

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/372310776>

Customer Satisfaction on Online Shopping Service Quality During Covid-19 Spreading

Conference Paper · January 2023

DOI: 10.24086/ICAFS2023/paper.893

CITATIONS

0

READS

219

3 authors, including:



[Qusay Hameed Al-Salami](#)

Cihan University-Erbil

45 PUBLICATIONS 77 CITATIONS

SEE PROFILE

Customer Satisfaction on Online Shopping Service Quality During Covid-19 Spreading

Eyad Majed Zannrni ¹, Qusay H. Al-salami ², Fatma I El-Zelawi³

¹Department of Economics and Economic Relations, Faculty of Economics, University of Aleppo, Aleppo / SYRIA.

²Department of Business Administration, College of Administrative and Financial Sciences, Cihan University-Erbil, Kurdistan Region / IRAQ.

³Department of Computer, Sciences and Arts Faculty, Benghazi University, Benghazi / LIBYA.

Abstract—Measuring customer satisfaction with online shopping (CSOS) service is indispensable nowadays, especially during COVID-19 spreading. Therefore, measuring customer satisfaction (CS) has become necessary to develop the quality and continuity of services. This research has three objectives: specifying factors that play a role in customer satisfaction on multi-communications companies' online-service quality (OSQ) in Erbil, measuring the effect of these factors, and examining the difference in satisfaction among customer groups taking into consideration the demographic information. The sampling is selected randomly from (144) customers having been shopping during the Covid-19 spreading to be the target people of this study. Testing of the hypotheses shows that a positive and significant relationship has existed between customer satisfaction and online service quality (OSQ) on E-commerce platforms: Web Design and Reliability are the most influential factors in customer satisfaction, while safety and customer service have little impact. Besides other factors, demographic variables, such as age and monthly income, affect customer satisfaction at online shopping websites.

Keywords— Customer Satisfaction, Online Shopping, Service Quality, Covid-19.

I. INTRODUCTION

In IRAQ, consumption habits were directly affected by the spread of the Internet, and online shopping services became more and more popular, and many people chose it, especially busy people.

Recently, researchers have paid more attention to e-commerce development (Kussusanti et al., 2019) and published papers specializing in e-commerce services only. In IRAQ, many problems for E-commerce generally and FastLink, Newroz, FTTH, and Tishknet specifically have resulted from many factors like care for the quality of poor product, weaknesses of freight forwarding, channels, online payment professionalism-lack, data confidentiality lack, buyers with no credit cards nor a payment card, warranty worries, and the seller's shortage in commitments. As a result of not gaining high consumer trust and satisfaction, the scale's limitations and

turnover do not match the potential. Consequently, customer satisfaction with the online services of e-commerce platforms is crucial.

Many researchers have been attracted to both customer satisfaction and service quality. The main goal of maintaining high service quality is survival in a highly competitive market. From an online perspective, a destination stays competitive only if it offers products or services with total satisfaction (Zeithaml et al., 1996).

Considering the positive verbal exchange or item and administration proposal from satisfied customers, management advancements will likely incite positive post-purchase conduct. Customer satisfaction is perceived as the least complicated device of the product. According to Wong & Law (2003), correspondences organizations and related fields will be able to determine how their administration conveyance execution is perceived by customers and identify areas for improvement by measuring customer loyalty.

II. LITERATURE REVIEW

A. Previous review

After 1960, the growing significance of administrations in creating financial matters marked the beginning of administration quality. This was the evolution of the traditional meaning of product quality to include services in addition to the product itself. According to Buffa (1976), the wake-up calls of the 1960s and 1970s required this component of the value for some manufacturing companies. The highly regarded paper by Brown et al. (1994), is an example of a period of exorbitant interest and excitement in administrations that occurred somewhere in the range of 1980 to 1985.

From 1985 to 1995, the majority of research studies were primarily concerned with the experimental testing of ideas and systems, resulting in tested and supported models. Reasonable structures and ideas continued to emerge as the basis for new observational work, a significant milestone in the field's advancement during this time (Prakash & Mohanty, 2013).

At the beginning of 2005, numerous powers sparked the development of administration quality, and numerous businesses, organizations, and individuals characterized the scope of the field's ideas and systems. Because of these

consolidated powers, the field of administration quality has developed. Management quality concepts were initially developed in response to the enormous growth of administration projects, which increased their significance to global economies.

Second, Service Quality (SQ) is regarded as an important business in data innovation and assembly. Thirdly, free businesses and expert administrations have shown a clear interest in administration promotion concepts. Expert service providers have also requested novel strategies and concepts for their businesses. According to Prakash & Mohanty (2013), the field of administration showcasing expanded to address the concerns and requirements of any business where the administration is a fundamental component.

According to Hill (1977), assistance can be defined as the state adjustment of an individual or of a decent having a place with the monetary unit that is achieved as a result of the movement of another monetary unit with the previous understanding of the previous individual or monetary unit. This state adjustment is known as state adjustment.

B. What is SQ?

Over the past two decades, conceptual work on service quality has been the subject of extensive research and lively debate. Parasuraman et al. (1988) presented SERVQUAL as an improved multi-item scale for assessing SQ, which is defined as "The degree and direction of a discrepancy between customers' service perceptions and expectations" (Lakhe & Mohanty, 1994).

According to Bitner & Hubbert (1994), SQ is typically defined as the customer's perception of a service provider's relative superiority or inferiority in terms of its services. It is frequently compared to the general attitude of the customer toward the business. Researchers have attempted to conceptualize, quantify, and explain the connection between service quality and an organization's overall performance.

C. Internet (Online) Shopping Service (OSS)

As per Armstrong et al. (2014), internet shopping is the acquisition of electronic correspondence among purchasers and vendors – generally on the web. Internet shopping permits purchasers to contact new providers, cut down on buying costs, and straightaway cycle orders. As per Gavin (2014), web-based shopping is a cycle where clients buy labor and products straightforwardly from a vendor for a while through the web, without middle people – a type of E-trade. Internet shopping benefits the two purchasers and merchants as far as client search, item data, measure association, and item conveyance.

According to Santos (2003), the client's general judgment and evaluation of the help delivery measure in a virtual market determine the nature of online services. After gaining experience and success in providing online support, the majority of the project begins by explaining that quality internet-based support components play a significant role in success or failure in addition to the website's presence and low prices. Customers who use web services anticipate that the services they receive will be comparable to or superior to those

provided by traditional services.

D. Some OSQ Scale Models

Import The utilization of E-trade in endeavors is expanding, and organizations know about the significance of estimating and controlling the nature of online administrations. Appropriately, many examinations create and propose scales that are reasonable for the setting of the nature of online administrations (Hasan. Alyaa & Muesser, 2017).

The majority of the models that were made from the SERVQUAL model, especially the E-SQ model (Parasuraman et al., 2005), cover the majority of the examination scale components: (1) Dependability; 2) Responsiveness; 3) Accessibility; 4) Flexibility; 5) Ease of Navigation; 6) Efficiency; 7) Assurances / Trust; 8) Security / Privacy; 9) Price Knowledge; 10) Site Esthetics; and 11) Customization / Personalization. In addition, Wolfenbarger & Gilly (2003) developed a truly comprehensive model of retail quality that spans the organization, as shown in Table 1.

E. Customer Satisfaction

There are assortments of alternative meanings of consumer loyalty. Massoudi, (2020) have perhaps the most referred-to definition. They characterized consumer loyalty as "a correlation of client assumptions with discernments in regards to the genuine help experience". Hoyer & MacInnis (2004) pointed out that after understudies have applied and encountered assistance, they can assess the results of their decision. If their assessments are good, they feel fulfilled. At the point when purchasers have a negative assessment of a result, they feel disappointed (Al-Salami et al., 2023).

Per the creators, fulfillment assessment focuses more on satisfying a need, though administration quality depends on the impression of predominance. At last, more intellectual angles are engaged in assessing administration quality, while fulfillment is somewhat identified with enthusiastic and full-of-feeling responses (Raewf & Thabit, 2015).

This exploration embraces the meaning of (Hoffman et al., 2010). The correlation of clients' assumptions with discernment regarding the real assistance experience is pertinent to the college climate and fits the subject of this examination.

1. CS Importance:

Past investigations have shown that consumer loyalty is imperative to instructive assistance administrations since it prompts brand devotion and new understudies through verbal advancement (Yüksel & Yüksel, 2003).

Inside, further developing consumer loyalty lessens costs related to imperfect labor and products, improving and supplanting, and overseeing and taking care of protests (Anderson et al., 1997). It is vital for businesses to recognize the connection between shopper satisfaction and loyalty (Massoudi, 2020).

2. CS Antecedents:

Consumer loyalty is characterized as an emotional state coming about because of the assessment of help, or "the purchaser's satisfaction response", how much the

satisfaction is lovely or disagreeable (Burns & Neisner, 2006). The feelings inspired during and after utilization are transient and are coordinated into a mentality toward the buy.

Table 1
THE QUALITY SCALE OF RETAIL QUALITY OVER THE NETWORK

Component	Observed Variables	Content
Reliability	Getting the right order	I received the exact item I ordered from this site before & during COVID-19.
	On-time delivery	The products on the site are delivered based on high-quality referrals.
	Delivering the right quality	The products on the site are delivered based on high-quality referrals.
Web design	Providing full information	The site provides sufficient information.
	Effective processing	The site does not take much time to trade.
	Processing speed	Complete web transactions quickly and easily
	Personalized	The appropriate level of site customization
	Product portfolio	The site includes a good product guide.
Safety	Personal privacy	My personal information is protected on this site.
	Safe feeling	My personal information is protected on this site.
	Safety assurance	The site offers complete privacy and security.
Customer service	Ready to respond	The company is always ready to serve customers.
	Desire to fix problems.	The site is interested in solving any problem faced by the customer.
	Quick service	Customer questions are answered immediately.
Customer Satisfaction	Application process	How satisfied are you with communication during your application process?
	Delivery times	How satisfied are you with the delivery times of online shopping companies?
	Complaint resolution	How satisfied are you with the complaint resolution of online shopping companies?

Source: Wolfenbarger & Gilly (2003)

3. Formation Process of CS:

The hope disconfirmation model gives the hypothetical premise for understanding the arrangement of consumer loyalty. This model depends on the variation hypothesis and has been utilized broadly in purchaser fulfillment research (Lee et al., 2008). It recommends that consumer loyalty is an element of assumptions and the degree to which saw administration execution meets the assumptions. On the off chance that the apparent assistance execution surpasses assumptions, positive disconfirmation happens, which thusly decides the degree of fulfillment. Then again, when the apparent assistance execution misses the mark regarding assumptions, this prompts negative disconfirmation and may bring about disappointment. Affirmation happens when execution matches assumptions (Anderson & Sullivan, 1993).

F. CS Factors

In light of the study carried out by the researchers, the variables examined and expected to affect consumer loyalty and satisfaction with the quality of online service for multi-communications companies in Erbil, are presented as follows:

1. Service Quality:

A significant calculation driving fulfillment of the assistance climate is service quality. The most well-known clarification for the thing that matters is that apparently, the quality of service is depicted as a type of demeanor. Given these conceptualizations, occurrences of fulfillment over the long run lead to an impression of administration quality (Al-Salami & Abdalla, 2022). For example, Cronin Jr & Taylor (1992) inspected the conceptualization and estimation of service quality and the connections among administration quality, shopper fulfillment, and buy goals. The discoveries recommended that SQ was a forerunner of buyer fulfillment while shopper fulfillment was not a critical indicator of administration quality.

2. Physical Environment:

The significance of actual environmental factors to make a picture and to impact client conduct is especially relevant in the help business. Since administration is by and large created and devoured all the while, the shopper is in the production line frequently encountering complete assistance inside the property's actual office. While the assistance ought to be of adequate quality, satisfying fundamental environmental factors (for example, music) may generally decide the level of, by and large, fulfillment and ensuing conduct in the help business (Oliver, 1980; Ryu & Jang, 2007; Qusay & Issa, 2023; Mahmood et al, 2022).

3. Fees:

The assistance expenses can significantly impact clients because the cost can draw in or repulse them, particularly since charges in the correspondence business capacities as a pointer of value.

Two sorts of costs are recognized: the goal cost, or the one that the assistance really expenses and which clients regularly do not retain, and the apparent value, which is distinctive for each individual and is the result of the target cost after the assessment of an individual. Moreover, the scientists demand that few investigations have discovered a connection between cost and administration quality as seen by the client: more exorbitant cost conveys higher help quality.

III. METHODOLOGY

A. Research Theoretical Framework

The questionnaire was adopted from previous studies and included demographic questions, questions regarding the factors which may enhance Iraqi citizens' satisfaction with online shopping service quality during Covid-19 spreading, and their performance expectancy. 5-point Likert scale and MCQs were mainly used to obtain numeric data.

The target population of this research will be all customers in

Erbil / Iraq, where Erbil is a fair city that uses online shopping in Iraq. Data were collected randomly from people who had dealt with online shopping during the COVID-19 outbreak. As explained in Appendix, which contains the project questionnaire.

There were 172 different participants, with 83.7% (144 participants) being familiar with online shopping sites and 16.3% (28 participants) not being. Based on the theoretical framework (Fig. 1 depicts the model of this research), the following hypotheses can be proposed:

H1: The level of online shopping satisfaction is positively correlated with the level of reliability:

H2: The level of satisfaction with online shopping is positively influenced by customers' perceptions of website design.

H3: The safety of online shopping at the site positively affects the level of online shopping satisfaction.

H4: The level of customer service of online shopping at the site favors online shopping satisfaction.

The relationship between online services quality and customer satisfaction, depending on demographic variables can be shown from the following sub-hypothesis:

H5a: Gender positively affects satisfaction with the quality of shopping services.

H5b: Age positively affects satisfaction with the quality of shopping services.

H5c: Income positively affects satisfaction with the quality of shopping services.

H5d: Academic level positively affects satisfaction with the quality of shopping services.

H5e: Occupation positively affects satisfaction with the quality of shopping services.

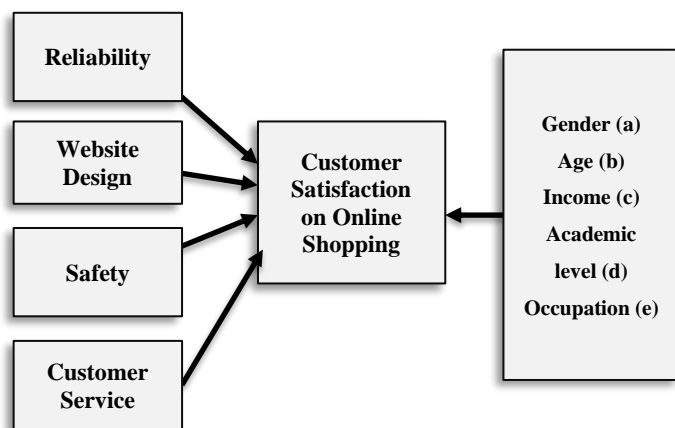


Fig. 1: Recommended Research Model

B. Data Analysis

Our sample consists of (144) customers having been shopping during the Covid-19 spreading to be the target people of this study. Participants were asked to complete the survey by responding to questions about the primary deliverables of online shopping activities.

1. Cronbach's Alpha Reliability Test:

A common way of measuring the consistency and reliability of a scale test is to use Cronbach's Alpha reliability. To determine whether the scale's components are internally consistent, reliability analysis is employed (Tavakol & Dennick, 2011).

As stated (Pallant, 2020), these statistics show how well each item on the scale is connected to others. Higher values indicate greater accuracy. Thus, Cronbach's alpha measures the strength of the positive correlation between the items in a collection. It is generally accepted that a Cronbach's Alpha value less than 0.60 is considered poor, while a Cronbach's Alpha value greater than 0.80 is considered good, and a maximum Cronbach's Alpha value of 0.90 has been recommended (Sekaran & Bougie, 2016).

Using a reliability test is a way to show how many times an instrument in this survey can be used by the same respondent and still yield the same results. Alternatively, to put it another way, the instrument's consistency can be measured by its reliability. Cronbach's Alpha formulas are used to calculate the reliability coefficient during reliability testing (Jami et al., 2023; Ratnasari et al., 2020).

Cronbach's alpha value is between 0.6 and 0.9, as shown in Table 2. As a result, it is deemed acceptable. As a result, the study demonstrates that the variables are highly consistent.

Table 2
CRONBACH'S ALPHA FOR RESEARCH VARIABLES

Variables	Responses	# items	Cronbach's Alpha
Reliability	114	3	0.722
Web Design	114	5	0.602
Safety	114	3	0.904
Customer Service	114	3	0.735
Customer Satisfaction	114	3	0.691

2. Sample Description Statistics:

Depending on the statistical program (SPSS 26), the research data and the characteristics of the respondents were analyzed using descriptive analysis (see Table 3 and Table 4).

The sociodemographic profiles of the respondents are summarized in Table 3. We note that there is a significant difference between both genders in terms of dealing with the quality of online shopping services, particularly females, who are more satisfied with online shopping service quality during the COVID-19 outbreak than males.

Female respondents comprise the lion's share (57.6%) (83). While (42.4) percent (61) of the respondents are males, this is due to the nature of females who are responsible for providing for the family's daily needs.

The same applies to the age factor and its impact on satisfaction with the quality of shopping services, where the results of the research showed that there is the highest satisfaction within the age group between (20-40) with 100

customers, and the lowest satisfaction was within the age group of more than 40 years with only 11 customers.

As for the effect of the customer's monthly salary on the quality of services, we found that the highest satisfaction was for those who received a salary of less than one million Iraqi dinars, then followed by a lower percentage for those whose monthly income ranged between (1-3) million ID net per month. The lowest satisfaction rate was for those with a monthly salary of more than 3 million.

Table 3
SOCIODEMOGRAPHIC INFORMATION

	Survey sample information	Frequency	Ratio (%)
Gender	Male	61	42.4
	Female	83	57.6
Age	Under 20	33	22.9
	Between 20 - 40	100	69.4
	More than 40	11	7.6
Income	Under 1 million	77	53.5
	Between 1 - 3 million	48	33.3
	Over 3 million	19	13.2
Academic level	Bachelor	73	50.7
	Master	39	27.1
	Ph.D.	12	8.3
	Others	20	13.9
Occupation	Students	79	54.9
	Employees	46	31.9
	Unemployed	19	13.2

In addition, from Table 3, we can see that for the bachelor level, the satisfaction of service quality was highest; that happened due to the nature of the large sample of undergraduate students with whom the questionnaire was conducted. This may be a type of bias in the sample selection.

We note that the category of students had the highest level of satisfaction with the nature of online shopping services, and then the group of employees and the unemployed, respectively, due to the exact reason for the nature of the sample drawn from the community.

Based on Table 4, we note that (51.4%) of customers depend on social networks to conduct online shopping operations during the spread of COVID-19, and nearly (70%) shop online at a rate of (1-4) times per month. In addition, the research results showed that almost (39%) use the Internet to shop for Houseware, followed by 32% who order food online.

From Fig. 2, we note that a large number of participations chose the answer Strongly Agree in question no. 1. This question means (I received the exact item I ordered from this site before & during COVID-19). The same percentage we can see in question no. (2 and 3).

In Fig. 3, we can show that a large number of participations chose the answer Agree in question no. 4. This question means (The site provides sufficient

information.). The same percentage we can see in question no. (5, 6, 7, 8, 9, 10, 11, 12, 13 and 14).

Table 4
SHOPPING HABITS STATISTICS

	Statistics of shopping habits	Frequency	Ratio (%)
The forms of online shopping	Online sales website	45	31.2
	Social networks	74	51.4
	Online shopping applications	25	17.4
Level of purchase	1-4 times a month	99	68.8
	4 times or more per month	14	9.7
	I rarely buy online	31	21.5
Purchase items	All about mother, child, men or women's fashion	11	7.6
	Houseware	56	38.9
	Technology, electrical appliances	22	15.3
	Food	46	31.9
	Others	9	6.2

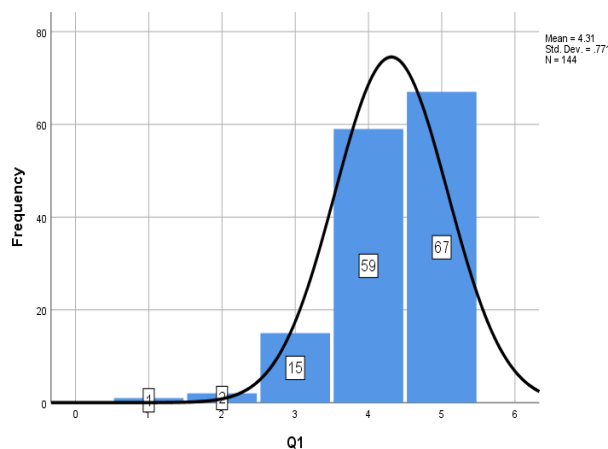


Fig. 2: Q1 Frequency

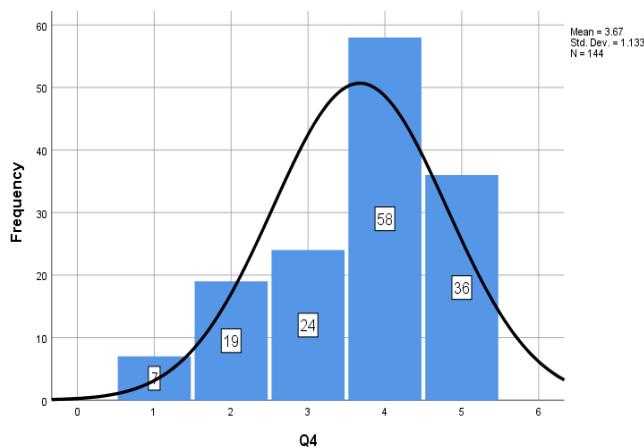


Fig. 3: Q4 Frequency

In Fig. 5, we can show that a large number of participations chose the answer Natural in question no. 15, which means (How satisfied are you with communication during your application process?). The same percentage we can see in question no. (16 and 17). From the overview, we

note that many participants were not satisfied with the nature of services for online shopping service quality during the Covid-19 spreading.

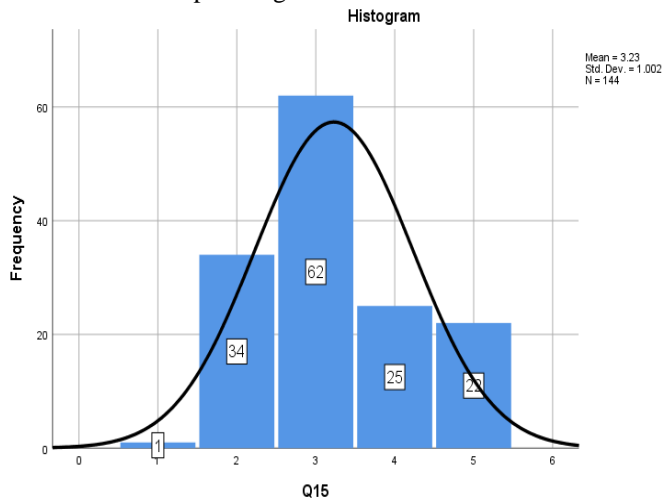


Fig. 5: Q15 Frequency

3. Difference Testing:

The Pearson correlation coefficient is used to measure the nature of the relationship (positive or negative) and to determine the strength of the linear relationship between the values of the independent and dependent variables, as in Table 5, which is related to demographic coefficients.

It is about -0.051 (> - 0.5) between (Gender) and Satisfaction (DV), this number is close to zero, and this indicates that there is no correlation between the two variables. The same idea can be seen with Income, Academic Level, and Occupation (Safety & Customer Service in Table 6). Also, we note that the value of Durbin-Watson = 0.802 ($\neq 2$) indicates weak positive autocorrelation among random errors (e's). The same idea can be seen with the other factors.

About Age, the Pearson correlation coefficient it's 0.208 (< + 0.5). This number is less than half, indicating that the correlation is weak between the two variables, and since the sign is positive, the relationship between (Age) and (DV) is a weak direct relationship.

About Reliability in Table 6, the Pearson correlation coefficient is -0.236 (> - 0.5). This number is less than half, indicating that the correlation is weak between the two variables, and since the sign is negative, the relationship between (Reliability) and (DV) is a weak direct relationship. The same idea we can see with Web Design.

4. Testing the Hypotheses

Here are the results of hypothesis testing to determine the nature of the difference in the characteristics of the research sample withdrawn from the Erbil community and the extent of their satisfaction with the quality of service by using correlation, linear regression, and T-test analysis, which showed that the relationship between the independent variables (Reliability, Web Design, Safety, and Customer Service), also the demographic characteristics with CS on quality of online shopping service (DV) during the COVID-

19 outbreak is significant at 95% ($p < 0.05$).

Table 5
THE PEARSON CORRELATION COEFFICIENT FOR DEMOGRAPHIC CHARACTERISTICS

Demographic Characteristics		Satisfaction (DV)	Durbin-Watson
Gender	Pearson Correlation	-0.051 (> - 0.5)	0.802
	Sig. (2-tailed)	0.543	
	N	144	
Age	Pearson Correlation	0.208 (< + 0.5)	0.895
	Sig. (2-tailed)	0.012	
	N	144	
Income	Pearson Correlation	-0.084 (> - 0.5)	0.820
	Sig. (2-tailed)	0.315	
	N	144	
Academic Level	Pearson Correlation	-0.066 (> - 0.5)	0.814
	Sig. (2-tailed)	0.431	
	N	144	
Occupation	Pearson Correlation	0.078 (< + 0.5)	0.834
	Sig. (2-tailed)	0.354	
	N	144	

Table 6
THE PEARSON CORRELATION COEFFICIENT FOR INDEPENDENT VARIABLES

Independent Variables (IV)		Satisfaction (DV)	Durbin-Watson
Reliability	Pearson Correlation	-0.236 (> - 0.5)	0.859
	Sig. (2-tailed)	0.004	
	N	144	
Web Design	Pearson Correlation	-0.200 (> - 0.5)	0.787
	Sig. (2-tailed)	0.016	
	N	144	
Safety	Pearson Correlation	-0.047 (> - 0.5)	0.814
	Sig. (2-tailed)	0.574	
	N	144	
Customer Service	Pearson Correlation	0.024 (< + 0.5)	0.819
	Sig. (2-tailed)	0.775	
	N	144	

The results of the t-test for model coefficients are shown in table (7), which is called a coefficients table. The estimated values of the coefficients $B_0 = 4.568$ and $B_1 = -0.274$ in column B. Also, $t = 11.099$ is significant with ($p < 0.05$). This result showed the total effect between (Reliability) and (Satisfaction) and hence (Reliability) is significantly related to (Satisfaction), which indicates that hypothesis H1 is significant and accepted, which means the level of online shopping Reliability is positively affecting the satisfaction of online shopping service quality.

This is mentioned by Wolfenbarger & Gilly (2003). This

impact shows that CS is firmly linked to Iraqi e-commerce platforms' reliability; choosing a good, secure seller or shipper improves this situation. Also, the product's information should be available to let customers know more when shopping.

Table 7
THE COEFFICIENTS TABLE FOR HYPOTHESIS H1

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.568	.412		11.099	.000
	Reliability	-.274	.095	-.236	-2.894	.004

a. Dependent Variable: Satisfaction

In Table 8, the coefficient B0 = 4.240 and B1 = -0.236. Also t = 11.945 which is significant with (p = 0.004 < 0.05). This result showed that (Web Design) is significantly related to (Satisfaction), which indicates that hypothesis H2 is significant and accepted, which means the customers' perception of Web Design positively affects Customer Satisfaction.

This is similar to Wolfinbarger & Gilly (2003) study, where web design represents the majority of contributions to CS. This implies that the Erbil community wants a simple, easy-to-understand, beautiful, and manipulate web design. However, this is not the main factor to satisfy the Erbil community at Iraqi's e-commerce platforms.

Table 8
THE COEFFICIENTS TABLE FOR HYPOTHESIS H2

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.240	.355		11.945	.000
	Web_Design	-.236	.097	-.200	-2.429	.016

a. Dependent Variable: Satisfaction

In Table 9, B0 = 3.571 and B1 = -0.044. Also t = 10.990 which is not significant with (p = 0.574 > 0.05). This result showed that (Safety) is not significantly related to (Satisfaction), which indicates that H3 is not significant, and this hypothesis was rejected. As a result, CSOS service quality is not affected by Safety during the Covid-19 spreading. The least effect on CS at Iraqi's e-commerce platforms is the security / safety factor. This result comes along with Wolfinbarger & Gilly (2003).

The same in Table 10, B0 = 3.151 and B1 = 0.059. Also t = 8.501 which is not significant with (p = 0.512 > 0.05). This result shows that CS is not remarkably linked to (Satisfaction), and this hypothesis H4 is rejected, which means the level of Customer Service of online shopping at the site is negatively affected by Customer Satisfaction.

The same applies to this hypothesis, which agrees with Wolfinbarger & Gilly (2003) research. The seller-buyer

transaction is 100% natural, and Iraqi's e-commerce platforms have no interference. Consequently, compensation, exchanging goods, and complaints had a more significant share. Telecom companies' responsibility is to secure the buyer's and seller's rights from defects, as a result of which the customer is promoted and satisfied.

Table 9
THE COEFFICIENTS TABLE FOR HYPOTHESIS H3

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.571	.325		10.990	.000
	Safety	-.044	.078	-.047	-.563	.574

a. Dependent Variable: Satisfaction

Table 10
THE COEFFICIENTS TABLE FOR HYPOTHESIS H4

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.300	.325		10.152	.000
	Customer_Service	.023	.079	.024	.286	.775

a. Dependent Variable: Satisfaction

The relationship between online services quality and customer satisfaction depending on demographic variables can be shown in Table 11 to measure the significance of sub-hypothesis of H5. This result showed only that (Age) is significantly related to (Satisfaction), which indicates that hypothesis H5b is significant and accepted, and all other the sub-hypotheses (for H5) are not significant.

Table 11
THE COEFFICIENTS TABLE FOR HYPOTHESIS H5

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.261	.161		20.252	.000
	Gender	-.076	.130	-.049	-.586	.559
	Age	.340	.123	.234	2.755	.007
	Income	-.173	.094	-.159	-1.841	.068
	Academic Level	-.070	.060	-.096	-1.164	.247
	Occupation	.085	.092	.078	.924	.357

a. Dependent Variable: Satisfaction

C. Research Contributions

This research has many valuable theoretical and practical contributions. This research attempted to evaluate customer satisfaction with online shopping service quality during the

Covid-19 spreading. The uniqueness of this research comes from examining different variables and testing their effect on the customers' satisfaction with the Erbil government.

IV. RESEARCH CONCLUSIONS AND RECOMMENDATIONS

A. Research Conclusions

Having done this research and written the research "CSOS Service Quality During Covid-19 Spreading", the researchers came to the following conclusions:

A combination of qualitative and quantitative methods with a proper sample size of 144 was used. Scales were verified by Cronbach's alpha reliability, Pearson correlation, and linear regression analysis, with the impact test of demographic variables.

The results from testing the hypotheses in this research showed that:

1. Reliability is the most influential factor in customer satisfaction, followed by Web Design, while safety and customer service had little impact.
2. The results show that demographic factors (age and monthly income) impact customer satisfaction at online shopping websites, except for other factors.

B. Research Recommendations

The researchers recommend that managers of telecommunications companies in the Kurdistan Region – Iraq be interested in possessing the necessary knowledge of how to satisfy customers by improving the service quality on online shopping sites, especially during the spread of Covid-19, so that managers can face this challenge.

Therefore, it is essential to increase the educational authorities' knowledge of the importance of service quality by using educational platforms to facilitate the educational process by holding workshops or training courses on this topic.

REFERENCES

- Al-Salami, Q. H., & Abdalla, S. N. (2022). The Impact of Academic Satisfaction as a Mediator on International Conferences. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 6(1), 19–26.
- Al-Salami, Q. H., El-Zelawi, F. I., & Sultan, A. S. (2023). Customer satisfaction on quality of ISO standard 9126 services in electronic banking in Libya. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 7(1), 58-67. DOI: 10.24086/cuejhss.vol7n1y2023.pp 58-67
- Anderson, E. W., Fornell, C., & Rust, R. T. (1997). Customer satisfaction, productivity, and profitability: Differences between goods and services. *Marketing Science*, 16(2), 129–145.
- Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2), 125–143.
- Armstrong, G., Adam, S., Denize, S., & Kotler, P. (2014). *Principles of marketing*. Pearson Australia.
- Bitner, M. J., & Hubbert, A. R. (1994). Encounter satisfaction versus overall satisfaction versus quality. *Service Quality: New Directions in Theory and Practice*, 34(2), 72–94.
- Brown, S. W., Fisk, R. P., & Bitner, M. J. (1994). The development and emergence of services marketing thought. *International Journal of Service Industry Management*.
- Buffa, E. S. (1976). *Operations management: The management of productive systems*. Wiley.
- Burns, D. J., & Neisner, L. (2006). Customer satisfaction in a retail setting: The contribution of emotion. *International Journal of Retail & Distribution Management*.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, 56(3), 55–68.
- Gavin, B. X. (2014). Task readiness: Theoretical framework and empirical evidence from topic familiarity, strategic planning, and proficiency levels. In *Processing perspectives on task performance* (pp. 63–94). John Benjamins.
- Hasan, H. F., Mahdi, A. A. & Nat M. (2017). A recommendation of information system implementation to support decision-making process of top management. Proceedings of the International Conference on Bioinformatics and Computational Intelligence.
- Hill, T. P. (1977). On goods and services. *Review of Income and Wealth*, 23(4), 315–338.
- Hoffman, K. D., Bateson, J. E., Wood, E. H., & Kenyon, A. J. (2010). *Services marketing: concepts, strategies, & cases: Cengage learning*.
- Hoyer, W. D., & MacInnis, D. (2004). *Consumer Behavior. Auflage, Boston, New York*.
- Jami, M. S., Massoudi, A. H., & Al-Salami, Q. H. (2023). Ethical Leadership Role in Job Embeddedness and Job Involvement. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 7(1), 11–15.
- Lakhe, R. R., & Mohanty, R. P. (1994). Understanding TQM. *Production Planning & Control*, 5(5), 426–441.
- Lee, S., Johnson, K. K. P., & Gahring, S. A. (2008). Small-town consumers' disconfirmation of expectations and satisfaction with local independent retailers. *International Journal of Retail & Distribution Management*.
- Massoudi, A. (2020). The Vital Role of Pink Marketing in the Creation of Women Loyalty. *International Journal of Social Sciences and Economic Review*, 2(3), 28-37. doi:10.36923/ijsser.v2i3.74
- Massoudi, A. (2020). Consumer Loyalty Indicator as Drivers to Satisfaction. *Cihan University-Erbil Journal of Humanities and Social Sciences*. 4 (1), 41-45. https://doi.org/10.24086/cuejhss.vol4n1y2020.pp41-45.
- Mahmood, N. H., Kadir, D. H., & Birdawod, H. Q. (2022). The Full Factorial Design Approach to Determine the Attitude of University Lecturers towards e-Learning and Online Teaching due to the COVID-19 Pandemic. *Cihan University-Erbil Scientific Journal*, 6(1), 20-25.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469.

- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *1988*, *64*(1), 12–40.
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, *7*(3), 213–233.
- Prakash, A., & Mohanty, R. P. (2013). Understanding service quality. *Production Planning & Control*, *24*(12). <https://doi.org/10.1080/09537287.2011.643929>
- Qusay, H., & Issa, M. J. (2023). The Role of Workplace Enviousness on Individual Productivity and Organizational Behavior. *Cihan University-Erbil Journal of Humanities and Social Sciences*, *7*(1), 107-114.
- Raewf, M., & Thabit, T. (2015). The student's satisfaction influential factors at Cihan University. *International Journal Of Advanced Research in Engineering & Management (IJAREM)*, *1*(02), 63–72.
- Ratnasari, S. L., Sutjahjo, G., & Adam, A. (2020). The effect of job satisfaction, organizational culture, and leadership on employee performance. *Annals of Tropical Medicine & Public Health*, *23*.
- Ryu, K., & Jang, S. S. (2007). The effect of environmental perceptions on behavioral intentions through emotions: The case of upscale restaurants. *Journal of Hospitality & Tourism Research*, *31*(1), 56–72.
- Santos, J. (2003). E-service quality: a model of virtual service quality dimensions. *Managing Service Quality: An International Journal*.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53.
- Wolfinger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, *79*(3), 183–198.
- Wong, J., & Law, R. (2003). Difference in shopping satisfaction levels: a study of tourists in Hong Kong. *Tourism Management*, *24*(4), 401–410. [https://doi.org/10.1016/S0261-5177\(02\)00114-0](https://doi.org/10.1016/S0261-5177(02)00114-0)
- Yüksel, A., & Yüksel, F. (2003). Measurement of tourist satisfaction with restaurant services: A segment-based approach. *Journal of Vacation Marketing*, *9*(1), 52–68.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*. <https://doi.org/10.2307/1251929>