Journal of
Risk and Financial Management

MDPI

Article

Attitude towards Online Shopping during Pandemics: Do Gender, Social Factors and Platform Quality Matter?

Nada Mallah Boustani [1,*], May Merhej Sayegh [1] and Zaher Boustany [2]

[1] Faculty of Business & Management, Saint Joseph University, Social Science Campus, Beirut 1104-2020, Lebanon
[2] Faculty of Letters and Humanities, Saint Joseph University, Human Science Campus, Beirut 1104-2020, Lebanon
* Correspondence: nada.mallahboustany@usj.edu.lb; Tel.: +961-3245452

Abstract: Because of the advancement of electronic commerce, online shopping has emerged, merging commercial and social activities and enhancing the social presence and value of the online environment. To improve the understanding of the changes in the consumer behavior during the COVID-19 pandemic, this study proposes a set of characteristics connected to the social side of online shopping and their influence on client purchasing attitude in addition to the quality of the platforms that are being used (service quality, system quality and information quality). For this matter, a survey of 289 Lebanese people was circulated in 2021 and a quantitative method was used to answer three research questions. Types of goods purchased and frequency of buying on-line were tested to check the presence of any gender differences, in addition to the relationship between the variables studied in the model. According to the research, social presence, social value, and tendency to compare products on different shopping platforms all have a significant correlation with the attitude towards online shopping, where the system quality was the least significant. When it comes to purchasing frequency and product types, the data gathered imply that gender disparities are considerable. This study does not consider the consumer's living environment or whether there are any age differences between the generations shopping online.

Keywords: attitude; consumer behavior; online shopping; pandemic; quality information; quality service; quality system; social presence; social value; tendency to compare

JEL Classification: M30; D91; O30

check for updates

Citation: Boustani, Nada Mallah, May Merhej Sayegh, and Zaher Boustany. 2022. Attitude towards Online Shopping during Pandemics: Do Gender, Social Factors and Platform Quality Matter? *Journal of Risk and Financial Management* 15: 474. https://doi.org/10.3390/jrfm15100474

Academic Editors: Chux Gervase Iwu, Abdullah Promise Opute and Eresia-Eke Chuks

Received: 15 September 2022
Accepted: 14 October 2022
Published: 18 October 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Within months of the first cases being reported, the COVID-19 virus had spread to every continent. Because the virus's spread was not fully understood in the early stages of 2019, all citizens worldwide were compelled to enter quarantine. According to studies, long-term exposure to high amounts of air pollution causes a variety of health issues, particularly those connected to lung problems, and may have contributed to the spread of the virus (Kasioumi and Stengos 2022). Moreover, many consumers changed their behavior, and people were using online shopping more frequently. Further, Lebanon has experienced various crises over the past three years: an economic and financial crisis in 2019, in addition to the sanitary crisis due to COVID-19, and the explosion at the Port of Beirut on 4 August 2020. Lebanon, where the research has been conducted, dealt concurrently with the lockdowns and other crises and measures brought on by the pandemic outbreak. The pandemic has had an impact on consumer behavior during the previous two years. Consumers' buying alternatives and behaviors have changed as a result of the lockdown and social distance and purchasing has migrated from mobility to the comfort of one's own home. Consumers have greater freedom and do not have to adhere to a strict timetable while

visiting stores. They have established new habits as a result of technological advancements, which has a big influence on consumer behavior (Sheth 2020a, 2020b).

Three major factors have been highlighted in research as having the potential to influence and modify consumer behavior (Sheth 2020b). The first factor is government policy. Consumers will be more encouraged to utilize online purchasing and their future tendency to do so will always be influenced by the aggressivity of sanitary measures imposed during pandemics affecting their freedom of mobility.

The shifting in demographics is the second aspect to consider (Sheth and Sisodia 1999). Senior people are more occupied in maintaining their health, while young professionals prefer to spend time purchasing online.

Technology is the third driver. Consumer habits and behaviors had been modified by the use of the internet, smartphones, and other technical instruments, which had a significant influence on the creation of new online shopping habits. The adoption of technology has been a major driver of social and cultural change in society, as well as an invention responsible for the expansion of electronic commerce and the widespread usage of the internet (Sánchez-Torres and Juarez-Acosta 2019). As previously said, it has become a key channel in consumer behavior as a result of technical advancements and the internet.

Ad hoc natural calamities, including pandemics such as COVID-19, can be added to the prior drivers (Sheth 2020a). However, at the same time, innovative strategy setting is necessary for business innovation in complex and uncertain contexts, and if it is used, it should be accompanied with reorganizational structures and designs that are compatible with the roadmap of strategy innovation (Boustani and El Boustani 2017). Rapid improvements in information technology have opened up new economic prospects, such as internet commerce, in recent years. Information technologies have transformed conventional consumer behavior into a new website visitor behavior by providing a broad international reach, cheap prices, readily available service and product information, and increased flexibility. Customers have new ways to buy their items thanks to social media and online communities. In fact, purchasers are using social media (Facebook, LinkedIn, Instagram, etc.) to contact businesses and conduct transactions (Hajli 2015).

With the pandemic crisis, internet commerce has advanced to a point where it provided significant benefits to both shoppers and merchants. However, owing to the large number of persons who are shifting their purchasing habits to online shopping and those who want to buy online before and during the crisis, online shopping is likely to rise in Lebanon.

Researchers are also interested in learning more about the quality of service, system and information provided through online shopping affecting the consumers attitude leading to a permanent adoption of online shopping. Moreover, it is worthwhile to dive into, through this research, the elements that influence purchasers' behavior and intention to shop online through their tendency to compare the products from one platform to another.

This study was conducted in a developing economy (Lebanon) that suffers from multiple crises and the novelty and importance of the work reside in many aspects: Firstly, the fact that, according to the World Trade Organization, e-commerce must intervene with enthusiasm and energy and show its importance and effectiveness in the trade and online purchasing sectors if it is to save the global economy. Additionally, during the past several years, there has been a noticeable rise in the proportion of people in developing nations who possess cellphones and have access to the internet (Poushter 2016; Abou Ali et al. 2020).

Moreover, in Lebanon, the e-commerce market is progressively growing. Lebanon is ranked 56th overall and fifth in the Middle East for e-commerce preparedness, according to the UNCTAD B2C E-commerce Index 2017. However, it still lags behind several of its neighbors. Both revenues and the number of online shoppers are still growing slowly in the Lebanese e-commerce business (Nordeatrade 2019).

The purpose of this paper is to help researchers understand better the consumers extent of respecting their new buying patterns because of pandemic effects, lockdowns, and social distancing measures. The research shall also investigate the dynamics of consumers' positive attitude towards on-line shopping that shall forbid them from reverting to their

old purchasing habits even in post pandemic times. Finally, gender differences vs goods categories analysis shall be considered in this study as well.

Customer engagement is a well-known idea in information systems (IS) and marketing research, with the goal of continuing online buying long after the pandemic crisis has passed (Brodie et al. 2013).

Based on the following, a conceptual work is proposed by the authors adopting:

1. The use of the unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al. 2012) to determine which elements impact customer behavior in the aftermath of the pandemic in terms of electronic purchase uptake.

2. The DeLone–McLean model of IS success (DeLone and McLean 1992), which identifies the elements that influence customer attitudes toward electronic purchases and is the most widely used model in research on information system success (DeLone and McLean 2008) and the most extensively used method for assessing IT performance, particularly in e-commerce systems (Wang 2008; Busalim et al. 2021). Information quality, system quality, intention to use, and service quality are among the six characteristics measured by this approach to determine the effectiveness of information systems.

Because the lockdown and social distance impacted a wide variety of consumer activities, consumer resilience and adaption has become a key focus for academic research. It is a new field of study, and the COVID-19 crisis has brought it to light as a promising research area specifically in Lebanon. In this developing economy, where most of commerce and financial services adopt a traditional approach due to legal restrictions (Boustani 2020), shopping was thus conducted mostly in a traditional way, visiting shops and malls while avoiding online purchasing. This research adds the social comparison tendency to the combination of the two models to better explain the costumer's desire to continue purchasing online after the pandemic crisis. The authors argue in this study that information quality, service quality, and system quality are key technical aspects that influence customer happiness and loyalty to online shopping. The researchers also look at the effects of social presence and social value on customer behavior when it comes to internet purchasing.

With the introduction of new economic activities, the IS success model (DeLone and McLean 1992) has been amended, with the most recent updated version of the IS success model present in 2003. To address the problem of disregarding human characteristics, the model included a "service quality" feature. The perceived quality of the information, system, and service define the user's behavior (system usage), and their satisfaction is their emotive reaction to the system.

According to the paradigm, an individual's conduct (e.g., usage) is impacted by his attitude (e.g., satisfaction) and preceded by their views about the information and system's quality. As a result, conduct and attitude are mutually reinforcing structures that can have an influence on both individuals and organizations. Moreover, consumer behavior during the COVID-19 crisis appears to align with behaviors exhibited during historic shock events (Loxton et al. 2020).

This research will evaluate a conceptual framework based on the unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al. 2012) and the information systems success model (IS success model) based on the aforementioned discussion (DeLone and McLean 2003, 2004). The primary aspects that would impact customers' behavior toward online purchasing in Lebanon following the pandemic crisis will be studied theoretically and experimentally. Finally, in this study, the authors will try to answer three research questions:

RQ1: What are the sociodemographic characteristics of respondents' purchasing online during COVID-19 pandemic?

RQ2: Are there any gender differences in types of goods purchased and in the perception of quality and social variables used in the model?

RQ3: What is the relation between the quality and the social factors affecting the consumers' continuous attitude and adoption of online shopping post-COVID?

The paper proceeds with a theoretical review, then presents the methodology and results. The findings are discussed before the conclusions on the theoretical and practical implications of the study and avenues for future research are presented.

2. Theoretical Background

The COVID-19 epidemic has influenced consumer purchasing decisions and online buying habits (Mason et al. 2020). Consumers' income, age, and sector of occupation play important roles in the context of new shopping patterns (Valaskova et al. 2021). In this research, the authors aim to look at the elements that influence online shopping customers' adoption of digital technologies.

Electronic commerce is seen as a subset of information technology. ICT aids in the facilitation, execution, and processing of business processes (DeLone and McLean 2003; Wang and Zhang 2012).

Shopping habits have been constrained during the shutdown. Consumers have begun to incorporate new technology and applications into their daily routines. Work, family, and friend gatherings, school, and shopping have all come to rely on the internet and social media, e.g., WhatsApp, Youtube, Wechat, and LinkdIn, for the performance of everyday tasks (Sheth 2020a).

Belvedere and Grando (2017) and Sánchez-Torres and Juarez-Acosta (2019) state that the use of information and communication technologies is the most important factor enabling communication and providing value offerings to stakeholders.

Behavioral intention is reflected by the variable intention to use, which is the antecedents for use in the modified DeLone–McLean model (2003). Information quality, system quality, and service quality come before the intention to use, which is a psychological hypothesis. The technological part of the information system is represented by these three technical variables (Mardiana et al. 2015). The inclusion of intention to use in the DeLone-Mclean model is based on the notion that a user's attitude reflects his desire to use the system before he uses it, whereas the variable usage is the behavior (DeLone and McLean 2003). Following the desire to use, there is "real usage," which will result in the user's "pleasure," and so on. In the model, the desire to use and the actual usage are glued together, creating the illusion of alternation.

However, in order to better understand the primary aspects that could influence a customer's decision to purchase online, the IS success model was used, along with other key variables from the UTAUT model (Sánchez-Torres et al. 2017). Information quality, system quality, and service quality (DeLone and McLean 2004) have all been shown to have a significant impact on consumer behavior and intent (Chang et al. 2005). Other dimensions from the UTAUT model that might impact the customer's attitude have been included as well: social presence, social value, and social comparison tendency. Further discussion and justifications for the hypothesis are presented in the forthcoming sections.

2.1. Information Quality

The quality of information is seen as a key factor that influences customer trust, and trust has a favorable impact on purchase intent (Kim and Park 2012; Busalim et al. 2021). Relevance, competence, correctness, and usefulness in customer satisfaction are all components of information quality (DeLone and McLean 2003, 2004). The quality of information can influence clients' willingness to purchase online (Dong et al. 2014; Gao et al. 2015).

Huang and Benyoucef (2013) defined website design elements for online shopping, and information quality was selected as one of the important qualities that connects all levels of the electronic commerce model. Customers will engage in online purchasing, however, if they feel that electronic commerce provides accurate, reliable, and timely information about items and services (Sharma and Crossler 2014; Busalim et al. 2021). Consumer satisfaction is positively influenced by the quality of web information connected to decision making (Dong et al. 2014; Erkan and Evans 2016), which leads to continuous use.

The user's confidence and pleasure with a website's content increases if he can discover comprehensive and accurate information about the product or service he or she wants to acquire. Some data suggests that the information quality elements (accuracy, relevance, timeliness, and sufficiency) have a substantial impact not only on the consumer intention to adopt the website, but also on their intention to recommend it to other customers (Chiu et al. 2014. As a result, the quality of material on e-commerce websites has an impact on client satisfaction intensity.

2.2. System Quality

"System quality" is used to quantify technical success. The technical level of the electronic commerce system that features on the website, providing product information and supporting online services, comprises responsiveness, compatibility, and dependability. This online environment has the potential to increase client re-purchase intent. The consumer's view of the degree to which a social commerce website contains technical and functional capabilities, i.e., availability, usability, flexibility, and accessibility, is characterized as system quality in electronic commerce websites (Liang et al. 2011; Alshibly 2014). In an online purchasing environment, an acceptable system quality will have a favorable influence on consumer satisfaction and engagement behavior. System quality plays a significant role in increasing client trust in online buying (Lee and Chung 2009; Zhou 2014; Tarhini et al. 2019).

2.3. Service Quality

The DeLone and McLean Model proposes five criteria for evaluating service quality: tangibility, dependability, responsiveness, assurance, and empathy (DeLone and McLean 2003). In the context of electronic commerce, system quality is defined as the customer's assessment of the website's products or services (Alshibly 2014). Customers want all of their needs to be met at all times with simple access, search, and download qualities in online buying. Therefore, accessibility and usability are highly significant criteria for online shopping quality (Kim et al. 2012). Any website's service quality is determined by how dependable, trustworthy, empathic, and safe it is. The online shopping platform allows for a great deal of personalization and interaction (DeLone and McLean 1992; Gao et al. 2015). A high-quality technical system will provide a valuable platform for social interaction and inspire visitors to return to the site, increasing happiness, retention, and loyalty (Liang et al. 2011; Al-Debei et al. 2015).

2.4. Tendency to Social Comparison

The tendency to social comparison online (TSCO) is described as the extent to which an individual compares his or her opinions with those of others while making an online purchase (Shen 2012). When purchasing online, customers have a tendency to compare themselves to others (Buunk and Gibbons 2007), and they are affected by other people's thoughts.

2.5. Social Value

Social value is the perception of social self-concept when shopping online using commercial sites. Users evaluate products and services by social value, e.g., social consequences, and not only by hedonic and utilitarian values (Sweeney and Soutar 2001; Rintamäki et al. 2006). Social value has a significant impact on online purchase intention (Lin and Lu 2015; Kim and Park 2012). The perception of social value, such as acquiring social recognition from others and feeling acceptable to others, may strengthen their purchase intention from online shopping sites (Gan and Wang 2017). The more social value users obtain from purchasing from online shopping sites, the more their purchase intention will be developed.

2.6. Social Presence

Online social presence, such as online shopping from sites, can be defined as the perception of personal, sociable, and sensitive human elements of a website (Gefen and Straub 2004; Ogonowski et al. 2014). Social presence can be embedded as the perception of personal and sociable human elements using an online environment that enables interaction between users and customer service representatives in an e-commerce site (Ogonowski et al. 2014; Qiu and Benbasat 2005). Qiu and Benbasat (2005) stated that there is a wide variety of social presence tools to enhance human interaction on the websites and the main one is the online chatbox where experts can assist the customer, such that the perceived interaction with another human in online environments has been called social presence (Herrando et al. 2021). The sociability and interaction on online shopping increase the perceived social presence and encourage positive attitudes towards online shopping through customers' involvement and socialization (Cui et al. 2010; Hassanein and Head 2007).

2.7. Attitude towards Online Shopping

The perceived social presence can have a favorable impact on customers' attitudes towards shopping online (Hassanein and Head 2007). Apart from showing interest in a product by buying it, their satisfaction from online shopping can have a positive impact on their attitudes towards this shopping (Herrando et al. 2021). Some authors also stated that loyalty is behind a positive attitude towards online shopping (Anderson and Srinivasan 2003).

3. Materials and Methods

The purpose of this article is to identify the significance of quality, comparison propensity, and social aspects to the attitude of online buying based on an analysis of the current condition of consumer behavior among Lebanese individuals. This will be accomplished by evaluating the internal factor structure of consumer behavior during pandemic and crisis situations. The disparities in gender behavior and the different sorts of goods purchased will then be highlighted using a difference analysis. The following sub-objectives of the research have been developed in relation to the main objective of this paper, i.e., to look for connections among the listed elements affecting online shopping, confirm the association between chosen factors in online shopping, and determine whether there are sociodemographic differences.

The authors base their conceptual work on the aforementioned discussion and the unified theory of acceptance and use of technology (UTAUT) and the information systems success model (IS success model). After the pandemic crisis, the key variables that will affect consumers' online shopping behavior in Lebanon will be theoretically and experimentally investigated.

3.1. Measuring Tools and Data Collection

Because the purpose is to compare consumers' attitudes regarding online purchasing, a one-of-a-kind analysis of the basic elements that influence online purchase quality and comparison tendency is offered. Items obtained from prior literature were utilized to test the hypotheses of the suggested model.

Because this is exploratory research with descriptive cross-sectional research, a questionnaire was used to collect primary data. The questionnaire was sent online to a diverse community of people living in rural and urban locations, and the necessary Facebook pages and WhatsApp groups were both used to share the link to the electronic survey. The questionnaire was completed by 312 respondents in total. The survey was conducted on a non-probabilistic sample of 289 Lebanon residents who were included in the sample after invalid questionnaires were eliminated.

Following that, the survey had to be distributed to people of diverse socioeconomic backgrounds to eliminate prejudice. The data were collected using an electronic questionnaire (via a social media link to Google Forms) validated in previous studies and adapted to this research. The questionnaire constructs variables were adapted from Gefen and

Straub (1997) for the variables, i.e., social presence and social value. As for all the quality variables, the authors adapted the construct of Pitt et al. (1995), and for the online shopping attitudes the authors adapted the construct of Al-Debei et al. (2015) and the tendency to social comparison about online shopping from Shen (2012).

The questionnaire had 34 items, the first five of which were used to categorize the examined sample in preparation for further statistical analysis. The objective of the questionnaire was on demographic data, consumer behavior, and their perceptions of social elements and platform quality when making purchases online.

The methodology used involved using a questionnaire with multiple items per construct to facilitate responses. To provide their answers, respondents used a Likert scale ranging from 1 ("I strongly disagree") to 7 ("I strongly agree") to effectively measure variables that are not directly visible (Churchill and Lacobucci 2004). The data gathering took place between February and March of 2020, the confinement period in Lebanon which was due to COVID-19 pandemic. A total of 312 forms were collected, with 289 consistent replies.

3.2. Statistical Analysis

The following methods were employed: inductive statistical techniques, correlation analysis (Pearson correlation coefficient), and comparative analysis (*t*-test, ANOVA).

Basic descriptive statistical methods were used to perform an exploratory study of the data. Microsoft Excel 2013 was used to centralize the data, while IBM SPSS Statistics v.20 was used for statistical analysis (IBM Corp., Armonk, NY, USA). The t-test for independent samples was used to compare the mean values obtained for each group. Because the requirements, including the normality of the distribution, were established, parametric tests could be used. In addition, Pearson correlation coefficients were generated to assess the relationships between some of the variables in the research. The level of significance evaluated in all statistical studies was 5% ($p < 0.05$).

The survey was made up of closed-ended questions utilizing the Likert scale. On a seven-point scale, the respondents may indicate how much they agreed or disagreed with the statement: 1 (totally disagree), 2 (disagree), 3 (somehow disagree), 4 (indifferent or undecided), 5 (somehow agree), 6 (agree), and 7 (strongly agree).

4. Results and Findings

The authors will provide the outcomes of their findings in this section, as well as respond to the three research questions suggested in the introduction paragraph of this paper.

4.1. Results of RQ1 Concerning the Sociodemographic Characteristics of Respondents' Purchasing Online during COVID-19 Pandemic

Table 1 shows the characteristics of the respondents in detail. A total of 289 persons participated in the study, including 113 men and 176 women, 60.9% and 39.1% respectively. Most respondents (54% of the total) were between the ages of 21 and 25. This indicates that the sample under investigation is made up of a younger generation and the remainder population has an age distribution higher than 26. Due to the population's age, 130 participants (or 45%) were employed as students, 116 participants (or 40.1%) were full-time employees, and the other participants were classified as unemployed or self-employed.

About 51.6% of participants had 9–13 years of online experience, while 19.4% had 14–19 years, 11% had 4–8 years of experience, 11.4% had 20–25 years of experience, and 0.7% had more than 26 years of internet experience. These percentages show that a large majority of respondents, approximately 70% of the sample studied had an average of 15 years of online experience. Moreover, 76.1 % of respondents had undertaken internet shopping 1–3 times, 14.2% had never done it, and the remainder had done it more than four times. When adding the total percentages of respondents who had already purchased online, the total percentage is 85.8%. Clothing and shoes are the most often purchased categories of items (32.5%), followed by accessories (21.5%).

Table 1. Sociodemographic results.

		Frequency	Percent
gender	Male	113	39.1
	Female	176	60.9
age	15 years to 20 years	42	14.5
	21 years to 25 years	156	54.0
	26 years to 30 years	32	11.1
	31 years to 35 years	20	6.9
	36 years to 40 years	10	3.5
	more than 41 years	29	10.0
employment	Full time employee	116	40.1
	Student	130	45.0
	Unemployed	25	8.7
	Self employed	18	6.2
types of products purchased online	Nothing	41	14.2
	Clothes and shoes	94	32.5
	Accessories	62	21.5
	Food and supplements	6	2.1
	Books	14	4.8
	Electronic devices	33	11.4
	Makeup and perfumes	39	13.5
purchasing frequency	Never	41	14.2
	1 to 3 times	220	76.1
	4 to 6 times	10	3.5
	7 to 9 times	3	1.0
	more than 10 times	15	5.2
	Total	289	100.0

4.2. Results for RQ2: Constructs Reliability and Gender Differences in Types of Goods Purchased and in the Model Variables

In order to answer the second research question, the authors started by (1) defining each variable, then (2) testing the reliability of the construct's items in order to (3) control and study the existence of any gender differences that might be noted in the frequency of purchases or in the types of goods that might affect the types of products entrepreneurs offer on online shopping.

The conceptual model is focused on the following variables for social aspects: social value, social presence, and tendency to social compare online shopping products. As for the quality variables, the model included the service quality, the information quality, and the service quality. The constructs are listed below, and their reliability is tested and shown in Table 2.

4.2.1. Constructs Variables

Social value:

- Using online shopping platforms would help me to feel acceptable;
- Using online shopping platforms would make a good impression on others;
- Using online shopping platforms would improve the way I am perceived;
- Using online shopping platforms would give me social approval.

Tendency to Social comparison:

- I often like to talk with other online shoppers about mutual opinions and experiences;
- I often try to find out what other online shoppers think, namely those who face similar problems as I face;
- I find online product reviews on platforms helpful.

Social Presence:

- There is a sense of human contact in online shopping platforms;
- There is a sense of sociability in online shopping platforms;
- There is a sense of human warmth in online shopping platforms;
- There is a sense of human sensitivity in commerce platforms;
- There are many other buyers who feel interested in using online shopping platforms;
- There are many other buyers sharing information regarding products offered on online shopping platforms;
- There are many buyers who have bought the products offered on online shopping platform.

Table 2. The results of the reliability test (Cronbach Alpha).

Reliability Statistics		
Variables	**Cronbach's Alpha**	**N of Items**
Social Value	0.916	4
Quality Of Information	0.890	4
Social Presence	0.887	7
Attitude	0.823	3
Quality Of Service	0.810	4
TSCO	0.802	3
Quality Of System	0.688	4

Information Quality:

- Online shopping platforms provide sufficient information;
- Online shopping platforms provide timely and accurate information;
- Information provided by online shopping platforms meets my needs;
- Information provided by online shopping platforms is clear and reliable.

System Quality:

- Online shopping platforms are easy and simple to use;
- I find it easy to get online shopping platforms to do what I want;
- Using online shopping platforms requires a lot of effort;
- Using online shopping platforms is often frustrating.

Service Quality:

- Online shopping platforms provide dependable services;
- Online shopping platforms provide the services at the time promised;
- Online shopping platforms are responsive to buyers' requests;
- Online shopping platforms are designed to satisfy the needs of buyers.

Online Shopping Attitude:

- Buying from online shopping platforms is a good idea;
- Buying from online shopping platforms is better than buying from a real store/shop;
- Buying from online shopping platforms is a pleasant thing to do.

4.2.2. Results of the Reliability Test

For the replies of the Lebanese participants, the authors examined the reliability of the items in the seven variables. Table 2 shows the Cronbach alpha results, which show

that most values are near to 0.7 or above, indicating that each of the variables analyzed has internal consistency. These results are conformed with most of qualitative interpretation of the significance of the values that is implied in most of the scientific writing that presents Cronbach's statistics. Alpha scores are sometimes classified as acceptable, sufficient, or satisfactory, with scores below the threshold being labeled as insufficient. This threshold is typically defined as less than 0.7 or, more broadly, as between 0.6 and 0.7 (Griethuijsen et al. 2014). Furthermore, the constructs with the greatest alpha include the social value connected to online shopping ($\alpha = 0.916$) having the highest internal consistency.

4.2.3. Differences in the Types of Goods Purchased through Online Shopping

The question related to the types of goods purchased through online shopping was a ranking and classification question between the following goods: clothes and shoes; accessories; food and supplements; books; electronic devices; makeup and perfumes; and the authors added "nothing" as an answer. The researchers were interested in learning what kinds of goods Lebanese consumers buy online.

Table 3 lists the ranked "one" response in the respondents' classification of their purchases. In the sample investigated, it was discovered that 32.5% of participants prefer to buy clothes and shoes via on-line shopping, followed by 21.5% for accessories, 13.5% for makeup and fragrances, and 11.4% for technological equipment. Books and food do not make up a large portion of the purchases made by Lebanese participants on their online social commerce platforms.

Table 3. Types of goods purchased through ONLINE SHOPPING.

List of Products Purchased through Online Shopping	Frequency	Percent	Cumulative Percent
Nothing	41	14.2	14.2
Clothes and shoes	94	32.5	46.7
Accessories	62	21.5	68.2
Food and supplements	6	2.1	70.2
Books	14	4.8	75.1
Electronic devices	33	11.4	86.5
Makeup and perfumes	39	13.5	100.0
Total	289	100.0	

In addition, to respond to the second portion of RQ2, which is about gender disparities, the researchers conducted a comparison between the types of goods purchased by gender categories, considering the fact that gender is a socioeconomic user attribute that has been widely used and evaluated in the realm of IT acceptability and, as a result, of online buying behavior (Gefen and Straub 1997; Venkatesh et al. 2003; Bigne et al. 2005). Gender is a crucial influence in online consumer behavior, according to certain research (Lim and Rashad 2014), and there are gender disparities in attitudes regarding online purchases (Hasan 2016). Gender inequalities in e-commerce are explained by studies (Zhou et al. 2007). Women are more emotional than males, and the lack of face-to-face conversation in online buying might dissuade women from making a purchase (Dittmar et al. 2004).

Major gender differences in the types of goods and products purchased through on-line shopping have been noted, with men preferring to buy electronic devices, foods and supplements, books, and accessories, but not makeup or perfumes, whereas women prefer to buy shoes and clothes, as well as makeup and perfumes, but not foods and supplements. These findings are showed in Table 4 and support those of Lim and Rashad (2014), Gefen and Straub (1997), Venkatesh et al. (2003), and Bigne et al. (2005).

Table 4. Types of goods purchased online by gender.

			Gender		Total
			Male	Female	
List the type of product you purchase using online shopping.	Nothing	Count	18	23	41
		% within gender	15.9%	13.1%	14.2%
	Clothes and shoes	Count	29	65	94
		% within gender	25.7%	36.9%	32.5%
	Accessories	Count	29	33	62
		% within gender	**25.7%**	18.8%	21.5%
	Food and supplements	Count	6	0	6
		% within gender	**5.3%**	0.0%	2.1%
	Books	Count	8	6	14
		% within gender	**7.1%**	3.4%	4.8%
	Electronic devices	Count	23	10	33
		% within gender	**20.4%**	5.7%	11.4%
	Makeup and perfumes	Count	0	39	39
		% within gender	0.0%	22.2%	13.5%
	Total	Count	113	176	289
		% within gender	100.0%	100.0%	100.0%

Traditional variables, e.g., online payment for orders, a variety of delivery options, beautifully designed websites, and store evaluations, as well as social network impacts, are significant factors affecting women's online purchasing habit (Stofkova et al. 2022). Contrarily, women prefer and value tactile shopping more than men do. They want to try and touch the products they wish to buy (Cho 2004). However, the results of the study show that Lebanese women still buy makeup and perfumes online without doing either of those things. Hasan (2016) claims that the e-commerce paradigm is more suited to men. They can save time, effort, and money in the long run (Lim and Rashad 2014). Men need to obtain helpful and comprehensive facts about items on a website in order to repurchase from it (James 2013).

The authors found that 14.2% of the population never buys anything using on-line shopping, with the largest number (76.1%) for purchases made 1–3 times, followed by 5.2% for purchases made more than ten times (results showed in Table 5). There were gender variations in the frequency of purchases made using on-line shopping, as shown in Table 6, where all percentages showed that females had the highest purchasing frequencies with the exception of "7 to 9 times" where males account for 66.7% of the total frequency of purchasing goods online. These results indicate that females use less at the beginning and don't have the habit and loyalty towards online purchasing and that males are used to online purchasing and purchase more than women do.

Table 5. Frequency purchase differences.

		Frequency	Percent	Cumulative Percent
Valid	Never	41	14.2	14.2
	1 to 3 times	220	76.1	90.3
	4 to 6 times	10	3.5	93.8
	7 to 9 times	3	1.0	94.8
	more than 10 times	15	5.2	100.0
	Total	289	100.0	

Table 6. Online purchasing frequency according to gender.

			Gender		Total
			Male	Female	
purchasing frequency	Never	Count	18	23	41
		% within purchasing frequency	43.9%	**56.1%**	100.0%
	1 to 3 times	Count	83	137	220
		% within purchasing frequency	37.7%	**62.3%**	100.0%
	4 to 6 times	Count	4	6	10
		% within purchasing frequency	40.0%	**60.0%**	100.0%
	7 to 9 times	Count	2	1	3
		% within purchasing frequency	**66.7%**	33.3%	100.0%
	more than 10 times	Count	6	9	15
		% within purchasing frequency	40.0%	**60.0%**	100.0%
Total		Count	113	176	289
		% within purchasing frequency	39.1%	60.9%	100.0%

4.3. Results of RQ3: The Relation and Impact of the Quality and the Social Factors on the Consumer Continuous Attitude and Adoption of Online Shopping Post COVID

In order to answer research question 3, the authors investigated the possible gender differences as to the types of variables studied, and the results are presented in Table 7. In addition, the authors tested the level of correlation between these variables under study, as shown in Figure 1.

Table 7. *T*-test results and means for model variables according to gender.

Gender		Mean	Std. Deviation	t	*p*-Value
Online shopping attitude	Male	4.4513	1.10995	0.634 (3)	0.527
	Female	4.3580	1.37830		
Tendency to social comparison about online shopping	Male	4.5133	1.28254	0.701 (2)	0.484
	Female	4.3977	1.41857		
Social presence on online shopping	Male	4.3451	1.01568	−0.44 (3)	0.66
	Female	4.4034	1.21504		
Social value on online shopping	Male	3.7876	1.22074	−0.361 (3)	0.718
	Female	3.8466	1.53968		
quality of the information provided on online shopping platform	Male	4.7257	1.24820	−1.85 (3)	0.066
	Female	4.9943	1.13388		
quality of the system of the online shopping platform	Male	5.7522	1.09814	1.526 (2)	0.128
	Female	5.5455	1.14052		
quality of the service of the online shopping platform	Male	4.8584	0.93415	−1.879 (2)	0.061
	Female	5.0739	0.96226		

Scale for social value and social presence, loyalty and satisfaction: values from 1 to 7; values less than 4 is for "no influence" and values exceeding 4 for "influence". (2) Equal variances assumed according to Levene's Test for Equality of Variances. (3) Equal variances not assumed according to Levene's Test for Equality of Variances.

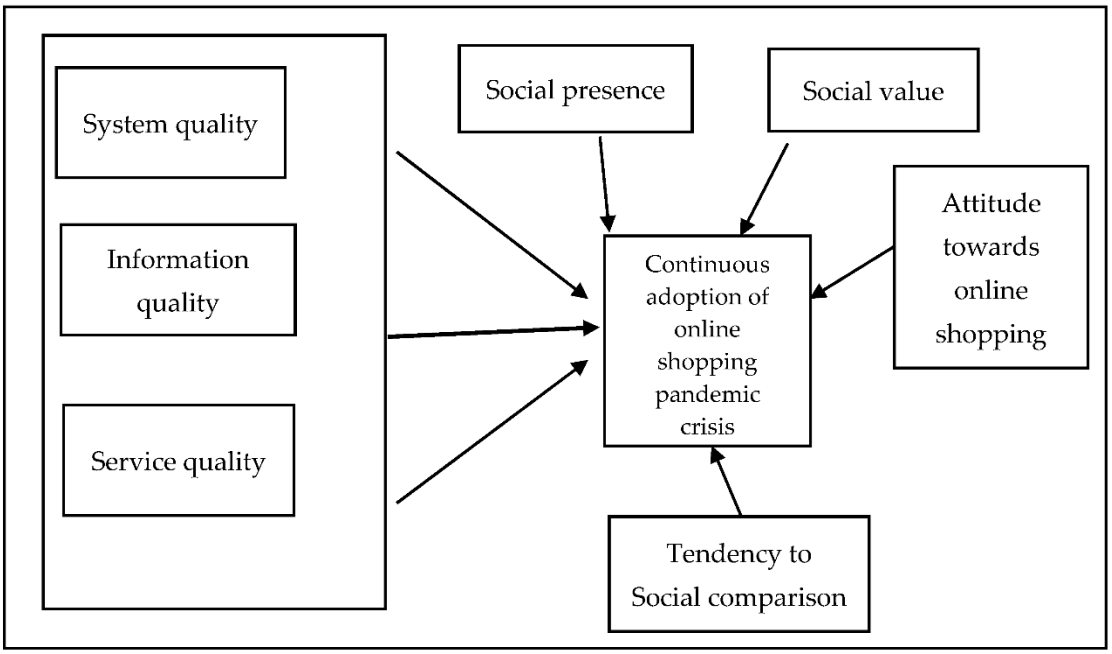

Figure 1. Proposed model for continuous adoption of on-line shopping after COVID-19.

The *t*-test findings revealed that there were no gender differences since all p-values were greater than 0.05 as shown in Table 7. For the variables of quality of service (5.0739) and quality of information (4.9943) offered through online purchasing, women's means are higher than men's means. The following factors had the greatest mean for men: quality of online shopping system (5.7522), social comparison tendency (4.5133), and attitude toward online purchasing (4.4513). The lowest mean for online shopping attitude was less than 4.5 for both men and women, indicating that they had a generally ordinary attitude toward online buying. Women place a higher value on the quality of service and information when purchasing online compared to men, and they are happier with the quality offered. These results showed that this can be related to the sorts of things women choose to buy, which are more closely aligned with their requirements than what males buy online.

The regression matrix with Pearson coefficients shown in Table 8 was used to examine the robustness of the linear regressions between the sets of individual variables in the research model shown in Figure 1. As predicted, there was a strong relationship between the variables, particularly social presence, and attitude toward online shopping (0.664). Except for the variable social value, which is not strongly correlated to the quality of the system offered for online shopping, as the regression coefficients reveal in Table 8, all other relationships were positive and higher than 0.5.

Table 8. Relationship between model's variables (Pearson correlation results).

	Social Value	Social Presence	Online Shopping Attitude	Tendency to Social Comparison	Quality of the Information	Quality of the System	Quality of the Service
Social value	1						
Social presence	0.522 **	1					
Online shopping attitude	0.621 **	0.664 **	1				
Tendency to social comparison	0.487 **	0.605 **	0.657 **	1			
quality of the information	0.240 **	0.376 **	0.444 **	0.391 **	1		
quality of the system	0.011	0.165 **	0.199 **	0.282 **	0.276 **	1	
quality of the service	0.257 **	0.367 **	0.452 **	0.456 **	0.526 **	0.293 **	1

** Correlation is significant at the 0.01 level (2-tailed).

5. Discussion

According to the research findings, quality aspects (information, service, and system) are positively associated to customers' online buying attitudes during the COVID-19 pandemic. These findings are significant for three reasons. To begin with, it is uncertain how long this situation will persist and whether more lockdowns would be necessary in the future. As a result, businesses should adjust their business models and various online shopping platforms to the changes in customer behavior that are occurring in the short and medium term.

Second, recent studies suggest that, in the long run, consumer behavior may change in response to the COVID-19 pandemic, particularly if consumers continue to purchase on-line rather than traditional shopping, and that businesses must anticipate these trends in order to meet customer needs in the future (Damais 2020; Moss et al. 2020).

Third, amid this crisis, many retailers have spent significant time, resources, and technology developing and/or upgrading their e-commerce strategy (Loxton et al. 2020). To guarantee that e-commerce maintains its popularity once the shop reopens, businesses must have a thorough understanding of their consumers' motives and their proclivity to compare all of the aspects that influence their purchases across several platforms.

The research findings showed that the service quality is the least correlated to the proposed model and has the least impact for the consumers continuous use of online shopping, therefore, the authors suggest that businesses should leverage their social media presence to deliver higher-quality material that can be shared on sites like Instagram or Facebook to reach a broad audience. Traditional shops lacking internet storefronts prior to the sanitary crisis must use communication channels to enable clients to continue purchasing despite the lockdown, such as selling online vouchers that can be redeemed later or setting up temporary but less sophisticated online stores. For instance, in order to try on clothes, and because the findings show that this category of goods has the highest purchasing rates (69% of female in the sample studied and 31% of male respondents), the researchers can suggest digital changing rooms that might entice customers by entertaining them and allowing them to virtually try on items thanks to AI advancements (Merle et al. 2012).

As shown in the study, another important aspect of consumers' attitudes toward online shopping is that gender is a major parameter in purchasing products online and that the types of goods differ according to whether the customer is male or female. Therefore, during the COVID-19 crisis, when customers seem to spend more time engaging in e-commerce and may acquire things more consciously, online businesses may gain from this momentum (Moss et al. 2020). In either case, these businesses should position themselves to deliver a pleasurable experience, high-quality service, and an educational buying experience. Companies may also appeal better to consumers by deliberately upgrading their online quality service information and system.

Lastly, COVID-19 has improved social media utilization (Facebook, Instagram, WhatsApp, Twitter, and Zoom). They are using word-of-mouth to generate enormous amounts of data. The present analytical techniques are less useful for video chats.

6. Conclusions

The authors of this study attempted to investigate, through a series of systematic processes and research projects, how consumer behavior and attitudes might change as a result of using an online shopping platform during COVID-19 confinement, with a particular focus on determining whether any type of quality or social factors might affect the continued use of online shopping. The researchers developed a conceptual model based on this perception, which they tested on Lebanese people from various socioeconomic backgrounds, allowing them to examine the presence of purchasing frequency and gender differences, as well as the types of goods purchased online. Additionally, the authors discovered a clear and strong correlation between their model variables.

Existing habits and structures are being called into question as a result of the COVID-19 pandemic. Companies must understand consumer behavior at this time since crises

can cause profound economic and cultural changes. Due to a significant development in e-commerce, the tendencies formed during the crisis may stay stable in the future, causing major implications for traditional retailers.

It has been deduced that customers, regardless of their gender differences, are spending more time on online platforms during the present pandemic although the types of goods purchased varies from one gender to another. Furthermore, authors discovered that people's purchasing attitudes are influenced by their proclivity to compare items on online buying sites. According to the research findings, businesses may influence purchase behavior by enhancing the quality of their service, information, and system.

The lockdown and social segregation tactics deployed to combat the COVID-19 virus have seriously affected consumer behavior. Time and place are the only two restrictions on usage. Because of the flexibility of time in contrast to the rigidity of geography, consumers have learned to adapt in new and creative ways. The distinction between work and personal life is becoming more and more hazy as more people work, study, and relax at home. The store must go to the customer because the customer is unable to come to the establishment.

Consumers who have been placed under lockdowns for an extended period of time are more prone to accept modern technologies that make work, learning, and consumption activities more convenient. Consumer attitudes are expected to change as a result of adopting digital technologies. Due to the COVID-19 crisis, customers shopped online more frequently after the crisis than during it. Both the frequency of online purchases and the percentage of items bought online have increased dramatically (Svatosova 2022). Therefore, online retailers can boost their competitiveness in e-commerce by being ready for these changes and taking them into consideration when creating and implementing their e-strategy.

There are certain limitations to this study worth tackling in future work. This research focuses on three forms of quality aspects affecting online shopping platforms. Adding to this, gender disparities in consumer attitudes and their willingness to compare items online. These customers routinely purchase goods online. However, because the sample under study does not fairly cover older generations, the authors may need to account for age disparities in future studies.

Furthermore, the influence of the early limitations imposed in response to the COVID-19 pandemic is investigated in this study. To strengthen the theoretical context of this research, further studies should be performed to see if the global crisis has impacted the long-term drivers of consumer behavior.

In the same way that customers have learnt to improvise, businesses must learn to innovate and become more resilient during a pandemic. Companies, however, are governed by formal processes, which they are frequently unable to modify rapidly. Fortunately, as more major businesses have moved to cloud computing, innovating has become easier. Supermarkets, for instance, and major businesses have been affected in this way. In summary, businesses should learn how to make their infrastructure, systems, and procedures more robust to tackle global crises such as COVID-19 in their different processes (managerial, logistic, supply chain etc.).

The frequency of implementing responsible activities within the principles of the circular economy is a novel variable in e-commerce (Musova et al. 2021). Future research should focus on the environmentally conscious consumer behavior in relation to consumer demographics and perspectives on environmental issues.

Finally, it is noted that customers visiting stores today are not the same as they used to be. Consumers may revert to their old behaviors unless the technology they learnt to utilize, such as online ordering, triggers major changes in their lives, maintaining a perpetual good attitude towards online buying following the pandemic. This attitude tends to sustain in the future, as shown in this study, if businesses marketing strategies enhance the quality of the services, information, and system provided through online shopping platforms.

Author Contributions: Conceptualization, N.M.B. and M.M.S.; methodology, N.M.B.; software, N.M.B.; validation, N.M.B., M.M.S. and Z.B.; formal analysis, N.M.B.; investigation, M.M.S.; resources, M.M.S.; data curation, N.M.B.; writing—original draft preparation, N.M.B.; writing—review and editing, N.M.B.; visualization, M.M.S.; supervision, Z.B.; project administration, N.M.B.; funding acquisition, N.M.B., M.M.S. and Z.B. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This research was implemented taking care to ensure all ethical standards and followed the guidelines of the Declaration of Helsinki. The development of the study by questionnaire survey was approved on 4 May 2020 by the ethics committee of Saint Joseph University of Beirut (Reference No. 2020-100).

Informed Consent Statement: Not applicable.

Data Availability Statement: Data are available from the corresponding author upon request.

Conflicts of Interest: The authors declare no conflict of interest.

References

Abou Ali, Ali, Alaa Abbass, and Nihal Farid. 2020. Factors influencing customers' purchase intention in social commerce. *International Review of Management and Marketing* 10: 63. [CrossRef]

Al-Debei, Mutaz M., Mamoun N. Akroush, and Mohamed Ibrahiem Ashouri. 2015. Consumer attitudes towards online shopping: The effects of trust, perceived benefits, and perceived web quality. *Internet Research* 25: 707–33. [CrossRef]

Alshibly, Haitham Hmoud. 2014. A free simulation experiment to examine the effects of social commerce website quality and customer psychological empowerment on customers's atisfaction. *Journal of Business Studies Quarterly* 5: 21–40.

Anderson, Rolph E., and Srini S. Srinivasan. 2003. E-satisfaction and e-loyalty: A contingency framework. *Psychology and Marketing* 20: 123–38. [CrossRef]

Belvedere, Valeria, and Alberto Grando. 2017. ICT-enabled time performance: An investigation of value creation mechanisms. *Production Planning and Control* 28: 75–88. [CrossRef]

Bigne, Enrique, Carla Ruiz, and Silvia Sanz. 2005. The Impact of Internet User Shopping Patterns and Demographics. *Journal of Electronic Commerce Research* 6: 193.

Boustani, Nada Mallah. 2020. Traditional Banks and Fintech: Survival, Future and Threats. In *ICT for an Inclusive World*. Lecture Notes in Information Systems and Organisation. Edited by Youcef Baghdadi, Antoine Harfouche and Marta Musso. Cham: Springer, vol. 35. [CrossRef]

Boustani, Nada Mallah, and Z. El Boustani. 2017. Innovation in organizations having founder's syndrome. *Problems and Perspectives in Management* 15: 517–24. [CrossRef]

Brodie, Roderick J., Ana Ilic, Biljana Juric, and Linda Hollebeek. 2013. Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research* 66: 105–14. [CrossRef]

Busalim, Abdelsalam H., Fahad Ghabban, and Ab Razak Che Hussin. 2021. Customer engagement behaviour on social commerce platforms: An empirical study. *Technology in Society* 64: 101437. [CrossRef]

Buunk, Abraham P., and Frederick X. Gibbons. 2007. Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes* 102: 3–21. [CrossRef]

Chang, Man Kit, Waiman Cheung, and Vincent S. Lai. 2005. Literature derived reference models for the adoption of online shopping. *Information & Management* 42: 543–59.

Cho, Jinsook. 2004. Likelihood to abort an online transaction: Influences from cognitive valuations, attitudes, and behavioral variables. *Information & Management* 41: 827–38. [CrossRef]

Churchill, G. A., and Dawn Lacobucci. 2004. *Marketing Research: Methodological Foundations, Structural Equation Modeling*. Mason: South-Western College Pub.

Cui, Nan, Tao Wang, and Shuang Xu. 2010. The Influence of Social Presence on Consumers' Perceptions of the Interactivity of Web Sites. *Journal of Interactive Advertising* 11: 36–49. [CrossRef]

Damais, Jean-Francois. 2020. *The Forces of Customer Experience. The Science of Strong Relationships in Challenging Times*. Paris: IPSOS. Available online: https://www.ipsos.com/en/forces-customer-experience (accessed on 5 October 2021).

DeLone, William H., and Ephraim R. McLean. 1992. Information Systems Success: The Quest for the Dependent Variable. *Information Systems Research* 3: 1–95. [CrossRef]

DeLone, William H., and Ephraim R. McLean. 2003. The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems* 19: 9–30. [CrossRef]

DeLone, William H., and Ephraim R. McLean. 2004. Measuring e-Commerce Success: Applying the DeLone & McLean Information Systems Success Model. *International Journal of Electronic Commerce* 9: 31–47. [CrossRef]

DeLone, William, and Ephraim McLean. 2008. Measuring information systems success: Models, dimensions, measures, and interrelationships. *European Journal of Information Systems* 17: 236–63.
Dittmar, Helga, Karen Long, and Rosie Meek. 2004. Buying on the Internet: Gender Differences in On-line and Conventional Buying Motivations. *Sex Roles* 50: 423–44. [CrossRef]
Dong, Tse-Ping, Nai-Chang Cheng, and Yen-Chun Jim Wu. 2014. A study of the social networking website service in digital content industries: The Facebook case in Taiwan. *Computers in Human Behavior* 30: 708–14. [CrossRef]
Erkan, Ismail, and Chris Evans. 2016. The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior* 61: 47–55. [CrossRef]
Gan, Chunmei, and Weijun Wang. 2017. The influence of perceived value on purchase intention in social commerce context. *Internet Research* 27: 772–85. [CrossRef]
Gao, Lingling, Kerem Aksel Waechter, and Xuesong Bai. 2015. Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study—A case of China. *Computers in Human Behavior* 53: 249–62. [CrossRef]
Gefen, David, and Detmar W. Straub. 1997. Gender Differences in the Perception and Use of E-Mail: An Extension to the Technology Acceptance Model. *MIS Quarterly* 21: 389–400. [CrossRef]
Gefen, David, and Detmar W. Straub. 2004. Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-Products and e-Services. *Omega* 32: 407–24. [CrossRef]
Griethuijsen, Ralf A. L. F., Michiel W. van Eijck, Helen Haste, Perry J. den Brok, Nigel C. Skinner, Nasser Mansour, Ayse Savran Gencer, and Saouma BouJaoude. 2014. Global patterns in students' views of science and interest in science. *Research in Science Education* 45: 581–603. [CrossRef]
Hajli, Nick. 2015. Social commerce construct and consumer's intention to buy. *International Journal of Information Management* 35: 183–91. [CrossRef]
Hasan, Bassam. 2016. Perceived irritation in online shopping: The impact of website design characteristics. *Computers in Human Behavior* 54: 224–30. [CrossRef]
Hassanein, Khaled, and Milena Head. 2007. Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. *International Journal of Human-Computer Studies* 65: 689–708. [CrossRef]
Herrando, Carolina, Julio Jiménez-Martínez, and María José Martín-De Hoyos. 2021. The Mediated Effect of Social Presence on Social Commerce WOM Behavior. *Information* 12: 498. [CrossRef]
Huang, Zhao, and Morad Benyoucef. 2013. From e-commerce to social commerce: A close look at design features. *Electronic Commerce Research and Applications* 12: 246–59. [CrossRef]
James, Carl. 2013. *Errors in Language Learning and Use Exploring Error Analysis*. London: ImprintRoutledge, p. 320. [CrossRef]
Kasioumi, Myrto, and Thanasis Stengos. 2022. The Effect of Pollution on the Spread of COVID-19 in Europe. *EconDisCliCha* 6: 129–40. [CrossRef]
Kim, Changsu, Robert D. Galliers, Namchul Shin, Joo-Han Ryoo, and Jongheon Kim. 2012. Factors influencing Internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications* 11: 374–87. [CrossRef]
Kim, Sanghyun, and Hyunsun Park. 2012. Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management* 33: 318–32. [CrossRef]
Lee, Kun Chang, and Namho Chung. 2009. Understanding factors affecting trust in and satisfaction with mobile banking in Korea: A modified DeLone and McLean's model perspective. *Interacting with Computers* 21: 385–92. [CrossRef]
Liang, Ting-Peng, Yi-Ting Ho, Yu-Wen Li, and Efraim Turban. 2011. What Drives Social Commerce: The Role of Social Support and Relationship Quality. *International Journal of Electronic Commerce* 16: 69–90. [CrossRef]
Lim, Pei Ling, and Yazdanifard Rashad. 2014. Does Gender Play a Role in online Consumer Behavior? *Global Journal of Management and Business Research* 14: 49–56.
Lin, Kuan-Yu, and Hsi-Peng Lu. 2015. Predicting mobile social network acceptance based on mobile value and social influence. *Internet Research* 25: 107–30. [CrossRef]
Loxton, Mary, Robert Truskett, Brigitte Scarf, Laura Sindone, George Baldry, and Yinong Zhao. 2020. Consumer Behaviour during Crises: Preliminary Research on How Coronavirus Has Manifested Consumer Panic Buying, Herd Mentality, Changing Discretionary Spending and the Role of the Media in Influencing Behaviour. *Journal of Risk and Financial Management* 13: 166. [CrossRef]
Mardiana, Siti, Jann H. Tjakraatmadja, and Atik Aprianingsih. 2015. DeLone–McLean Information System Success Model Revisited: The Separation of Intention to Use-Use and the Integration of Technology Acceptance Models. *International Journal of Economics and Financial Issues* 5: 172–82. Available online: https://dergipark.org.tr/en/pub/ijefi/issue/31972/352276?publisher=http-www-cag-edu-tr-ilhan-ozturkinformation (accessed on 5 October 2021).
Mason, Andrew, John Narcum, and Kevin Mason. 2020. Changes in consumer decision-making resulting from the COVID-19 pandemic. *Journal of Customer Behaviour* 19: 299–321. [CrossRef]
Merle, Aurélie, Sylvain Senecal, and Anik St-Onge. 2012. Whether and How Virtual Try-On Influences Consumer Responses to an Apparel Web Site. *International Journal of Electronic Commerce* 16: 41–64. [CrossRef]
Moss, Fiona, Jean-Francois Damais, and Tamara Ansons. 2020. Staying Close to Your Customers. Why Customer Experience still Matters Amid COVID-19 and Social Distancing. Available online: https://www.ipsos.com/sites/default/files/ct/publication/documents/2020-04/ipsos-staying-close-to-your-customers.pdf (accessed on 2 May 2020).

Musova, Zdenka, Hussam Musa, and Veronika Matiova. 2021. Environmentally responsible behaviour of consumers: Evidence from Slovakia. *Economics & Sociology* 14: 178–98. [CrossRef]
Nordeatrade. 2019. Ecommerce in Lebanon. Available online: https://www.nordeatrade.com/en/explore-new-market/lebanon/ecommerce (accessed on 5 October 2021).
Ogonowski, Andrzej, Andrew Montandona, Elsamari Bothaa, and Mignon Reynekeb. 2014. Should new online stores invest in social presence elements? The effect of social presence on initial trust formation. *Journal of Retailing and Consumer Services* 21: 482–91. [CrossRef]
Pitt, Leyland F., Richard T. Watson, and C. Bruce Kavan. 1995. Service quality: A measure of information systems effectiveness. *MIS Quarterly* 19: 173–87. [CrossRef]
Poushter, Jacob. 2016. *Smartphone Ownership and Internet Usage Continues to Climb in Emerging Economies*. Washington: Pew Research Center, pp. 1–44.
Qiu, Lingyun, and Izak Benbasat. 2005. Online Consumer Trust and Live Help Interfaces: The Effects of Text-to-Speech Voice and Three-Dimensional Avatars. *International Journal of Human–Computer Interaction* 19: 75–94. [CrossRef]
Rintamäki, Timo, Antti Kanto, Hannu Kuusela, and Mark T. Spence. 2006. Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland. *International Journal of Retail & Distribution Management* 34: 6–24. [CrossRef]
Sánchez-Torres, Javier A., and Fernando Juarez-Acosta. 2019. Modelling SME e-commerce with IMAES. *Journal of Business & Industrial Marketing* 34: 137–49.
Sánchez-Torres, Javier A., Alexander Varon Sandobal, James-Ariel Sánchez-Alzate, and X. Arroyo. 2017. Differences between e-commerce buyers and non-buyers in Colombia: The moderating effect of educational level and socioeconomic status on electronic purchase intention. *DYNA (Medellin, Colombia)* 84: 175–89. [CrossRef]
Sharma, Shwadhin, and Robert E. Crossler. 2014. Intention to Engage in Social Commerce: Uses and Gratifications Approach. Paper Present at the AMCIS, Savannah, GA, USA, August 7–9. Available online: https://core.ac.uk/download/pdf/301363025.pdf (accessed on 22 November 2021).
Shen, Jia. 2012. Social Comparison, Social Presence, and Enjoyment in the acceptance of social shopping websites. *Journal of Electronic Commerce Research* 13: 198–212. Available online: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.462.3942&rep=rep1&type=pdf (accessed on 22 November 2021).
Sheth, Jagdish N. 2020a. *The Howard-Sheth Theory of Buyer Behavior*. New Delhi: Wiley & Sons. Available online: https://www.jagsheth.com/consumer-behavior/a-theory-of-buyer-behavior/ (accessed on 22 November 2021).
Sheth, Jagdish N. 2020b. Impact of COVID-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research* 117: 280–83. [CrossRef]
Sheth, Jagdish N., and Rajendra S. Sisodia. 1999. Revisiting Marketing's Lawlike Generalizations. *Journal of the Academy of Marketing Science* 27: 71–87. [CrossRef]
Stofkova, Katarina Repkova, Dominik Laitkep, and Zuzana Stofkova. 2022. Shopping Behavior in the Context of the Digital Economy. *Journal of Risk and Financial Management* 15: 39. [CrossRef]
Svatosova, Veronika. 2022. Changes in Online Shopping Behavior in the Czech Republic During the COVID-19 Crisis. *Journal of Competitiveness* 14: 155–75. [CrossRef]
Sweeney, Jillian C., and Geoffrey N. Soutar. 2001. Consumer perceived value: The development of a multiple item scale. *Journal of Retailing* 77: 203–20. [CrossRef]
Tarhini, Ali, Ali Abdallah Alalwan, and Raed S. Algharabat. 2019. Factors influencing the adoption of online shopping in Lebanon: An empirical integration of unified theory of acceptance and use of technology2 and DeLone-McLean model of IS success. *International Journal of Electronic Marketing and Retailing* 10: 368–88. [CrossRef]
Valaskova, Katarina, Pavol Durana, and Peter Adamko. 2021. Changes in consumers' purchase patterns as a consequence of the COVID-19 pandemic. *Mathematics* 9: 1788. [CrossRef]
Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis, and Fred D. Davis. 2003. User acceptance of information technology: Toward a unified view. *MIS Quarterly* 27: 425–78. [CrossRef]
Venkatesh, Viswanath, James YL Thong, and Xin Xu. 2012. Consumer acceptance and use of information: Extending the unified theory of acceptance and use of technology. *MIS Quarterly* 36: 157–78. [CrossRef]
Wang, Chingning, and Ping Zhang. 2012. The Evolution of Social Commerce: The People, Management, Technology, and Information Dimensions. *Communications of the Association for Information Systems* 31: 5. [CrossRef]
Wang, Yi-Shun. 2008. Assessing e-commerce systems success: A respecification and validation of the DeLone and McLean model of IS success. *Information Systems Journal* 18: 529–57. [CrossRef]
Zhou, Lina, Liwei Dai, and Dongsong Zhang. 2007. Online shopping acceptance model—A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research* 8: 41–62. Available online: https://asset-pdf.scinapse.io/prod/2150312165/2150312165.pdf (accessed on 22 November 2021).
Zhou, Tao. 2014. Understanding continuance usage intention of mobile internet sites. *Universal Access in the Information Society* 13: 329–37. [CrossRef]