

Article

Identifying How E-Service Quality Affects Perceived Usefulness of Online Reviews in Post-COVID-19 Context: A Sustainable Food Consumption Behavior Paradigm

Yongrong Xin ¹ , Muhammad Irfan ^{2,3,4,*} , Bilal Ahmad ^{5,6} , Madad Ali ^{7,8} and Lanqi Xia ⁹

¹ Business School, Jiangsu Open University, Nanjing 210036, China

² School of Management and Economics, Beijing Institute of Technology, Beijing 100081, China

³ Center for Energy and Environmental Policy Research, Beijing Institute of Technology, Beijing 100081, China

⁴ Department of Business Administration, ILMA University, Karachi 75190, Pakistan

⁵ School of Economics and Management, North China Electric Power University, Beijing 102206, China

⁶ Riphah School of Business and Management, Riphah International University, Lahore 54000, Pakistan

⁷ School of Economics and Management, Qujing Normal University, Qujing 655011, China

⁸ Pakistan Studies Center, School of Ethnology, North Minzu University, Yinchuan 750021, China

⁹ College of Management Science, Chengdu University of Technology, Chengdu 610059, China

* Correspondence: irfansahar@bit.edu.cn

Abstract: In this study, the concept of online food purchasing is explored where consumers are not required to visit markets to purchase their foods, especially during the COVID-19 pandemic. Thus, the purpose of this study is to investigate the relationship between perceived e-service quality and related customer service outcomes in online shopping context. The influence of sustainable marketing practices in terms of perceived e-service quality (ESQ), perceived usefulness of online reviews (PUO), brand self-connection (BSC), personal innovativeness (PRI), and willingness to pay for online food services (WPO) has largely been neglected in the previous studies. The present study proposes a conceptual model to fill this gap and empirically examines how ESQ affects PUO, BSC, WPO, and e-word-of-mouth (e-WOM) of food delivery service brands. An online questionnaire survey was conducted with 423 customers utilizing the PLS-SEM-based approach to determine product indicators. Empirical results reveal that ESQ significantly influence BSC and PUO. In the same vein, PUO significantly influence BSC, while BSC significantly influence e-WOM and WPO. The results further indicate that PRI moderates the relationship between ESQ and BSC. In a post-pandemic context, our analysis indicates enormous implications for food service delivery brands in emerging economies. Online food service providers should consider reviewers' opinions about the products and services they offer and encourage their customers to write positive reviews of the products and services they offer.

Keywords: perceived e-service quality; self-brand connection; perceived usefulness of online reviews; personal innovativeness; e-word-of-mouth; COVID-19 pandemic



Citation: Xin, Y.; Irfan, M.; Ahmad, B.; Ali, M.; Xia, L. Identifying How E-Service Quality Affects Perceived Usefulness of Online Reviews in Post-COVID-19 Context: A Sustainable Food Consumption Behavior Paradigm. *Sustainability* **2023**, *15*, 1513. <https://doi.org/10.3390/su15021513>

Academic Editor: Hong-Youl Ha

Received: 19 September 2022

Revised: 24 December 2022

Accepted: 27 December 2022

Published: 12 January 2023



Copyright: © 2023 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

Is there any impact on online business growth in emerging economies as a result of COVID-19 outbreak? Perceived usefulness of online reviews (PUO) may have a crucial role in assisting shoppers in making better choices that improve their lives in the era of e-commerce [1–3]. A number of studies have demonstrated the significance of online reviews to the purchase decisions of customers and the selection of products [4,5]. A one-star increase in Yelp ratings can lead to an increase in revenue of 5% to 9% for restaurants and food service providers, which are heavily dependent on online reviews [6]. For instance, diners have complained about inefficient and overheated outdoor seating on Yelp. Additionally, 80% of consumers choose food service providers based on ratings [7]. In light of the significant changes in consumer lifestyles and purchasing practices that

have resulted from the COVID-19 outbreak, there has been a significant impact on the food service industry [8]. Online ordering was the most popular method of ordering food globally in 2020–2021 [9]. As a result of the pandemic, food service owners have seen their sales dramatically drop and direct services restricted, negatively affecting customer service. Thus, unsatisfactory customer reviews can adversely affect food delivery businesses' ratings and revenues.

An online food delivery service provides a consistent delivery experience, improves productivity capacity, and strengthens customer relationships across concentrated markets [10]. Customers expect websites to offer top-notch customer service [11]. In particular, it is applicable to businesses engaged in online services, such as food delivery services, in which companies and consumers exclusively communicate online [3]. Food delivery owners can develop close relationships with their customers based on their interactions with online services. Further, [12] advocate that higher quality in online services will motivate repeat purchases, and determinants that enable customers to build relationships with brands should be examined. Also, it is essential to quantify the amount of time and difficulty people save by using e-services. Through these services, a brand and its customers may have a strong connection [13]. In order to address brand self-connection (BSC) in the food service industry, the present study integrates perceived e-service quality (ESQ) and its implications, which have been unaddressed in previous literature on the subject [12].

The preceding few years have seen social media platforms become important sources of relevant product information, product evaluation, and consumer interaction. It has become increasingly common for hospitality consumers to share their opinions about products online as social media and online purchasing become more prevalent [14]. When a consumer purchases a product or service, they can express feelings, opinions, and attitudes online in reviews [7]. In this regard, scholars are curious to learn how the PUO may impact customer purchasing decisions in the food service delivery. Additionally, several studies have been conducted examining the perceived usefulness of online services and their link with BSC. For example, the findings of [15] suggest that the perceived usefulness of online healthcare services as well as the perception of trust, play an important role in their acceptance. Similarly, [16] argues that consumers are more likely to engage with brands when technology is perceived as useful because it encourages them to use more of a brand's products or services. Despite substantial studies on perceived usefulness in consumer literature, little has been done to examine how ESQ affects consumers' PUO and their BSC in the food delivery services and hospitality business. This study serves to fill this gap by exploring the factors behind the ESQ and the PUO in the context of emerging food service providers.

Additionally, several studies have been conducted on how individual innovativeness affects technological behavior intentions [17,18]. Various moderating variables have been found to govern the relationship between e-services and BSC (e.g., [19,20]). However, there is no common view and no insights into the food service delivery industry, so more research is needed. In particular, by extending the research of other academics, we use a product indication technique based on PLS-SEM to discover personal innovativeness (PRI) as a moderating variable in impacting perceptions of ESQ and BSC [10]. This is why we adapted the original technology acceptance model (TAM), with the hope that technological innovation services will be employed based on PRI [21]. The adoption of information technology is more likely to occur among those who are more innovative, and vice versa since innovation is an individual characteristic [21,22]. Therefore, food service providers use online surveys to connect with prospective customers [4]. In addition, the impact and expansion of e-word-of-mouth (e-WOM) have significantly increased since users now have the opportunity to convey their opinions to a larger group [23]. Hence, e-WOM is believed to have a larger influence than traditional WOM due to its ease, accuracy, and range [24]. We believe digital technology could amplify market differentiation and equip consumers with more relevant information, lowering consumer insecurity and enhancing consumers'

willingness to pay for online food services (WPO) for online services. Consequently, the theoretical model proposes a contribution to the literature on perceived ESQ, e-WOM, and WPO.

In this study, we extend the literature concerning the TAM by investigating the association among determinants and consequences of PUO. The literature on tourism and hospitality has little research that uses PUO, since scholars were extremely concerned about differences between written feedback and statistical score [25]. In light of the COVID-19 epidemic, there have only been a few investigations identifying online consumer reviews. In our opinion, the present study represents the initial effort to fill the mentioned research gaps and allows food service delivery owners to better support their consumers following the outbreak of COVID-19. In order to accomplish this, the following research questions were proposed: (1) Is there any change in consumers' perceptions of online reviews following the COVID-19 pandemic? (2) What impact does ESQ have on PUO and BSC? and (3) In what sense does the innovativeness of the customer moderate the effect of ESQ on BSC?

The rest of the study is structured as follows: Section 2 deals with literature review and hypotheses development. Research methods are reported in Section 3. Section 4 provides study results. Discussion and policy implications are discussed in Section 5. Finally, Section 6 concludes the study and provides study limitations along with future research directions.

2. Literature Review and Hypotheses Development

2.1. The Quality of Online Food Services in the Post-COVID-19 Period

In the new world of e-commerce, people need to compare services more than ever before. Five parameters comprise the Servqual model: tangibles, reliability, responsiveness, assurance, and empathy [26]. In the present study, the existing framework has been assessed to generate perceived customer value through ESQ. A standard method of evaluating the quality of service in the online environment is the SERVQUAL model [27]. There are a number of key dimensions that are missing from the SERVQUAL model that may allow the ESQ to improve. In Ref. [28], the ESQ is addressed across a range of aspects, such as the design of the website, usability, confidentiality, trustworthiness, content, sharing, dissemination, and customization. In the retail sector, ESQ has been referred to as consumers' perceptions and choices regarding online services [29].

ESQ has been examined in many areas of study. The ESQ provided by online food service delivery in post-COVID-19 has been the subject of limited empirical studies. A study conducted by [9] examined consumer perceptions of the online food delivery supply chain system following the outbreak of COVID-19. In consequence, online food purchasers are more likely to make smart choices and less likely to be exposed to possible risks. It is becoming increasingly common for food service providers to offer online delivery services rather than manufacturing and preservation practices, which allow customers to find a preferred food service provider, make selections, and provide delivery codes when ordering food online [3,30]. In the post-COVID era, people's demand for online food service delivery has greatly increased because advanced technologies provide greater flexibility in terms of both location and time. In this problem, e-food services provide access to inexpensive and convenient meals at people's front doors after a long workday, thus maintaining wider social isolation amid the outbreak.

2.2. Perceived E-Service Quality and Perceived Usefulness of Online Reviews

Despite the extensive literature on the topic of online service provision, we selected the most pertinent research in the service industry, particularly in the food service industry. Besides reading food service reviews online, customers may also review the company website, which includes a menu, images, and video clips relevant to the establishment's cuisine. It is possible for customers to find a wide range of details from online reviews. Numerous research findings have looked at the role and effects of online reviews, such as reviews of online food delivery apps, in the hospitality business [16].

On many review websites, there is a peer-review system that allows users to comment on the reviews they have read [4]. For instance, McDonald's provides customers with a service that allows them to view positive and negative comments posted by other users to help in the rating process. In order to build trust in a company, customers may benefit from the helpful information on a review platform [1,3]. In an article [1], the authors argue that including user reviews on a webpage may contribute to the enhancement of the company's online services. Researchers have used the concept of perceived usefulness to examine how well online consumers perceive the quality of services, e-commerce, and degrees of satisfaction they receive from websites [7].

There is a lack of literature regarding the connection between the PUO and the ESQ. Thus, the more effective services offered by online food service providers, the greater consumer perception of the usefulness of online reviews in post-pandemic service expectations. Based on the above arguments, we point:

H₁: *Perceived ESQ will have a positive impact on PUO.*

2.3. Perceived E-Service Quality and Self-Brand Connection

In order to offer smooth services online, e-customer service delivery is designed to meet customer expectations [12]. Consequently, consumers may perceive service brands as leaders in a rapidly changing market [31]. It is well known that technological advancements in the food industry have evolved from production and preservation to online service channels, enabling customers to identify their favorite food places, select items, and ask about meals on their websites [30].

Literature [32] suggest that website design improves the perceptions of web users offline. The robustness of a website provides an opportunity for positive reviews as well as impressions. According to previous debates, a professionally designed website can significantly influence customers' perceptions and keep them connected to the brand [4]. It is important to consider how a web-based system's perceived ease of use (usability) impacts the user experience [4]. According to [33], website convenience substantially impacts brand advocacy, which is strongly correlated with the BSC. When it comes to providing perfect quality services, many factors must be taken into consideration. In addition to fulfilling the order on time, the website should deliver the services described, and receiving orders should be a simple and convenient process.

Furthermore, customers may be encouraged to associate themselves more closely with trustworthy brands. A customer must establish meaningful beliefs about a brand, which in turn will likely strengthen the relationship with the brand in terms of empathy, trustworthiness, and authenticity when the customer approves of the brand. In the context of online services, companies can obtain customer data such as buying habits, needs, likes, dislikes, and so forth. Therefore, personalized services can be delivered more easily, resulting in improved customer loyalty, company reputation, and perception [34]. Our current argument is that people have reduced outdoor activities due to COVID-19 threats and shifted their eating habits to online food services. In light of this, we propose the accompanying hypothesis (Figure 1).

H₂: *Perceived ESQ will have a positive influence on BSC.*



Figure 1. Conceptual framework.

2.4. Perceived Usefulness of Online Reviews and Self-Brand Connection

A ‘brand as self’ conception is prevalent when consumers view brands as part of their self-concept [13]. Literature [35] explored the concept of BSC, which explores how consumers have integrated brands into their self-concepts. It appears that consumers are more likely to develop an BSC when they have a close association with a reference group.

As retail e-commerce increases and social media explodes, consumers and businesses are engaging in more open dialogue online about products. [14] study of online reviews defines it as a combination of customer experiences, attitudes, and opinions that facilitates the exchange of information between a consumer and a business before they purchase a service or product. Among the findings of [5] on consumer satisfaction, it appears that the level of BSC is mediated by customer satisfaction. The positive comments of a customer on a social networking site can have a major impact on other customers’ opinions of a product, establishing a personal connection between the consumer and the online brand. Previous research has demonstrated that users’ perceptions of the PUO influence their attitudes and behaviors of consumers [36]. Following the prior statement, we suggest the below hypothesis.

H₃: PUO will have a positive influence on BSC.

2.5. Self-Brand Connection and E-Word of Mouth

In the COVID-19 outbreak, E-WOM played an important role in influencing consumer behavior. Despite this, customer feedback continues to be a significant but largely ignored concern that motivates consumers to share their positive and negative experiences with online shopping [23]. In order to develop customers’ awareness and build their individual identities, customer-brand associations are determined by customer interactions [37]. It has been found that consumers who have a greater sense of BSC are much more prone to circulate positive WOM [38]. Consumers who have enjoyed good ESQ are more likely to use their strong brand connections and personality traits to express strong e-WOM. [39] contend that emotional bond is a behavioral characteristic that explains the relationship between favorable WOM and BSC. It is important to note that emotional attachment contributes to a large number of positive experiences that will be easily available from an imaginative mind, resulting in positive WOM behaviors.

However, people with low BSC may seek to be involved in positive social interactions through e-WOM. It is the brand’s responsibility to engage in effective e-WOM. In other words, it is defined by the individual’s need for emotional stability. In prior studies, BSC was associated with brand loyalty, brand attitudes, and purchase intention [40]. In spite of this, there is still a lack of literature exploring the direct relationship between BSC and e-WOM. Therefore, it may be possible to develop e-WOM with a brand through BSC. As a result, we propose the underlying hypothesis.

H₄: *BSC will have a positive influence on e-WOM.*

2.6. Self-Brand Connection and Willingness to Pay More

In addition, when consumers choose a brand, the brand also offers great value to the customer because it shapes their self-perception [35]. This happens when consumers contrast or match items with their real images. During the COVID-19 epidemic, online food service providers claimed the biggest increase in consumer food purchases, and food suppliers have also verified a spike in demand [9]. Despite all this, [29] found that dedication is crucial to a customer's WPO. The WPO has been established to efficiently and effectively determine a customer's product preferences and expected purchase value [41]. Furthermore, customers who are connected to the brand need to behave more consistently. In previous research, BSC and WPO were strongly associated [42]. Previous research showed that people are more likely to pay a premium price for a specific meal when they highlight product quality, nutritional values, and environmental, social responsibility [41]. It is possible to retain thoughts and emotions about a brand faster and more frequently when there is a strong sense of self-connection to it [43]. In this respect, we propose that consumers who feel strongly about their brand are more likely to pay for online dining and food services during an outbreak. As a result, we propose the underlying hypothesis.

H₅: *BSC will have a positive influence on WPO.*

2.7. The Moderating Role of Personal Innovativeness

According to [44], PRI can be used to predict consumers' adoption of information technology. This study develops an updated version of the TAM, which was developed in the early study. As per innovation theory research, a PRI significantly impacts an individual's perception of inventive qualities, and new customers are generally better aware of internet service platforms [45].

In light of customers' increased use of advanced online services, we argue that they have a greater connection to an online brand. Thus, the innovative customer will prefer to use online services for a specific brand, even if they perceive a lower level of ESQ. In other words, customers who are more innovative are more likely to test out online services even if they are not of high quality. Several researchers have found that PRI can be used as a moderator. For example, there is evidence that personalized-innovativeness moderates the association between customer satisfaction and loyalty to e-services [46]. Similarly, another study by [47] examined the role of individual innovation in determining perceived needs and purchase intentions for mobile services. There has been limited research on the moderating effect of PRI in online food service contexts, while it has significant importance in the digital world. As a result, we conclude that the interaction effect of PRI will be more assertive with ESQ and BSC. Hence, we suggest the following hypothesis.

H₆: *PRI moderates the effect of ESQ on BSC so that when consumers display their PI, the effect of ESQ on BSC becomes stronger.*

3. Method

3.1. Sample and Procedure

Due to the ongoing COVID-19 outbreak, the proposed research model was tested by conducting an online survey [48–50]. In our context, this approach is deemed most suitable in light of the suggestion of [51]. In addition to being less costly and allowing for quick responses, an online survey provides wide geographic coverage, which is considered to be beneficial. Accordingly, the suggested framework was evaluated using a web-based survey approach in the Chinese online food service context [6]. A link to an online questionnaire was distributed through emails and social media sites, such as WeChat, QQ, and TikTok by data administrators. Therefore, convenience sampling was employed to collect data for the survey. If the population is unknown and there is difficulty obtaining responses from the entire sample frame, this method is considered more appropriate. The respondents

were considered digital natives due to their experience with online food ordering services. In addition, there were two main sections in the questionnaire. In the first part, personal statistics, such as gender, age, marital status, education, occupation, income, and duration of online food delivery services, were collected from respondents, while in the second part, key constructs were assessed through structural questionnaires. In order to ensure the validity and reliability of this research, pre-tests and pilot tests were conducted. In order to conduct the pilot study, a random sample of 30 customers who frequently purchased food online was selected. A survey was conducted between April and June 2022 among food service customers in China. The respondents were frequent diners and previously used online services at their favorite food service providers. In order to verify the accuracy of the scale before conducting the final survey, 32 food service customers participated in a pilot study.

We disregarded 33 responses of 456 questionnaires because of insufficient and duplicate responses. As a result, we were able to analyze 423 responses. In the sample, 67.8% of respondents were male (287 respondents), and 32.1% were female (136 respondents). Among them, 40.6% are between the ages of 21–30, 49.6% have completed high education, and 38.1% have a monthly income between CNY 8001–10,000 (see Table 1). There were 23.9% teachers, and 34% are proprietors.

Table 1. Sample demographics.

Categories	Frequency	Percentage (%)
Gender		
Male	287	67.8
Female	136	32.1
Age		
20 years or younger	79	18.6
21–30	172	40.6
31–40	89	21.0
41–50	52	12.2
51–60	31	7.32
Education		
High school	15	3.5
Bachelor's degree	210	49.6
Master	154	36.4
PhD	44	10.4
Income		
<5000	6	1.4
5001–8000	121	28.6
8001–10,000	161	38.1
10,001–13,000	79	18.7
13,001–15,000	46	10.9
Above 15,000	10	2.4
Profession		
Teacher	101	23.9
Businessmen	111	26.2
Government Job	59	13.9
Proprietor	144	34.0
Doctor	8	1.9

3.2. Measures and Validation

In order to conduct this survey, we developed a questionnaire based on previous studies and modified it to meet the needs of the study. A 7-point Likert scale was used to assess questionnaire items adapted from previous literature. (1 = strongly disagree; 7 = strongly agree). A study by [52] provided the basis for ESQ based on fifteen items. A sample item is, “The user interface of the online food services has a well-organized appearance.” The four items of BSC have been taken from [53] study. A sample item is, “To what extent is this food service brand part of you?” According to [5], we assessed PUO

by utilizing four items. The following is an example: “It is helpful to me to read online consumer reviews”. The four items developed by [54] contribute to PI. A sample item is, “When I hear about new technologies, I try to find ways to interact with them”. In the study of [55], five items were introduced to measure competitive advantage. The following are some examples, “I have posted positive reviews about this food service brand on websites and/or travel review websites”. In Ref. [41], three items constitute WPO. Examples of such items include “I am willing to pay a premium over competing services to be able to visit this food service brand again”.

4. Results

4.1. Measurement Model Validation

We used correlation analysis to check the interrelationship between variables. After analyzing the test, the results showed a significant correlation between variables (See Table 2). We investigated discriminant validity using the square root of average variance extracted (AVE). The results generated reveal support for discriminant validity because AVE has a higher square root value than its correlation with other constructs [56]. An alternate method to discover discriminant validity is by comparing AVE by MSV value with all variables. If AVE is greater than MSV, discriminant validity is achieved [57]. The square root of the average variance extracted (AVE) is higher than its correlation with other constructs according to discriminant validity estimators [57]. In addition, Table 2 also indicates that all constructs’ composite reliability (CR) is above 0.70, lying between 0.733 to 0.925 [58]. After that, we conducted a convergent validity analysis using AVE and item loadings to check the potential association between these items [59]. Results confirm that the AVE values for every variable are more significant than 0.5, which clears that these variables hit the benchmark and have 50% more variance. The test is shown in Table 3.

Table 2. Discriminant validity.

Constructs	1	2	3	4	5	6
BSC	0.808					
PRI	0.180	0.857				
PUO	0.689	0.070	0.777			
WPO	0.476	0.081	0.556	0.879		
ESQ	0.692	0.069	0.764	0.575	0.712	
e-WOM	0.580	0.050	0.625	0.765	0.664	0.803

Notes: BSC: brand self-connection, PRI: personal innovativeness, PUO: perceived usefulness of online reviews, WPO: willingness to pay for online food services, ESQ: perceived e-service quality, e-WOM: e-word-of-mouth. The bold values are the AVEs.

Table 3. The reliability and validity of the measurement.

Constructs	Cronbach’s Alpha	Composite Reliability	Average Variance Extracted (AVE)
Perceived e-service quality	0.925	0.935	0.507
Brand self-connection	0.733	0.849	0.652
Perceived usefulness	0.782	0.859	0.604
Personal innovativeness	0.748	0.846	0.735
e-word of mouth	0.816	0.879	0.644
Willingness to pay more	0.852	0.911	0.772

4.2. Reliability Analysis

We used the Cronbach-alpha approach to analyze the reliability of all constructs. The results reveal that the Cronbach value for all constructs exceeded the threshold value of 0.70, as recommended by [60], validating the reliability of the data. To examine the coherence of all variables’ items, a CR estimation was performed. As a result of the study, it has been

determined that the CR values exceed the cutoff value of 0.70 [61]. The results are compiled in Table 3.

4.3. Multicollinearity

A regression test is executed to check the multicollinearity issues to find Tolerance and Variance inflation factor (VIF) values. The VIF value should be between 0 and 3 [62]. According to the results (see Table 4), this model does not have any multicollinearity issues because values of VIF and Tolerance are within the suggested range of each variable and are in line [63].

Table 4. Loading and VIF of the indicators.

Constructs	Items	Loadings	VIF
Website design	WEBD1	0.836	2.218
	WEBD2	0.886	2.775
	WEBD3	0.819	2.318
Reliability	RLB1	0.788	2.282
	RLB2	0.816	2.234
	RLB3	0.821	2.646
	RLB4 *	-	-
Responsiveness	RSP1	0.807	2.540
	RSP2	0.875	2.021
	RSP3	0.762	1.923
Trust	TRST1	0.903	1.184
	TRST2	0.870	2.187
Personalization	PLSN1	0.807	2.690
	PLSN2	0.875	2.327
	PLSN3	0.762	2.454
Brand self-connection	BSC1	0.768	1.415
	BSC2	0.814	1.480
	BSC3	0.839	1.647
	BSC4 *	-	-
Perceived usefulness of online reviews	PUO1	0.746	1.500
	PUO2	0.783	1.654
	PUO3	0.859	1.845
	PUO4	0.713	1.488
Personal innovativeness	PI1	0.821	1.225
	PI2	0.866	1.458
	PI3	0.907	1.393
	PI4	0.803	1.369
E-word of mouth	eWOM1	0.815	1.836
	eWOM2	0.815	1.732
	eWOM3	0.772	1.594
	eWOM4	-	-
	eWOM5	0.807	1.639
Willingness to pay	WPO1	0.905	2.446
	WPO2	0.875	2.201
	WPO3	0.856	1.870

Note: * Indicates that items were removed from the model (loadings < 0.708).

4.4. Structural Model and Hypothesis Outcomes

In addition to testing our hypothesis links with each other and the presented model, we also tested the reliability and validity of our reliable measures. The Value of R^2 was found to be 0.67, affirming a meaningful explanation as it achieved the recommended value of 0.35 [64]. Additionally, the covariance-based regression analysis and the SEM algorithm were utilized to test the model relationship. It is clear from the results that the linearity between all links is extreme in terms of the f-value. In addition, we ran various fitness tests to validate our data matches the proposed structural model (i.e., CFI = 0.972,

PNFI = 0.756, AGFI = 0.924, TLI = 0.945, RMSEA = 0.061, $\chi^2/df = 2.541$, and SRMR = 0.054) clearly demonstrate the structural model's fit to our data [65].

An analysis of the results showed a significant positive impact of ESQ on the PUO ($H_1-\beta = 0.770$, $p < 0.01$) and BSC ($H_2-\beta = 0.393$, $p < 0.01$), hence H_1 and H_2 supported. Furthermore, PUO has a positive and significant association with brand-self connection ($H_3-\beta = 0.380$; $p < 0.01$), confirming H_3 . Additionally, the direct impact of the fourth and fifth hypotheses indicated that self-brand connection is positively and significantly related to WPO ($H_4-\beta = 0.476$; $p < 0.01$) and e-WOM ($H_5-\beta = 0.580$; $p < 0.01$). So, both are accepted.

To determine the moderating influence, we used Hayes' PROCESS in SPSS. The results of moderating effects are presented in Table 5 and Figure 2. In hypothesizing H_6 , we find that PRI ($H_6-\beta = 0.103$, $p < 0.05$) significantly moderates the relationship between perceived ESQ and BSC. As a result, our study's hypothesis H_6 was supported.

Table 5. Hypotheses testing.

Hypotheses	Beta	<i>p</i> Values	Decision
H_1 : ESQ \rightarrow PUO	0.770 ***	0.01	Accepted
H_2 : ESQ \rightarrow BSC	0.393 ***	0.01	Accepted
H_3 : PUO \rightarrow BSC	0.380 ***	0.01	Accepted
H_4 : BSC \rightarrow WPO	0.476 ***	0.01	Accepted
H_5 : BSC \rightarrow e-WOM	0.580 ***	0.01	Accepted
H_6 : ESQ \times PRI \rightarrow BSC	0.062 **	0.05	Accepted

Note: *** $p < 0.01$, ** $p < 0.05$.

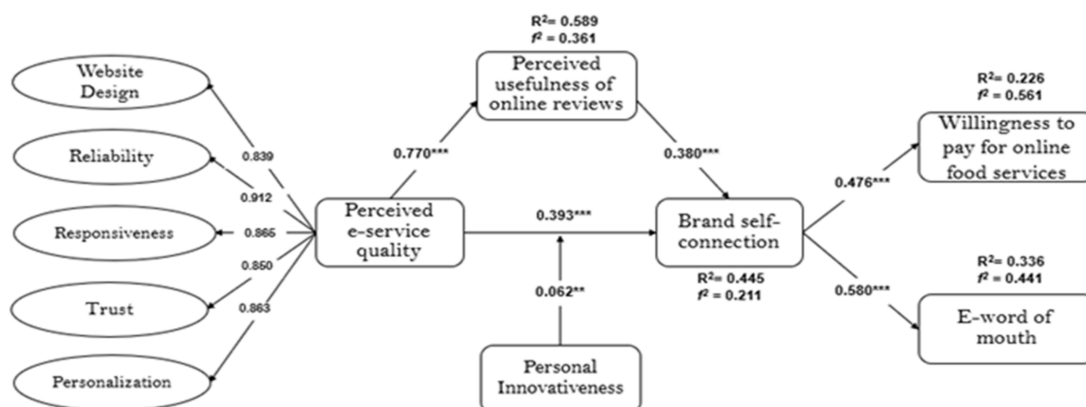


Figure 2. Results of hypotheses. Note: ** = 0.05, *** = 0.01.

4.5. Second-Order Construct

Figure 3 illustrates the second-order construct used to measure perceived ESQ. As a result of multicollinearity, when a model incorporates both first-order and second-order constructed variables, it is required to verify the first-order variables' effects on the second-order variables. The weights assigned to ESQ and its components were determined in this regard. Our findings suggest that there is a strong relationship between website design (0.840), reliability (0.912), responsiveness (0.866), trust (0.860), and personalization (0.866) with ESQ (Table 6).

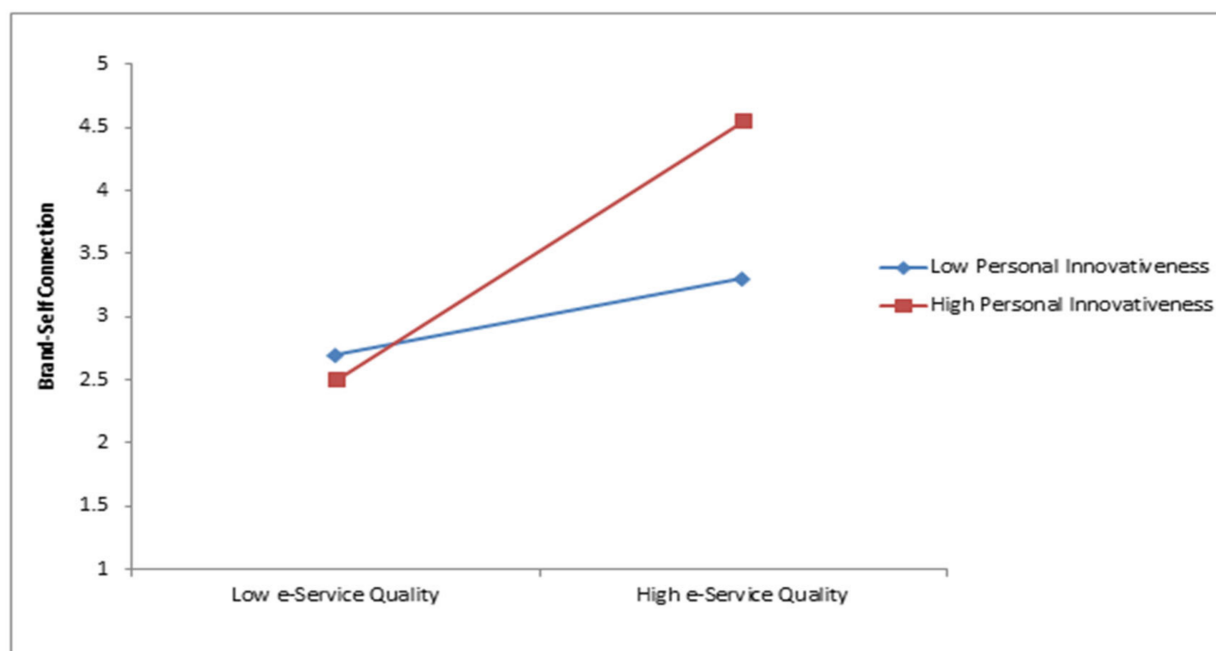


Figure 3. Simple slope analysis.

Table 6. Assessment of second-order e-service quality construct.

Second-Order Construct	First-Order Constructs	Weights	<i>p</i> Values
ESQ	Web site design	0.839 ***	0.000
ESQ	Reliability	0.912 ***	0.000
ESQ	Responsiveness	0.865 ***	0.000
ESQ	Trust	0.850 ***	0.000
ESQ	Personalization	0.863 ***	0.000

Note: *** = 0.01.

5. Discussion and Implications

5.1. Theoretical Implication

The findings of this research make numerous contributions to the body of literature on hospitality marketing to a broad extent. In the post-pandemic food industry, the current research examines consumers' perceptions of ESQ and the usefulness of online reviews in response to the latest calls for a better understanding of perceived ESQ [66,67]. Based on these results, perceived ESQ is positively associated with PUO and BSC, identifying that superior online services are associated with stronger brand connection and perceived usefulness. To build a strong relationship with online shoppers, foodservice brands should provide high-quality online services. In recent years, researchers have successfully implemented this concept of perceived usefulness to understand how well online shoppers evaluate content from web pages concerning ESQ, e-shopping behavior, and satisfaction [68]. Based on the prior literature, it is evident that offering efficient services and providing a convenient, user-friendly platform can improve the customer experience level, BSC, and PUO [13,36,69]. In addition, the current results are consistent with the TAM, which asserts that consumers are more inclined to embrace simple technologies owing to their complexity. Numerous TAM studies indicate that perceived usefulness is the most influential element when customers are contemplating adopting an internet-based service [68].

Second, our findings suggest that PUO influences BSC, which is, in turn, positively related to e-WOM and WPO. It's completely obvious that WOM outreach conducted online has a greater effect on companies than its more conventional version [70]. In social media, online consumers can connect with a brand by finding more relevant and helpful information. That brand is worth a lot more to them. According to [5], consumers' positive

comments on social media platforms are likely to create an emotional connection with other consumers and encourage e-WOM marketing. Consequently, BSC plays an essential role in building positive e-WOM for businesses in the current competitive landscape and generating increased online sales for retailers. Therefore, it can be an important factor in maintaining the financial viability of businesses in the online hospitality/food service industry in the wake of a pandemic.

Finally, PRI moderates the relationship between ESQ and BSC. It's been shown that early adopters have a stronger emotional attachment to companies and a more positive overall online shopping journey than the typical customer [22]. We propose that consumers who are more willing to go outside the box and employ cutting-edge online services are more interested in a specific online brand. Furthermore, despite its scientific importance, research has not examined PI's direct or indirect influence in the post-pandemic online food service scenario. This motivated us to design a research strategy based on the assumption that a strong connection between ESQ and BSC would lead to a more profound effect.

5.2. Practical Implications

We also provide practitioners, marketers, and service providers with a variety of useful insights; as a result, they ought to take these important ideas into account while updating their processes and policies in the wake of a pandemic. Firstly, the current study supports the idea that the digital revolution significantly influences customers' inclinations toward web-based products and services. Due to the COVID-19 epidemic, online food service providers should recognize the internet-related customer support that will impact customers' opinions of a brand and stimulate them to utilize e-WOM via social media networks. When developing online services, it is important to consider every element of Internet technology. The Internet enables consumers to browse food online on a webpage, along with other essentials. In the same way, people can view other necessities online and view food online on a website page [29,30].

Secondly, online food service providers should consider reviewers' opinions about the products and services they offer and encourage their customers to write positive reviews of the products and services they offer. In order to encourage customers to write and comment on quality reviews, online retailers should develop a user interface for online reviews [2,7]. In addition, online retailers should provide secure payments by applying a variety of methods, such as SSL protocols, digital wallets, and verification symbols, which diminish the risk perception and facilitate online shopping [14]. In an effort to simplify customers' problems and improve WPO, service providers can take advantage of these factors. It is important to note that the findings of the present research may also be helpful to businesses in the food industry, restaurant owners, governmental bodies, wholesalers, and marketers.

Thirdly, food service providers may use online brand communities to encourage customers to connect with their own brands. For instance, McDonald's has developed separate social media communities for customers based on their rewards status [39]. As a result of these programs, customers are encouraged to pay more to cultivate loyalty and spread positive WOM. Additionally, a well-designed mobile application contributes to BSC. A Starbucks mobile application allows customers to pay using their smartphones and keep track of their desired products, making it easier for them to keep connecting with the brand.

Finally, food suppliers may also be aware of the division between innovators and independent consumers (e.g., younger people tend to be more innovative than older people). In terms of planning an event (e.g., reserving tables), consumers with independent personalities prefer mobile apps over calling or visiting a service center.

6. Conclusions

This research employed a post-COVID-19 setting to evaluate the causes and consequences of the perceived usefulness of online reviews. As a further step, we have

substantially contributed to the TAM model by examining the moderating role of personal innovativeness between the relationship of e-service quality and brand-self connection. The observational results of the study show that e-service quality is a key driver of perceived usefulness of online reviews and brand-self connection in the context of food service delivery. The findings further suggest that personal innovativeness has a significant moderating effect on the relationship between perceived e-service quality and brand-self connection. The study's findings support the idea that food service companies should provide top-notch online services when they want to build sustainable relationships with online consumers. In a similar fashion, good customer feedback on social media platforms is likely to create an emotional connection with other customers and improve e-word of mouth marketing and their willingness to pay for online food services.

The findings of this study contribute significantly to the literature on hospitality and marketing in the following ways: First, in response to potential calls for deeper insight into perceived ESQ concept [66,67], we investigate whether online reviews and BSC affect customers' perceptions in post-pandemic settings. Second, we examine the influence of BSC on customers' WPO and e-WOM, which emphasizes the importance of BSC in post-pandemic food service delivery management. The study contributes significantly to the literature in hospitality marketing as it addresses a critical gap for empirical investigation in this area [70,71]. The PLS-SEM approach to product indicators identifies the moderator role of PRI in ESQ and BSC, which has been unclear in pandemic-based hospitality and food delivery contexts [72]. This reveals fundamental managerial insights in the post-COVID-19 outbreak in light of the moderating effect of individual innovativeness. Finally, we find that customers are more likely to pay for enhanced perceived ESQ and to spread e-WOM after COVID-19 if they recognize the value of online reviews. Thus, the development of perceived ESQ strategies in the post-COVID-19 era is critically dependent on the development of PUO and BSC with the food service providers. Moreover, practical implications are provided for food service providers and managers, who can contribute to improving consumer behavior and decision-making after COVID-19 conditions.

The present study also has some limitations that may provide opportunities for future research. Firstly, the future study has to be enhanced with other methodologies since only quantitative approaches were used to acquire data in this research. For instance, it would be beneficial to conduct a multi-method study design to gain a deeper understanding of ESQ and WOM marketing, in particular in the hospitality sector. *Secondly*, we only utilized information from one country (China); therefore, we need to expand the scope of our research to include other cultures, nations, and geographical regions. To gain additional insight, we recommend undertaking research on pandemics across nations/cultures. *Thirdly*, further investigations may explore other factors of the PUO, such as consumer feedback, consumer knowledge, and risk perception (for new insights) [5,40,73]. *Fourthly*, future research can incorporate other moderating constructs such as perceived trust, perceived risk, and technology efficacy [73]. Finally, the ability of message-based advertisements to attract users may differ among customer review sites. Therefore, it is crucial to understand these factors' role in shaping and modifying consumer attitudes and behaviors in the future.

Author Contributions: Conceptualization, M.I.; Formal analysis, B.A.; Funding acquisition, M.I.; Investigation, M.A. and L.X.; Methodology, B.A.; Project administration, M.I.; Resources, Y.X.; Software, B.A.; Supervision, M.I.; Validation, Y.X.; Writing—original draft, Y.X.; Writing—review & editing, M.I., M.A. and L.X. All authors have read and agreed to the published version of the manuscript.

Funding: This research did not receive any funding.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Ethics Committee of the ILMA University, Pakistan.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data is available upon reasonable request from corresponding author.

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

References

1. Guerreiro, J.; Rita, P. How to predict explicit recommendations in online reviews using text mining and sentiment analysis. *J. Hosp. Tour. Manag.* **2020**, *43*, 269–272. [\[CrossRef\]](#)
2. Leung, D. Unraveling the interplay of review depth, review breadth, and review language style on review usefulness and review adoption. *Int. J. Hosp. Manag.* **2021**, *97*, 102989. [\[CrossRef\]](#)
3. Hong, C.; Choi, H.H.; Choi, E.K.C.; Joung, H.W.D. Factors affecting customer intention to use online food delivery services before and during the COVID-19 pandemic. *J. Hosp. Tour. Manag.* **2021**, *48*, 509–518. [\[CrossRef\]](#)
4. Liu, Z.; Park, S. What makes a useful online review? Implication for travel product websites. *Tour. Manag.* **2015**, *47*, 140–151. [\[CrossRef\]](#)
5. Thakur, R. Customer engagement and online reviews. *J. Retail. Consum. Serv.* **2018**, *41*, 48–59. [\[CrossRef\]](#)
6. Ali, S.; Khalid, N.; Javed, H.M.U.; Islam, D.M.Z. Consumer Adoption of Online Food Delivery Ordering (OFDO) Services in Pakistan: The Impact of the COVID-19 Pandemic Situation. *J. Open Innov. Technol. Mark. Complex.* **2020**, *7*, 10. [\[CrossRef\]](#)
7. Luo, Y.; Xu, X. Comparative study of deep learning models for analyzing online restaurant reviews in the era of the COVID-19 pandemic. *Int. J. Hosp. Manag.* **2021**, *94*, 102849. [\[CrossRef\]](#)
8. Li, C.; Miroso, M.; Bremer, P. Review of Online Food Delivery Platforms and their Impacts on Sustainability. *Sustainability* **2020**, *12*, 5528. [\[CrossRef\]](#)
9. Mehroliya, S.; Alagarsamy, S.; Solaikutty, V.M. Customers response to online food delivery services during COVID-19 outbreak using binary logistic regression. *Int. J. Consum. Stud.* **2020**, *45*, 396–408. [\[CrossRef\]](#)
10. Gunden, N.; Morosan, C.; DeFranco, A. Consumers' intentions to use online food delivery systems in the USA. *Int. J. Contemp. Hosp. Manag.* **2020**, *32*, 1325–1345. [\[CrossRef\]](#)
11. Jensen, Ø.; Hansen, K.V. Consumer values among restaurant customers. *Int. J. Hosp. Manag.* **2007**, *26*, 603–622. [\[CrossRef\]](#)
12. Lakhi, G.e.R.; Mohamadali, N.A. Antecedents of Overall E-service Quality and Brand Attachment in the Banking Industry. *SEISENSE J. Manag.* **2020**, *3*, 26–34. [\[CrossRef\]](#)
13. Moliner, M.Á.; Monferrer-Tirado, D.; Estrada-Guillén, M. Consequences of customer engagement and customer self-brand connection. *J. Serv. Mark.* **2018**, *32*, 387–399. [\[CrossRef\]](#)
14. Ventre, I.; Kolbe, D. The Impact of Perceived Usefulness of Online Reviews, Trust and Perceived Risk on Online Purchase Intention in Emerging Markets: A Mexican Perspective. *J. Int. Consum. Mark.* **2020**, *32*, 287–299. [\[CrossRef\]](#)
15. Mou, J.; Shin, D.H.; Cohen, J. Understanding trust and perceived usefulness in the consumer acceptance of an e-service: A longitudinal investigation. *Behav. Inf. Technol.* **2016**, *36*, 125–139. [\[CrossRef\]](#)
16. Tubaishat, A. Perceived usefulness and perceived ease of use of electronic health records among nurses: Application of Technology Acceptance Model. *Inform. Heal. Soc. Care* **2018**, *43*, 379–389. [\[CrossRef\]](#)
17. Irfan, M.; Ahmad, M. Relating consumers' information and willingness to buy electric vehicles: Does personality matter? *Transp. Res. Part D Transp. Environ.* **2021**, *100*, 103049. [\[CrossRef\]](#)
18. Irfan, M.; Elavarasan, R.M.; Ahmad, M.; Mohsin, M.; Dagar, V.; Hao, Y. Prioritizing and overcoming biomass energy barriers: Application of AHP and G-TOPSIS approaches. *Technol. Forecast. Soc. Chang.* **2022**, *177*, 121524. [\[CrossRef\]](#)
19. Lari, L.A.D.A.; Iyanna, S.; Jabeen, F. Islamic and Muslim tourism: Service quality and theme parks in the UAE. *Tour. Rev.* **2020**, *75*, 402–413. [\[CrossRef\]](#)
20. Casidy, R. Linking Brand Orientation with Service Quality, Satisfaction, and Positive Word-of-Mouth: Evidence from the Higher Education Sector. *J. Nonprofit Public Sect. Mark.* **2014**, *26*, 142–161. [\[CrossRef\]](#)
21. Wu, X.; Lai, I.K.W. The acceptance of augmented reality tour app for promoting film-induced tourism: The effect of celebrity involvement and personal innovativeness. *J. Hosp. Tour. Technol.* **2021**, *12*, 454–470. [\[CrossRef\]](#)
22. Hwang, J.; Kim, H.; Kim, W. Investigating motivated consumer innovativeness in the context of drone food delivery services. *J. Hosp. Tour. Manag.* **2019**, *38*, 102–110. [\[CrossRef\]](#)
23. Juliana, J.; Djakasaputra, A.; Pramono, R.; Bernarto, I. Observational Learning and Word of Mouth Against Consumer Online Purchase Decision during the Pandemic COVID-19. *Syst. Rev. Pharm.* **2020**, *11*, 751–758.
24. Han, H.; Al-Ansi, A.; Chi, X.; Baek, H.; Lee, K.S. Impact of environmental CSR, service quality, emotional attachment, and price perception on word-of-mouth for full-service airlines. *Sustainability* **2020**, *12*, 3974. [\[CrossRef\]](#)
25. Li, H.; Xie, K.L.; Zhang, Z. The effects of consumer experience and disconfirmation on the timing of online review: Field evidence from the restaurant business. *Int. J. Hosp. Manag.* **2020**, *84*, 102344. [\[CrossRef\]](#)
26. Parasuraman, A.; Zeithaml, V.A.; Berry, L.L. A Conceptual Model of Service Quality and Its Implications for Future Research. *J. Mark.* **1985**, *49*, 41–50. [\[CrossRef\]](#)
27. Kim, E.Y.; Jackson, V.P. The Effect of E-SERVQUAL on e-Loyalty for Apparel Online Shopping. *J. Glob. Acad. Mark. Sci.* **2009**, *19*, 57–65. [\[CrossRef\]](#)
28. Rowley, J. An analysis of the e-service literature: Towards a research agenda. *Internet Res.* **2006**, *16*, 339–359. [\[CrossRef\]](#)
29. Suhartanto, D.; Ali, M.H.; Tan, K.H.; Sjahroeddin, F.; Kusdibylo, L. Loyalty toward online food delivery service: The role of e-service quality and food quality. *J. Foodserv. Bus. Res.* **2019**, *22*, 81–97. [\[CrossRef\]](#)

30. Pigatto, G.; Machado, J.G.d.C.F.; Negreti, A.d.S.; Machado, L.M. Have you chosen your request? Analysis of online food delivery companies in Brazil. *Br. Food J.* **2017**, *119*, 639–657. [\[CrossRef\]](#)
31. Dennis, C.; Papagiannidis, S.; Alamanos, E.; Bourlakis, M. The role of brand attachment strength in higher education. *J. Bus. Res.* **2016**, *69*, 3049–3057. [\[CrossRef\]](#)
32. Riaz, A.; Gregor, S.; Lin, A. Biophilia and biophobia in website design: Improving internet information dissemination. *Inf. Manag.* **2018**, *55*, 199–214. [\[CrossRef\]](#)
33. Khan, I.; Hollebeek, L.D.; Fatma, M.; Islam, J.U.; Rahman, Z. Brand engagement and experience in online services. *J. Serv. Mark.* **2019**, *34*, 163–175. [\[CrossRef\]](#)
34. Ganapathi, P.; Abu-Shanab, E.A. Customer Satisfaction with Online Food Ordering Portals in Qatar. *Int. J. E-Serv. Mob. Appl.* **2020**, *12*, 57–79. [\[CrossRef\]](#)
35. Escalas, J.E.; Bettman, J.R. You Are What They Eat: The Influence of Reference Groups on Consumers' Connections to Brands. *J. Consum. Psychol.* **2003**, *13*, 339–348. [\[CrossRef\]](#)
36. Floh, A.; Koller, M.; Zauner, A. Taking a deeper look at online reviews: The asymmetric effect of valence intensity on shopping behaviour. *J. Mark. Manag.* **2013**, *29*, 646–670. [\[CrossRef\]](#)
37. Swaminathan, V.; Page, K.L.; Gürhan-Canli, Z. "My" brand or "our" brand: The effects of brand relationship dimensions and self-construal on brand evaluations. *J. Consum. Res.* **2007**, *34*, 248–259. [\[CrossRef\]](#)
38. Tuskej, U.; Golob, U.; Podnar, K. The role of consumer-brand identification in building brand relationships. *J. Bus. Res.* **2013**, *66*, 53–59. [\[CrossRef\]](#)
39. Kwon, E.; Mattila, A.S. The Effect of Self-Brand Connection and Self-Construal on Brand Lovers' Word of Mouth (WOM). *Cornell Hosp. Q.* **2015**, *56*, 427–435. [\[CrossRef\]](#)
40. van der Westhuizen, L.M. Brand loyalty: Exploring self-brand connection and brand experience. *J. Prod. Brand Manag.* **2018**, *27*, 172–184. [\[CrossRef\]](#)
41. Kiatkawsin, K.; Han, H. What drives customers' willingness to pay price premiums for luxury gastronomic experiences at michelin-starred restaurants? *Int. J. Hosp. Manag.* **2019**, *82*, 209–219. [\[CrossRef\]](#)
42. Elbedweihi, A.M.; Jayawardhena, C.; Elsharnouby, M.H.; Elsharnouby, T.H. Customer relationship building: The role of brand attractiveness and consumer-brand identification. *J. Bus. Res.* **2016**, *69*, 2901–2910. [\[CrossRef\]](#)
43. Park, C.W.; Priester, J.R.; MacInnis, D.J. The connection-prominence attachment: (CPAM): A conceptual and methodological exploration of brand attachment. In *Handbook of Brand Relationships*; Routledge: Abingdon, UK, 2009; pp. 327–341.
44. Thakur, R.; Srivastava, M. Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. *Internet Res.* **2014**, *24*, 369–392. [\[CrossRef\]](#)
45. Jackson, J.D.; Yi, M.Y.; Park, J.S. An empirical test of three mediation models for the relationship between personal innovativeness and user acceptance of technology. *Inf. Manag.* **2013**, *50*, 154–161. [\[CrossRef\]](#)
46. Jianlin, W.; Qi, D. Moderating effect of personal innovativeness in the model for e-store loyalty. In Proceedings of the International Conference on E-Business and E-Government, ICEE, Guangzhou, China, 7–9 May 2010; pp. 2065–2068.
47. Jeong, N.; Yoo, Y.; Heo, T.Y. Moderating effect of personal innovativeness on mobile-RFID services: Based on Warshaw's purchase intention model. *Technol. Forecast. Soc. Chang.* **2009**, *76*, 154–164. [\[CrossRef\]](#)
48. Irfan, M.; Akhtar, N.; Ahmad, M.; Shahzad, F.; Elavarasan, R.M.; Wu, H.; Yang, C. Assessing public willingness to wear face masks during the COVID-19 pandemic: Fresh insights from the theory of planned behavior. *Int. J. Environ. Res. Public Health* **2021**, *18*, 4577. [\[CrossRef\]](#) [\[PubMed\]](#)
49. Tanveer, A.; Zeng, S.; Irfan, M. Do Perceived Risk, Perception of Self-Efficacy, and Openness to Technology Matter for Solar PV Adoption? An Application of the Extended Theory of Planned Behavior. *Energies* **2021**, *14*, 5008. [\[CrossRef\]](#)
50. Asif, M.H.; Zhongfu, T.; Ahmad, B.; Irfan, M.; Razzaq, A.; Ameer, W. Influencing factors of consumers' buying intention of solar energy: A structural equation modeling approach. *Environ. Sci. Pollut. Res.* **2022**, 1–16. [\[CrossRef\]](#)
51. Cobanoglu, C.; Cobanoglu, N. The effect of incentives in web surveys: Application and ethical considerations. *Int. J. Mark. Res.* **2003**, *45*, 1–13. [\[CrossRef\]](#)
52. Lee, G.G.; Lin, H.F. Customer perceptions of e-service quality in online shopping. *Int. J. Retail Distrib. Manag.* **2005**, *33*, 161–176. [\[CrossRef\]](#)
53. Park, C.W.; Macinnis, D.J.; Priester, J.; Eisingerich, A.B.; Iacobucci, D. Brand Attachment and Brand Attitude Strength: Conceptual and Empirical Differentiation of Two Critical Brand Equity Drivers. *J. Mark.* **2010**, *74*, 1–17. [\[CrossRef\]](#)
54. Lee, H.Y.; Qu, H.; Kim, Y.S. A study of the impact of personal innovativeness on online travel shopping behavior—A case study of Korean travelers. *Tour. Manag.* **2007**, *28*, 886–897. [\[CrossRef\]](#)
55. Serra-Cantalops, A.; Ramon-Cardona, J.; Salvi, F. The impact of positive emotional experiences on eWOM generation and loyalty. *Spanish J. Mark. ESIC* **2018**, *22*, 142–162. [\[CrossRef\]](#)
56. Ahmad, M.; Zhao, Z.Y.; Irfan, M.; Mukeshimana, M.C.; Rehman, A.; Jabeen, G.; Li, H. Modeling heterogeneous dynamic interactions among energy investment, SO₂ emissions and economic performance in regional China. *Environ. Sci. Pollut. Res.* **2020**, *27*, 2730–2744. [\[CrossRef\]](#)
57. Fornell, C.; Larcker, D.F. Structural equation models with unobservable variables and measurement error: Algebra and statistics. *J. Mark. Res.* **1981**, *18*, 382. [\[CrossRef\]](#)
58. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*; Prentice-Hall, Inc.: Hoboken, NJ, USA, 2006.

59. Wong, K.K.-K. Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Mark. Bull.* **2013**, *24*, 1–32.
60. Nunnally, J.C. *Psychometric Theory 3E*; Tata McGraw-Hill Education: New York, NY, USA, 1994.
61. Hair, J.F., Jr.; Matthews, L.M.; Matthews, R.L.; Sarstedt, M. PLS-SEM or CB-SEM: Updated guidelines on which method to use. *Int. J. Multivar. Data Anal.* **2017**, *1*, 107. [[CrossRef](#)]
62. Field, A. *Discovering Statistics Using IBM SPSS Statistics*; Sage: Newbury Park, CA, USA, 2013.
63. Strupeit, L.; Palm, A. Overcoming barriers to renewable energy diffusion: Business models for customer-sited solar photovoltaics in Japan, Germany and the United States. *J. Clean. Prod.* **2016**, *123*, 124–136. [[CrossRef](#)]
64. Cohen, J.E. *Statistical Power Analysis for the Behavioral Sciences*; Routledge: New York, NY, USA, 2013; p. 490.
65. Lucianetti, L.; Jabbour, C.J.C.; Gunasekaran, A.; Latan, H. Contingency factors and complementary effects of adopting advanced manufacturing tools and managerial practices: Effects on organizational measurement systems and firms' performance. *Int. J. Prod. Econ.* **2018**, *200*, 318–328. [[CrossRef](#)]
66. Kim, E.; Nicolau, J.L.; Tang, L. The Impact of Restaurant Innovativeness on Consumer Loyalty: The Mediating Role of Perceived Quality. *J. Hosp. Tour. Res.* **2021**, *45*, 1464–1488. [[CrossRef](#)]
67. Satti, Z.W.; Babar, S.F.; Parveen, S.; Abrar, K.; Shabbir, A. Innovations for potential entrepreneurs in service quality and customer loyalty in the hospitality industry. *Asia Pacific J. Innov. Entrep.* **2020**, *14*, 317–328. [[CrossRef](#)]
68. Luo, S.F.; Lee, T.Z. The influence of trust and usefulness on customer perceptions of e-service quality. *Soc. Behav. Pers.* **2011**, *39*, 825–838. [[CrossRef](#)]
69. Chang, S.C.; Chou, P.Y.; Wen-Chien, L. Evaluation of satisfaction and repurchase intention in online food group-buying, using Taiwan as an example. *Br. Food J.* **2014**, *116*, 44–61. [[CrossRef](#)]
70. Kim, J.; Hwang, J. Who is an evangelist? Food tourists' positive and negative eWOM behavior. *Int. J. Contemp. Hosp. Manag.* **2021**, *34*, 555–577. [[CrossRef](#)]
71. Jeon, M.M.; Lee, S.; Jeong, M. Perceived corporate social responsibility and customers' behaviors in the ridesharing service industry. *Int. J. Hosp. Manag.* **2020**, *84*, 102341. [[CrossRef](#)]
72. Satti, Z.W.; Babar, S.F.; Ahmad, H.M. Exploring mediating role of service quality in the association between sensory marketing and customer satisfaction. *Total Qual. Manag. Bus. Excell.* **2019**, *32*, 719–736. [[CrossRef](#)]
73. Wang, S.; Wang, J.; Lin, S.; Li, J. Public perceptions and acceptance of nuclear energy in China: The role of public knowledge, perceived benefit, perceived risk and public engagement. *Energy Policy* **2019**, *126*, 352–360. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.