Measuring the Service Quality, Customer Satisfaction, and Customer Loyalty of Selected Fast-Food Restaurants during the COVID-19 Pandemic

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Abstract
During the COVID-19 pandemic, fast-food restaurants are thriving as they are closing throughout the country. Restaurants should continue to innovate and be resilient due to crisis because there will be strongholds and recovery. The study examines the relationship between service quality, customer satisfaction and loyalty using the researchers’ expanded Service Quality (SERVQUAL) framework with innovation and recovery as new constructs. Moreover, the research was conducted during the COVID-19 pandemic in the fast-food industry. Respondents of the study were 189 diners from selected fast-food restaurants in Pasay City, Philippines, through convenience sampling. The study employed a descriptive-correlational research design. The study revealed that the fast-food restaurant meets the expectations of its customers in terms of service quality even during the pandemic crisis; however, the new construct of innovation reveals the lowest rating among other service quality dimensions, and it is suggested to implement innovative strategies in adapting to the new normal setting. Other findings revealed that service quality has a significant relationship between customer satisfaction and loyalty. As a result, it is recommended that the service quality in fast-food restaurants be re-measured to develop innovative strategies without compromising customer satisfaction and regain loyalty during the COVID-19 pandemic.

Keywords
COVID-19 Pandemic, Customer Satisfaction, Customer Loyalty, Fast Food Restaurants, Innovation, Service Quality Strategic Plan
1. Introduction

Due to the outbreak of COVID-19 in 2020, humanity faced an enormous worldwide calamity. Moreover, the corporate world is highly interconnected and can be influenced by various external elements, including economic, sociocultural, and political variables and uncontrollable pandemics. Still, the novel coronavirus’s potential societal effects remain unknown (Wen et al., 2020). The coronavirus has particularly hard-struck the restaurant business, with daily restaurant demand dropping by 0.06 percent for every 1% increase daily in new COVID-19 cases (Yang et al., 2020). Decreasing dining-out consumers will affect restaurants’ profitability, while restaurants' preventative steps may jeopardize customer satisfaction (Zhong et al., 2021). Restaurants must be completely prepared for the revival of customer demand in the long run while making every effort to better understand and serve their customers in the short term because customers’ needs for excellent cuisine, a friendly setting, and quality service never totally gone off (Davahli et al., 2020). This pandemic has been a significant setback for the restaurant industry because it requires changing restaurant routines. Customers picking up meals at their restaurants, also known as self-pick-up, drive-thru, or quick courier delivery, have changed the restaurant business model.

According to Xie et al. (2020), consumers’ food choices and consumption can be relatively dynamic, situational, and complicated, relying heavily on cultural and social factors and the availability of reliable information about the food they consume. In other words, their food consumption decisions are strongly influenced by cultural and social factors in their daily lives. Concerns about mandated lockdowns, social distancing, and uncertainty caused by the pandemic significantly impact consumers’ lifestyles today (Laguna et al., 2020). Service quality is crucial in the hospitality industry, as is customer satisfaction (Mensah, 2017). Studies have shown that service quality is critical to customer satisfaction and re-patronage (Ivkov et al., 2018) and as important as food quality (Bujisic et al., 2014), which significantly increases the likelihood of re-patronage (Pantelidis, 2010). As a result of evolving service quality into an interactive rate, any effort to attract customers and gain a long-term competitive advantage must maintain interactive service quality to ensure that customers have an active service experience. Customer satisfaction and service quality are crucial business factors since a company’s ability to expand depends heavily on its ability to retain clients through customer service and keep them happy (Edward & Sahadev, 2011). Customer satisfaction is anticipated through effective service delivery, enhancing customer involvement and interpersonal relationships (Chang et al. 2017). This view is supported by González et al. (2007), asserting that great service quality is associated with customer satisfaction and increases a company’s ability to compete in the market. As emphasized by Kaur & Soch’s (2018), service firms provide a variety of service quality characteristics, which result in
customer satisfaction and affect customer loyalty.

Though numerous researches were conducted relative to service quality, customer satisfaction and loyalty, little research has been done during the unprecedented change in the service environment brought about by the impact of the COVID-19 pandemic. In addition, none has been done by expanding the service quality dimensions of the SERVQUAL framework. The study made an integrated model by combining innovation and recovery as new constructs aside from reliability, responsiveness, assurance, tangibility and empathy. Specifically, it sought to answer the following research questions:

1) How do diners rate the service quality of selected fast-food chain restaurants according to the following dimensions?
   a) Reliability,
   b) Assurance,
   c) Tangible,
   d) Empathy,
   e) Responsiveness,
   f) Innovation, and
   g) Recovery?

2) How do diners of the selected fast-food chain restaurants measure the following variables:
   a) Customer satisfaction
   b) Customer loyalty?

3) Is there a significant relationship between service quality, customer satisfaction, and customer loyalty?

2. Literature Review

2.1. Service Quality

Previous researchers have declared various dimensions of service quality. In their early studies, Parasuraman, Zethaml, and Berry (1988) identified ten dimensions: credibility, security, competence, courtesy, communication, understanding/knowing customers, access, reliability, responsiveness, and tangibility. As a result, they narrowed service quality into five critical dimensions: empathy, assurance, reliability, responsiveness, and tangibility. Service quality in various service industries is critical for managers and academic researchers. Because of the lack of tangible evidence associated with services, consumers find it more difficult to evaluate service quality than product quality. Service quality is frequently defined as the gap between a customer’s expectations and perceptions of the service experience (Parasuraman et al., 1988). Service quality researchers often view expectations as normative standards or beliefs about what a service provider should provide. Customers’ expectations are benchmarks against measuring the delivered service (Zeithaml et al., 1996).

Furthermore, perceived performance reflects customers’ subjective percep-
tions of the level of service received (Parasuraman et al., 1985). According to Ryu and Han (2010), service quality is the main component of a fast-food restaurant, which must be measured and improved continuously. “SERVQUAL” is a tool for identifying service quality measurement, and customers are the ultimate critic of service quality. Customers determine the perceived value of service based on their overall experience with delivered service, which restaurant practitioners should keep in mind. Furthermore, customers see a restaurant as synthesizing tangible and intangible elements. Previously, restaurants were more concerned with food quality and taste. Still, today they must pay equal or even greater attention to other important factors such as serving, atmosphere, interior design, location, etc. The goal was to attract new customers, but now it is more important to keep existing customers. Service quality is critical in achieving and maintaining business success and profitability in the competitive restaurant industry. Restaurant managers must understand customers’ needs and expectations to provide high-quality service.

2.2. Service Quality in the Restaurant Industry (DINESERVE Model)

Stevens, Knutson, and Patton (1995) created the DINESERV instrument to adapt SERVQUAL to the restaurant industry. The original DINESERV instrument contained 40 service quality items validated through a phone survey. The instrument was refined using confirmatory factor analysis. DINESERV’s final version contained 29 items: ten statements representing tangibles, five statements representing reliability, three statements representing responsiveness, six statements representing assurance, and five statements expressing empathy. The most important dimension was reliability, followed by tangibles, assurance, responsiveness, and empathy. This dimension hierarchy is very similar to SERVQUAL; the only difference is that tangibles are ranked fourth in Parasuraman et al. (1988) SERVQUAL research. Kim et al. (2003) used the DINESERV model to validate the five dimensions and assess service quality in Korean foreign-brand casual dining restaurants. The study’s findings revealed two-dimensionality issues. The first issue was the development of three sub-dimensions in the tangibles factor: 1) the appearance of physical facilities and staff, 2) the menu and the restaurant, and 3) the comfort and cleanliness of facilities. The responsiveness factor, which did not have its dimension in this study, was involved in the second dimensionality problem. The researchers have proposed two possible explanations for this problem: either the DINESERV scale needs to be revised, or there is a cultural difference between Korean diners (Kim et al. 2003) and American diners (Stevens et al., 1995). The DINESERV scale was used by Markovic, Komsic, and Stifanic (2013) to assess service quality in city restaurant settings. Using 103 usable questionnaires, the model was tested on a sample of 12 restaurants in Zagreb (Croatia). According to the empirical study, 21 expectations scores are statistically higher than perceptions scores, indicating a low level of service quality.
Various hospitality and food and beverage industries attempt to deliver their products and services competitively while benefiting from increased customer satisfaction and loyalty. Businesses use a variety of marketing strategies to provide high-quality goods and services to satisfied customers (Namin, 2017). Client satisfaction and service quality are two important marketing theories and studies concepts.

The dimensions of DINESERV are described briefly below:

**Reliability.** Reliability should be prioritized. Others argue that personalization is more important in assessing service customer happiness because of the same coproduction process (Fornell et al., 1996; Anderson, Fornell, & Rust, 1997). Because many services are labor-intensive and customized to meet various needs, customization is more important for services than for manufactured items. According to Huff, Fornell, and Anderson (1996), there is significant variation in faults between competing products, and buyers can distinguish the variation, arguing that dependability is likely to promote overall quality. The restaurant’s service should be consistent and satisfactory to its customers in maintaining speed and quality of service during peak hours (Markovic et al., 2010; Kim et al., 2003; Markovic et al., 2013).

**Assurance.** Assurance of service quality was one of the most important criteria in service quality, in line with previous studies (e.g., Lee & Hing, 1995). The most influential factor was voted to be the component of service quality. The key to success is assurance—knowledge and civility of employees and their ability to transmit trust and confidence. Confidence came in first, followed by empathy and tangibility, and reliability came in last. Restaurant customers want to trust the restaurant and believe the service provider can deliver the products. They expect professional and knowledgeable service when dealing with customers. They can get personalized and quality attention from the restaurant staff if they are attentive.

**Tangibility.** The tangibility of a restaurant refers to its physical characteristics, which are frequently the first things visitors notice when they walk in. Yüksel and Yüksel (2002) investigated tourist satisfaction with restaurant services. The “service environment,” which includes seating arrangements and music decorating, was discovered to be a significant driver in molding consumers’ behavior. According to Chow et al. (2019), when forecasting service quality for restaurant clients in the Chinese setting, interaction with personnel and the physical environment is more important than end quality. Similarly, Ryu and Jang (2008) investigated the combined effect of ambient factors on behavioral intentions in upscale restaurants. According to their findings, the most important influences on customers’ emotional responses were atmosphere (e.g., music, aroma, and temperature) and employee appearance, influencing customers’ post-dining behavioral intentions. In their investigation, Ryu and Han (2011), a restaurant should carefully construct the physical atmosphere to increase the customer’s perception of price reasonableness.
Empathy. The firm’s consumers receive compassionate, one-on-one care (Parasuraman et al., 1988). Requesting that customers return soon expresses how much the restaurant appreciates their service and ensures they return soon (Kim et al., 2003). In addition to providing what the customer requests, the restaurant can foster empathy by offering complimentary food and other specials. Customers are treated with respect by the service staff. This characteristic expresses the specific feeling when customers are treated exceptionally well (Pai et al., 2018).

Responsiveness. Once the customer has used the service, the restaurant should seek feedback for future improvement. They were putting feedback into action as soon as possible. The restaurant should collect feedback and consider and implement appropriate feedback (Bhargava et al., 2013). During peak hours, employees help one another to maintain service quality. It is clear how the staff coordinates and collaborates to provide excellent service (Pai et al., 2018). More effort is required for specific requests, and employees satisfy clients when they make special requests, such as planning a birthday party or special menus (Markovic et al., 2013).

The study integrated two additional constructs to strongly link to the pandemic as follows:

Innovation. According to Ivkov et al. (2018), in the restaurant industry, innovations appear as conceptual solutions in five main areas: design and atmosphere (e.g., interior and exterior appearance, colors, music, etc.), food and beverages (e.g., portion size, new ingredients, allergen-free, etc.), technology application (e.g., PMS, POS terminals, online reservations, smartphone applications, social media, etc.), and responsible business (e.g., ethics, eco-friendly packages, waste recycling, etc.) Amid the pandemic, technology has proven to be an invaluable resource for restaurants. Iorgulescu and Rvar (2013) view marketing as another type of innovation in the hospitality sector that gives new perspectives on employee-customer relations. Price innovation is rarely discussed but can be a source of competitiveness and a chance to achieve value (Hinterhuber & Liozu, 2014). Delivery food services are becoming increasingly popular, as restaurants have introduced supplies that prevent high commissions from being paid to third parties or contracts with food supply partners (Khan, 2020). However, the pandemic, the need to quickly transform the digital sector in restaurants, and more IT has resulted in significant investment in this segment. Virtual or ghost kitchens are not new (Kelso, 2020). They are also a free delivery service where restaurants are only for manufacturing and pickup, and only customers can order and control their orders using technology (Khan, 2020).

Recovery. Due to the significant impact of the COVID-19 pandemic on the restaurant industry, businesses invest in strategic, operational, and financial resilience to recover quickly (Smith-Bingham & Hariharan, 2020). Restaurant owners must examine their abilities and strengths to develop effective recovery strategies. Restaurants affected by the pandemic have been linked to financial and liquidity status to recover the majority of participants, preventing them
from closing or making changes resulting from loss or bankruptcy. Restaurants with lower prices had higher sales than restaurants without discount offers, according to Kim and Lee (2020). While price remains a quality indication, regular customers are less expensive and deliberately discounted in times of crisis. According to Yilmaz and Şahin (2021), the precautions implemented in Turkish restaurant businesses are similar to those in other world regions: Home delivery and takeaway sales approaches are being developed. Gössling et al. (2021), booking through the website or smartphones, promotional applications, contactless online and digital menu applications, contactless food delivery, and contactless payment alternatives are ways to increase digital presence ties with customers. Riccio (2020) and Dube et al. (2020), thermal control systems are used to measure customers at restaurant entrances, masks are provided, hand washing and disinfecting stations are set up, restaurants are designed according to social distance laws, and sitting capacity is regulated. Soon et al. (2021) restaurants are disinfected using various methods, including ultraviolet light. Restaurants have adequate ventilation (Covaci, 2020), use disposable products and equipment, hang educational information linked to rule compliance at the entrance and on the walls, and hang transparent curtains between tables to reduce touch. Employees wash their hands frequently, sterilize them, wear masks and gloves in restaurants, check employees’ body temperatures, and follow certification processes to create a sense of trust among visitors.

2.3. Customer Satisfaction

According to Kotler and Armstrong (2018), customer satisfaction measures how well products and services meet or exceed customers’ expectations. Customer satisfaction is a critical component of any successful and profitable business. It increases profit margins and employee satisfaction, customer loyalty, and retention. This is the same in the restaurant industry, which is becoming more competitive, and customers expect high service quality (Min, 2011; Ramseook-Munhurrun, 2012). According to Oxtaflani and Widowati (2017), customer satisfaction is critical for a business, and Ningsih and Segoro (2014) identified consumer attitudes, evaluations, and emotional responses are customer reactions following the purchase. Djan and Adawiyyah (2020) stated that, based on their sales assessment, it is satisfied that the chosen alternative product has achieved at least the same results as or better than customer expectations. It is dissatisfied that the selected product does not meet the customers’ expectations (Kotler & Keller 2013).

After the customers have acquired and used the goods and services, their satisfaction is viewed from customer evaluation. The assessment after the election is based on the experience of the use or use of the products or services (Nguyen et al., 2020; Imran et al., 2019). Customer satisfaction is the positive result of comparing expected service expectations, and performance received (Rita et al., 2019; To et al., 2020; Cheng et al., 2019). Customer satisfaction is an after-purchase
assessment where the chosen options at least meet customers’ expectations and where the result is dissatisfaction when the expectations are not met (Giao, 2020; Basari & Shamsudin, 2020). In some previous research, the indicators used to measure customer satisfaction include speed, attitudes to sellers, and quality (Subramanian et al., 2014); Best customer service, full-time orders, a website is user-friendly, product portfolio-wide range (Pandey et al., 2020) in another words, a satisfied customer would likely give the company a good reference (Leung, 2020). For example, Han and Ryu (2012) empirically verified that customer satisfaction positively relates to word of mouth in a full-service restaurant.

2.4. Customer Loyalty

Pure and continuous customer loyalty is one of the company’s great assets to achieve (Makanyeza, 2014). Loyalty shows the human need for emotional attachments, support, security, and handling (Odin et al., 2001). It is not a defined customer loyalty that accidents occur. The decisions on procurement and design are based on them. Several transactions have been built into overtime (Khadka & Maharjan, 2017). No accidental acquisition is defined by customer loyalty. The decisions on procurement and design are made in them. It is built over time through several transactions. (Leninkumar, 2017), Indicated that loyal customers would view the organization, support it positively, and repurchase.

According to Kim et al. (2003) and Reichheld et al. (2000), the only difference between establishing traditional client loyalty and creating contemporary client loyalty lies in the cost of establishing a costly online platform. Additionally, Gamboa and Goncalves (2014) found that an emotional link, which leads to stable customer loyalty, is established if businesses engage in marketing with customers. Customer loyalty is a strong commitment to a long-term relationship between consumers and a company or product. Loyal customers are constantly making purchases. In general, loyalty can be defined by long-term commitment as a good relationship between consumers and producers (Cheng et al., 2019; Khoa, 2020; Pandey et al., 2020; Wu et al., 2019). Customer loyalty is often based on positive consumer knowledge of the consumption of a product. This positive experience can be derived from the quality, price, and service that creates emotional links in consumers (Nastasoiu & Vandenbosch, 2018; Bricci et al., 2015). Client loyalty can be measured in two ways: conduct loyalty, as actual repeat purchase, positive speech, and continued preference for the same service, and attitudinal loyalty, as repurchase intent, ready to recommend service to others, resisting the competition (Otsetova, 2017).

Ishaq (2012) asserts that customers are more likely to view the service provider favorably and become loyal if they have good thoughts and attitudes toward the services during service consumption. Consumer loyalty is measured by average repurchases, purchase frequency, baggage shares, or other indicators) and driven by positive attitudes to the business and products/services (Zeithaml, Valarie, & Bitner, 2013). This is in line with previous research that has demon-
strated that in the hotel business, clients who are pleased with the level of service are more likely to as repeat clients (Cheng & Rashid, 2013; Cheng et al., 2014).

2.5. Hypothesis Development

Contemporary lockdown, quarantine, pervasive uncertainty, and constant focus on health and safety have brought new standards to every aspect of people’s lives. They all changed people’s behavior and re-aligned core human values and beliefs. As a result, businesses are not the same as they used to be, and what was once considered a great customer experience is no longer sufficient. As a result, all business segments have been compelled to reorganize their customer approach (Mehdibeigi et al., 2016).

The link between customer satisfaction and customer loyalty is strengthened by consumers’ high social trust instead of low social trust. In such a case, the customer fully cooperates with the restaurateur and is not immediately dissatisfied with the services if there is any negligence (Thielmann et al., 2020). The customer is still pleased with the restaurant and intends to return and recommend it to others. As a result, customers with this personality are less affected by social factors that reduce an individual’s social trust, but they still believe that people can be trusted in general (Robbins, 2016). The findings of the Diab et al. (2016) study confirm that four DINESERV variables positively influence customer satisfaction. The relationship between service quality and customer satisfaction has been demonstrated in a significant quantity of service marketing literature (Ahrholdt et al., 2017; Priporas et al., 2017; Famiyeh et al., 2018).

Furthermore, the study discovers that customer satisfaction significantly impacts customer loyalty, implying that satisfied customers are more likely to recommend and repurchase restaurant services. The study by Hussain (2016) examined the relationship between service quality, value, image, satisfaction and loyalty in a sample of 253 airline passengers. They found that the quality of service is an important factor in generating favorable behavioral intentions through customer satisfaction and loyalty.

Customers have various restaurant options, so keeping them loyal and luring new ones is essential. Restaurant owners and managers should focus on assurance, empathy, and tangibles of their services and continuously work to improve the overall service quality of their establishments to satisfy and retain customers and gain a competitive advantage. Hence, the following hypotheses are drawn:

H1. Service quality has a significant relationship with customer satisfaction.
H2. Service quality has a significant relationship with customer loyalty.
H3. Customer satisfaction has a significant relationship with customer loyalty.

2.6. Conceptual Framework

The conceptual framework’s foundation is based on the DINESERV model. It will measure and reinvestigate service quality and its impact on customer satisfaction and loyalty, with the 29 attributes fitting in five similar restaurant-quality
services. Tangibility refers to a restaurant’s physical layout, staff presence, and sanitation. Reliability necessitates precise monitoring and duration for ordered food. The restaurant’s responsibility lies with the staff regarding a food menu or a timely response to customer requests and needs. Assurance that customers in restaurants feel confident that their food is safe and can eat without fear, following their employees’ recommendations.

Moreover, the two constructs in the integrated model are: Innovation refers to providing customers with innovative services, new ways to add value, and the creation of new service offerings (reservation apps for takeaway and delivery). Innovation and creativity in the future are key success factors in a marketplace, specifically in multicultural environments (Liu & Jang, 2009; Hotho & Champion, 2011; Zhang, 2010; Sigala & Kyriakidou, 2015). Finally, recovery refers to strategies, policies and protocols, hygiene precautions, and order fulfillment. Recovery plans are frequently developed following crises under traumatic conditions (Topping & Schwab, 2014: p. 40). Resilience development necessitates the rehabilitation of four domains: physical, informational, cognitive, and social. Using the work of Linkov and Trump (2019), and Alberts and Hayes (2003), the physical domain of commercial restaurants is concerned with fixing the service's infrastructure.

In contrast, the information domain requires a systematic data web to assist decision-makers. Documents describing operational resilience must begin to be written, no matter how complex or terrible the crisis is. Memories are created among restaurant employees by documenting the measures implemented, recording the aspects that could be improved, and writing about actions that other locations have performed, which could be implemented in addition to their own.

More importantly, during the COVID-19 pandemic, the study’s framework will reinvestigate and measure the service quality and impact on customer satisfaction and loyalty of a selected fast-food restaurant in Pasay City. Figure 1 depicts the interrelationship of the variables of the study.

3. Methodology

This study was conducted to determine how fast-food restaurants thrived during the COVID-19 pandemic. Since most restaurants were closed, the researchers selected five fast-food restaurants in Pasay City, Philippines, with McDonald’s, Jollibee, KFC, Shakey’s Pizza, and Subway as the participating restaurants. These restaurants were selected since they operated even during the COVID-19 pandemic. The study used a descriptive-correlational research design employing a purely quantitative approach. This study used a convenience sampling technique to obtain data from the respondents. In total, 189 diners completed the distributed questionnaire equally distributed among the diners in five fast-food restaurants. The construction of the self-made survey questionnaire was adapted.
from Adeinat (2019), Freitas and De Lima (2020), Ivkov et al. (2018), and Rashid et al. (2015). In addition, the researchers include additional indicators as supplemental items in the innovation and recovery construct to correctly and adequately fit the instrument in the study, and likewise suggested by the validators during the face and content validity of the instrument. The rating of the various indicators in the questionnaire used a five-point rating scale for the level of agreement with the statements: 5 (4.20 - 5.00) Strongly Agree; 4 (3.31 - 4.19) Agree; 3 (2.60 - 3.30) Somewhat Agree; 2 (1.80 - 2.59) Disagree; 1 (1.00 - 1.79) Strongly Disagree.

The researchers conducted a pilot test on 30 non-respondents and tested its reliability. The test yielded a Cronbach of 0.96 value. Using Cronbach’s alpha, the value must equal or exceed 0.7 to magnify good reliability (Fornell & Larcker, 1981; Nunnally & Bernstein, 1994; Cho & Kim, 2015). A correlation test using Pearson’s correlation was used for data analysis to measure the relationship between the variables. The 0.05 alpha levels were used as the criterion for accepting or rejecting the null hypothesis.

The researchers followed ethical considerations in data gathering. An informed consent letter was attached to each distributed questionnaire, requesting respondents to participate voluntarily. No respondents were forced to participate in the data-gathering procedure, and they were allowed to withdraw anytime if uncomfortable. The assurance of strict confidentiality of data was emphasized to the respondents.
4. Results and Discussion

4.1. Service Quality Dimensions

Table 1 presents the summary of mean ratings on the service quality dimensions. As seen the 189 respondents rated “strongly agree” the service quality dimensions with an overall mean of 4.39. The dimensions of service quality of tangibility, reliability, responsiveness, assurance, empathy, and recovery were likewise rated “strongly agree.” In contrast, innovation was only rated “agree.” The summary of the result means that the service quality of the selected fast-food restaurants was recognized by their customers and properly implemented. It shows that they give value to their customer. Nevertheless, the findings depicted that fast-food restaurants must improve innovation to improve competitiveness and succeed in the market during and after a pandemic.

While Vargas-Hernández and González (2020) argue that innovation is the least important but contrasted by Damanpour et al. (2009), who argue that innovation is a key driver of economic change, growth, and the development of competitive advantages in all domains (academic, political, corporate, and public administration). Sustainable economic growth can result from innovation, which can help nations improve citizen performance and well-being, notwithstanding any crisis. They believe that innovating is critical to a company’s competitiveness. In particular, Duran et al. (2016) emphasize that innovation is one of the businesses’ most important competitive advantages in today’s highly competitive industries with short product life cycles.

In the hospitality industry, studies have shown that improving all the dimensions of service quality increases client satisfaction, loyalty, and repurchase intent (Kim et al., 2003; Rauch et al., 2015; Jeon & Jeong, 2017), as well as continuing to improve business performance and preserving long-term operations. This is reinforced by Omar et al. (2016), a customer’s service quality assessment is critical for providers looking to improve operational performance, reinforce

Table 1. Summary of mean scores of the seven quality service dimensions.

<table>
<thead>
<tr>
<th>Service Quality Dimensions</th>
<th>Mean</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Tangibility</td>
<td>4.45</td>
<td>0.71</td>
<td>SA</td>
</tr>
<tr>
<td>2) Reliability</td>
<td>4.49</td>
<td>0.68</td>
<td>SA</td>
</tr>
<tr>
<td>3) Responsiveness</td>
<td>4.39</td>
<td>0.72</td>
<td>SA</td>
</tr>
<tr>
<td>4) Assurance</td>
<td>4.46</td>
<td>0.69</td>
<td>SA</td>
</tr>
<tr>
<td>5) Empathy</td>
<td>4.32</td>
<td>0.75</td>
<td>SA</td>
</tr>
<tr>
<td>6) Innovation</td>
<td>4.13</td>
<td>1.07</td>
<td>A</td>
</tr>
<tr>
<td>7) Recovery</td>
<td>4.52</td>
<td>0.67</td>
<td>SA</td>
</tr>
<tr>
<td><strong>Overall Mean</strong></td>
<td><strong>4.39</strong></td>
<td><strong>0.76</strong></td>
<td><strong>SA</strong></td>
</tr>
</tbody>
</table>
key skills, and strengthen their market position. As additional service quality construct and measurement, innovation, despite a low mean score, has been important due to the new strategy in service delivery during the COVID-19 pandemic. Sabaru et al. (2022) stated that innovations continuously carried out by service and product providers could ultimately increase customer loyalty. This is because customers feel happy with product innovations. Previous research has related innovation to new technology or knowledge (Kotey & Sorenson, 2014). According to Johannessen et al. (2001), newness can be seen as the central concept of innovation and has been a significant distinguishing feature in the last two decades.

4.2. Customer Satisfaction and Customer Loyalty as Perceived by the Diners

Customer Satisfaction. As shown in Table 2, the diner’s rate on customers’ satisfaction of selected fast-food chain restaurants statement, “Accessibility of the fast-food restaurant has the highest weighted mean of 4.61 and has an equivalent verbal interpretation of Strongly Agree. However, the statement “I am satisfied with the inquiry service provided by the employees has the lowest weighted mean of 4.30 with an equivalent interpretation of Strongly Agree. Therefore, the overall mean of 4.44 indicates "Strongly Agree" in diner’s rate on customers’

Table 2. Customer satisfaction as perceived by the respondents.

<table>
<thead>
<tr>
<th>Customer Satisfaction</th>
<th>Mean</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) I am satisfied with the price of the food.</td>
<td>4.44</td>
<td>0.65</td>
<td>SA</td>
</tr>
<tr>
<td>2) I am satisfied with the inquiry service provided by the employees.</td>
<td>4.30</td>
<td>0.71</td>
<td>SA</td>
</tr>
<tr>
<td>3) It is a good avenue for learning new things about history and culture.</td>
<td>4.32</td>
<td>0.71</td>
<td>SA</td>
</tr>
<tr>
<td>4) It offers authentic, historical meaning and value to the place.</td>
<td>4.32</td>
<td>0.71</td>
<td>SA</td>
</tr>
<tr>
<td>5) It is an enjoyable medium for historical information and learning of the past.</td>
<td>4.33</td>
<td>0.71</td>
<td>SA</td>
</tr>
<tr>
<td>6) Accessibility of the fast-food restaurant</td>
<td>4.61</td>
<td>0.64</td>
<td>SA</td>
</tr>
<tr>
<td>7) Inquiry service provided by the employees</td>
<td>4.50</td>
<td>0.66</td>
<td>SA</td>
</tr>
<tr>
<td>8) Food quality (e.g., fresh, prepared well, served hot, value for the price)</td>
<td>4.48</td>
<td>0.66</td>
<td>SA</td>
</tr>
<tr>
<td>9) Professionalism projected by the employees</td>
<td>4.56</td>
<td>0.67</td>
<td>SA</td>
</tr>
<tr>
<td>10) Delivery of the product</td>
<td>4.54</td>
<td>0.68</td>
<td>SA</td>
</tr>
<tr>
<td>Overall Mean</td>
<td>4.34</td>
<td>0.68</td>
<td>SA</td>
</tr>
</tbody>
</table>
satisfaction with selected fast-food chain restaurants, implying that customer satisfaction reflects the degree to which a consumer believes that the use or possession of a specific service will evoke positive feelings. This is similar to Kabir’s study (2016), with the four factors rating satisfaction: order correctness, speed of service, food quality, and pricing and value in the service quality dimensions. These factors are equally important in influencing consumer satisfaction at fast-food businesses. The customer’s desire to develop a long-term relationship with the organization is described by satisfaction (Bloemer & Schroder, 2003; Ammari et al., 2017). Satisfaction is a person’s feelings toward the company’s future success (EL Samen & Alshurideh, 2012; Al Kurdi et al., 2020).

Customer Loyalty. As shown in Table 3, diner’s rate on customers loyalty of selected fast-food chain restaurants statements like “I believe that fast-food restaurant deserves my loyalty has the highest weighted mean of 4.45 and has an equivalent verbal interpretation of Strongly Agree. However, the statement “I will post positive feedback in my social media accounts about my experience in this fast-food restaurant has the lowest weighted mean of 4.16 with an equivalent interpretation of Agree. The overall mean of 4.34 indicates “Strongly Agree” in diner’s rate on customers’ loyalty to selected fast-food chain restaurants. This implies customer loyalty reflects the customer’s likeliness to dine in or repeat business with the restaurant. It is also the result of customer satisfaction, positive customer experiences, and the overall value of the services a customer receives from the restaurants. The result was supported by the study of (Ullah et al., 2016), who used perceived service quality to assess customer loyalty. Food services are associated with delivery speed and reliability. Consumer feelings, perceptions, and expectations are increasingly crucial for retaining customers in the fast-food restaurant industry. Customer loyalty is based on both tangible and

<table>
<thead>
<tr>
<th>Customer Loyalty</th>
<th>Mean</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) I intend to make more visits to this fast-food restaurant in the coming days.</td>
<td>4.32</td>
<td>0.71</td>
<td>SA</td>
</tr>
<tr>
<td>2) I will recommend this fast-food restaurant to others.</td>
<td>4.40</td>
<td>0.68</td>
<td>SA</td>
</tr>
<tr>
<td>3) I will encourage my friends and relatives to visit this fast-food restaurant.</td>
<td>4.37</td>
<td>0.69</td>
<td>SA</td>
</tr>
<tr>
<td>4) I will post positive feedback about my experience in this fast-food restaurant on my social media accounts.</td>
<td>4.16</td>
<td>1.07</td>
<td>A</td>
</tr>
<tr>
<td>5) I believe that fast-food restaurant deserves my loyalty.</td>
<td>4.45</td>
<td>0.65</td>
<td>SA</td>
</tr>
</tbody>
</table>

Overall Mean | 4.34 | 0.76 | SA
intangible elements. Restaurant choice and customer loyalty are strongly influenced by the food category or range of foods available and the level of service provided (Han et al., 2018). Furthermore, service providers strive for client loyalty since committed customers are less likely to be swayed by unwanted news and information about the services (Deng et al., 2010; Alshurideh et al., 2017).

4.3. Test of the Relationship between Service Quality and Customer Satisfaction

The researcher used the Pearson product-moment correlation coefficient (PPMCC) correlation matrix to test a significant relationship between service quality and customer satisfaction. In testing the alternative hypothesis on the significant relationship between service quality and customer satisfaction, Table 4 shows the results of Pearson’s correlation.

The table shows results that there is a significant relationship between service quality and customer satisfaction. This hypothesis was accepted because the correlation coefficient (r) equals 0.7796, a strong positive correlation. The relationship between variables is strong, as the farther the value to zero, the stronger the relationship. A significant result (r = 0.00001, p < 0.05) indicated a statistical relationship between the two variables at the 0.05 level. Moreover, the Pearson product-moment correlation coefficient (PPMCC) results showed that the variables among the service quality components significantly influenced customer satisfaction. Thus, evidence was able to validate and prove. According to Liu and Lee (2016), this is critical because customer perceptions of the quality of service and value can affect customer satisfaction and purchase intentions. This is also supported by Murad and Muhammad Ali (2015), where findings reveal a link between service quality and customer satisfaction. There is a high correlation between service quality and customer satisfaction. High service quality is linked to increased customer satisfaction (Chan & Castro, 2021).

**Table 4.** Pearson’s correlation statistics.

<table>
<thead>
<tr>
<th></th>
<th>Service Quality</th>
<th>Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality Pearson Correlation</td>
<td>1</td>
<td>0.7796</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.000001**</td>
</tr>
<tr>
<td>N</td>
<td>189</td>
<td>189</td>
</tr>
<tr>
<td>Customer Satisfaction Pearson Correlation</td>
<td>0.7796</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.000001**</td>
</tr>
<tr>
<td>N</td>
<td>189</td>
<td>189</td>
</tr>
</tbody>
</table>

**Correlation is significant at 0.05 level (2-tailed).**
The study also found that service quality is the most significant influencing element in the restaurant business, creating higher levels of customer satisfaction. As a result, when developing a restaurant strategy, the satisfaction of consumers must be prioritized (Mahato & Goet, 2020).

4.4. Test of the Relationship between Service Quality and Customer Loyalty

Table 5 shows a significant relationship between service quality and customer loyalty. This hypothesis was accepted because the correlation coefficient (r) equals 0.8144, a strong positive correlation. Thus, evidence was able to substantiate and demonstrate.

Customer loyalty may be strengthened by improving service quality, with “assurance” having the highest impact. This result is supported by the study by Chen (2015), wherein the quality of service provided impacts customer loyalty. Customers will be more loyal to a restaurant if they believe the service staff is capable and pleasant, has relevant expertise, and has a solid capacity to gain customers’ confidence and trust.

Based on Chan and Castro (2021), the result shows a significant relationship between service quality and customer loyalty. It demonstrates that high service quality is linked to high client loyalty.

4.5. Test of the Relationship between Customer Satisfaction and Customer Loyalty

Table 6 shows a significant relationship between service customer satisfaction and customer loyalty. This hypothesis was accepted because the correlation coefficient equals 0.7237, a strong positive correlation. Thus, evidence was able to verify and determined.

Customer satisfaction and loyalty have a positive correlation, proven in various studies (Al-Ansi et al., 2018; Shamah et al., 2018; Waal & Heijden, 2016). Satisfied consumers are likelier to become loyal customers, as seen by their attitudes

**Table 5. Pearson’s correlation statistics.**

<table>
<thead>
<tr>
<th></th>
<th>Service Quality</th>
<th>Customer Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
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<td>0.8144</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.00001**</td>
</tr>
<tr>
<td>N</td>
<td>189</td>
<td>189</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.8144</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.00001**</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>189</td>
<td>189</td>
</tr>
</tbody>
</table>

**Correlation is significant at 0.05 level (2-tailed).**
and behaviors, such as repeat purchases and good referrals to others (Ali et al., 2018; Saleem & Raja, 2014). A happy customer remains with a business for a long time, spends extra time and money, and promotes word-of-mouth marketing to others (Carranza et al., 2018; Espinosa et al., 2018; Nguyen et al., 2018).

Customer loyalty is critical for restaurant survival in this highly competitive market. Because customers have so many restaurant options, retaining their loyalty and attracting new customers is critical. Client pleasure and customer loyalty have a relationship. Service providers aim to please their clients by providing them with more benefits. This result is supported by the study of Diab et al. (2016), where customer satisfaction substantially impacts customer loyalty, which satisfies consumers who are more inclined to refer and repurchase restaurant services.

5. Conclusion

Today’s constantly changing and very competitive business environment require a sensitive awareness of the situation and fast reaction abilities from the food service industry to provide products and services to meet customers’ expectations and create customer loyalty. This paper examines the service quality, customer satisfaction, and customer loyalty in fast-food restaurants during the COVID-19 pandemic. Findings indicate a positive relationship between service quality, customer satisfaction and loyalty.

The theoretical implications of this study are that most studies focused on the traditional SERVQUAL framework, and no study yet with the integration of innovation and recovery. These constructs can be used in a different context and may vary between industries or countries. The study contributes to the existing knowledge by proposing a new integrated approach for predicting satisfaction and loyalty amid the pandemic crisis by having innovation and recovery as additional constructs.

Regarding managerial implications, the findings can help fast-food restaurants craft innovative strategies to improve restaurants’ services during and after the
pandemic crisis. This research highlights the utilization of technology with an emphasis on online delivery, health and hygiene and training among the restaurant staff. Owners and operators of fast-food restaurants may be better able to deploy resources and lessen the effects of the COVID-19 epidemic. This study can shed light on the challenges of making judgments in the face of evolving regulations and help develop plans to boost client loyalty and satisfaction.

Limitation and Further Research: This research is not without limitations. Due to the pandemic, the geographical scope of the study is confined only to Pasay City, Philippines, with only five selected fast-food establishments participating in data collection. Further research is recommended to replicate the study using the integrated service quality model on a larger scale. Future studies could examine a larger range of restaurants beside the fast-food industry or in different industry settings to validate the findings.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References


Chow, L., Krishnapillai, G., & Lee, C. (2019). Navigating Dining Satisfaction by Under-


Ma, C. C. Villanueva et al.

https://doi.org/10.1108/BFI-08-2017-0449


https://doi.org/10.1016/j.sbspro.2014.07.546


https://doi.org/10.1016/S0148-2963(99)00076-4


https://doi.org/10.1007/s11205-017-1820-0


https://doi.org/10.1080/0965254X.2019.1569109


https://doi.org/10.1177/1938965510378574


https://doi.org/10.1177/002224298504900403


Zhang, L. (2010). Exploitation of Contextual Affect-Sensing and Dynamic Relationship
Interpretation. *Computers in Entertainment, 8*, Article No. 18. 
https://doi.org/10.1145/1902593.1902597