

# Restaurant Customers' Quality Expectations: A Pre- and Post-COVID-19 Pandemic Comparison

## Abstract

This study examines changes in restaurant customers' quality expectations prior to and after the COVID-19 pandemic. The purpose of this study is to investigate if and how restaurant customers' quality expectations have changed during the pandemic. In addition, the present research also aims to determine which marketing (7P) quality dimensions will best explain customers' expectations in the post-COVID era. With a snowball sampling method, a total of 421 valid online questionnaires were obtained. The structured questionnaire included 42 marketing quality indicators belonging to the seven marketing dimensions. In addition, exploratory factor analyses and a sign test were used to assess differences in quality expectations. Results indicate statistically significant differences in customers' quality expectations before and after the pandemic. Four factors (Product-Physical Evidence, Promotion, People, and Price) best explained customers' expectations before and five factors (Product-Physical Evidence, Placement-Promotion, People, Price, and Processes) after the crisis. This paper contributes to the marketing and restaurant management literature by providing a detailed understanding of the importance of the different marketing indicators before and after the crisis. By applying a 7P research concept, we have also facilitated an international benchmarking process. The conclusion provides suggestions for future research directions and information for restaurant managers.

**Keywords:** COVID-19, customers, restaurants, quality, marketing

## 1. Introduction

The severe acute respiratory syndrome outbreak coronavirus 2 (SARS-CoV-2), which causes the COVID-19 disease, brought the most devastating effect in recent human memory. Studies are ongoing, but according to the World Health Organization (WHO), the COVID-19 pandemic has directly affected more than 155 million people and caused more than three million worldwide deaths since being declared in March 2020 (Global Research. More of its devastating effects are now apparent in social crises, economic downturns, and business interruptions. As tourism travel was halted and hospitality providers were limited in offering their services in order to limit the spread of the virus, the hospitality industry was among the hardest-hit economic sectors (Brizek et al., 2021).

The pre-pandemic tourism industry in the European Union (EU) accounted for as much as 10% of the EU Gross Domestic Product (GDP). Similarly, tourism accounted for 9.9% of the pre-pandemic GDP in the Republic of Slovenia. However, as a result of the pandemic, in 2020, the EU tourism industry realized an unprecedented 52% drop compared to 2019. In Slovenia, the overall drop was 50.8% (Slovenian Tourist Board [STO], 2021), which has severely affected the hospitality sector.

The preventive measures imposed by the EU governments have forced restaurant providers to partially operate by offering take-away and/or delivery services and to lower their capacity levels. This change practically led to the disappearance of the traditional 'sit-in' customers, which has resulted in significantly lower sales

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revenues. The large fall in restaurant sales was also likely due to the nature of the restaurants' service-oriented business models and their limited infrastructure to trade impersonally at large scales. Consequently, many restaurant providers decided to remain closed (Panzone et al., 2021).

A significant decrease in demand for restaurant services has also been triggered by changes in customers' expectations, which became significantly more uncertain about their risk exposure. In addition, fear and safety issues have raised the question of trusting restaurant providers in terms of imposed health and hygiene protocols (Min et al., 2021). Consequently, the uncompromising uncertainties caused by the pandemic have raised serious questions about how the hospitality industry, and also the restaurant sector, is prepared to satisfy changes in customers' expectations (Mehta et al., 2021). According to Foroudi et al. (2021), managers' primary concern must be to retain their customer base during a crisis. Therefore, managers should analyze and anticipate changes in customers' expectations in order to be able to provide offerings of satisfactory quality. From this perspective, the key issue for the restaurant industry is if and how changes in customers' buying behavior during the pandemic will affect the restaurant industry in the long term (Kim et al., 2021). In addition, the question of how restaurant firms can adapt to this new reality should be answered. As the pandemic is likely to have an unprecedented effect on the restaurant industry worldwide, researchers should strengthen knowledge in this crucial tourism sector to help restaurateurs become more resilient and achieve efficient post-crisis recovery.

The ongoing studies on restaurant customers' buying behavior during the pandemic have focused on the various and partial aspects related to changes in customers' expectations, such as risk perceptions (Yost & Cheng, 2021), the importance of social media (Sung et al., 2021), food packaging (Byrd et al., 2021), and many others. To the best of our knowledge, no study had applied a holistic approach in investigating how restaurant customers' quality expectations have been potentially changed due to the pandemic, which is an important issue for the restaurant industry because the core of why people are (or are not) dining at restaurants might have significantly changed (Yost & Cheng, 2021). Interestingly, other theoretical projections suggest that the pandemic will not significantly influence consumer behavior in the long term (Pantano et al., 2021). In this view, buying intentions remain an important area for academia and practice, as there are many uncertainties about how consumers will react in the post-pandemic period. Thus, the main purpose of this study is to fill the research gap by analyzing restaurant customers' expectations from restaurant providers prior to and after the pandemics by using a marketing-based (7P) questionnaire for the assessment of restaurant quality (Kukanja et al., 2017). Especially, we analyzed customers' responses during March and June 2021. As online research is popular for hospitality research during the current crisis (Mehta et al., 2021), we collected customers' responses based on an online survey. Using a marketing approach, we attempted to understand better if and how the pandemic influenced restaurant customers' expectations from the marketing perspective.

According to (Madeira et al., 2020), by understanding the influence of the pandemic on the restaurant sector, the long-term negative impacts on restaurant firms can be minimized if proper strategies are applied. Therefore, analyzing potential changes in customers' expectations might also help strengthen restaurants' resilience strategies during and especially after the crisis (Yost & Cheng, 2021). Additionally, we believe that this study will also remain significant after the COVID-19 situation is over since, according to (Zhong et al., 2021), this is probably not the last pandemic humanity will face in the forthcoming years.

The structure of the remainder of the paper is as follows. The next section discusses a literature review, followed by the presentation of methodology. For this study, the Sign test was applied to investigate differences between paired observations before and after the crisis, and two Exploratory Factor Analyses (EFAs) were performed to investigate the factor structures of customer expectations prior to and after the crisis. Next, research results were presented and discussed. The paper concludes with implications for the restaurant industry research and practice, presenting research limitations and recommendations for future research directions.

## 2. Literature review

### 2.1. Restaurant quality and customers' quality expectations

Restaurant managers must identify customers' quality expectations, as purchasing decisions are mainly driven by customer expectations from restaurant providers (Kim et al., 2021). Consequently, customer expectations and satisfaction, along with the concept of quality management, have been an important topic in the hospitality literature. Customers' choice to dine at a restaurant and the research in this area has usually been rooted in understanding the key restaurant-quality attributes (also referred to as dimensions) that motivate customer buying behavior (Yost & Cheng, 2021). In the restaurant sector, service quality is critical because it results in the difference between customers' expectations and perceptions of quality. Customers have a high-quality experience when the perceptions exceed the expectations. Therefore, based on its customer-oriented concept of subjectivity, service quality is defined as the ability of a service to fulfil and/or surpass the gap between customers' quality expectations and perceptions (Parasuraman et al., 1985).

Accordingly, there were several theoretical attempts to capture and empirically validate the critical components of service quality. One of the most widely used concepts is the Five-step model of service quality by Parasuraman et al. (1985). This model presents the theoretical basis for the empirical measurement of service quality based on the 29-item SERVQUAL instrument composed of five quality dimensions. Stevens et al. (1995) modified the SERVQUAL instrument to meet the specifics of the restaurant industry and introduced the DINESERV scale, although there were also alternative attempts to validate service quality empirically. For example, Kukanja et al. (2017) introduced a marketing-oriented service quality model, which captures the characteristics of restaurant service quality based on 7P indicators.

The pre-COVID-19 research projects stressed the importance of different quality attributes that define a satisfactory dining experience, including visible (tangible) elements of quality (Mosavi & Ghaedi, 2012), food (Namkung & Jang, 2007), people (Voon, 2012), and many others. In their study, Kukanja et al., 2017 found that restaurant customers primarily evaluate restaurant service quality based on three marketing factors (respectively): people, placement, and product and physical evidence. Research results might also change according to the measurement instrument applied to the different studies. Moreover, customers with different cultural backgrounds have different expectations, which might vary with the same level of services provided (Torres, 2014).

### 2.2. Influence of COVID-19 on restaurant customers' expectations

Customers made significant behavioral adjustments during the lockdown in response to the imposed governmental restrictions. Customers reduced their shopping frequency, began stockpiling goods, searched for alternative food supplies, and started to prepare food at home (Eftimov et al., 2020). According to Panzone et al., 2021, especially the (re)invented ability of consumers to experiment at home could lead to changes in customers' expectations towards the restaurant providers. According to Yost and Cheng (2021), COVID-19 has left an inefaceable mark on customers' buying behavior by creating a 'new normal' among eating habits, spending ability, and movement patterns. In contrast, according to Pantano et al. (2021), the pandemic should not necessarily influence customer behavior patterns in the long term.

Based on our literature review, we have identified relatively few studies (presented below) that analyzed changes in restaurant customers' quality expectations and buying behavior during the pandemic from the different (partial) perspectives. Moreover, to the best of our knowledge, no studies have analyzed restaurant customer quality expectations in the post-COVID-19 era. As there is no unified position about the influence of the pandemic on customer buying behavior, below, the state-of-the-art research findings (2020–2021) are summarized in different content sub-sections.

*Fear of infection.* Tuzovic et al. (2021) state that safety has become a significant concern for restaurant customers. The psychological fear of becoming infected leads to massive stress, which causes negative emotions, including confusion and anxiety (Yost & Cheng, 2021). In terms of public fear, Sung et al. (2021) found that the media coverage of COVID-19 plays a significant role in customers' risk perceptions.

*Social distancing measures.* The imposed public health regulations impact customers' dining experiences and their (dis)comfort when being among other guests. In particular, the perceptions of spatial density and social-crowdedness negatively influence customers' safety perceptions (Wang et al., 2021). Choi et al. (2020) revealed that the segment of 'solo diners' is increasing and that the restaurants' physical and customers' psychological boundaries positively influence customers' perceived territoriality, which leads to their positive satisfaction and boosts their revisit intention. These findings are consistent with a recent study by Taylor (2020), suggesting that the environmental setup affects customers' safety perceptions, consequently determining customers' decision making in the re-opening period.

*Operational safety procedures.* Because the virus might be transmitted via human contact, customers care much more about the imposed hygiene measures. Additionally, the virus may also transmit via food handling stages (Pressman et al., 2020), which triggers customers' desire to know the details about the food preparation process. A recent study by Byrd et al. (2021) revealed that customers have the deepest concerns about contracting the virus from cold-served food.

*Contactless service.* Fear of infection plays a crucial role in increasing sales of restaurants offering contactless service (Kim et al., 2021); it was also found that people who stay at home prefer to consume safe, fair-priced, and home-like delivered foods. This fact presents a major problem for fine-dining restaurants, focusing on providing an overall high-quality dining experience. Dining at gastronomic facilities is one of the lowest priorities for customers when they are under self-preventive practices (Lai et al., 2020).

*Price.* According to Foroudi et al. (2021), customer buying behavior is significantly more impacted by their household income. Kim et al. (2021) found that customers seem to be even more demanding during the pandemic and tend to consume food that signals the best value for money in terms of safety, quality, and health. These findings were also supported by Luo and Xu (2021), who reported that customers use rating filters before ordering from a restaurant to obtain the best value for money.

*Brand image.* Regarding customers' decision-making process, restaurant brand image is crucial for signaling safety and quality (Hakim et al., 2021). Customers prefer branded restaurants over non-branded ones (Kim et al., 2021). In their study, Wei et al. (2021) found that brand trustfully mediated the relationship between preventive measures and customers' intentions to dine out.

*Individual characteristics.* Regarding differences in customers' buying behavior due to their personal characteristics, Tuzovic et al. (2021) found that women seem to have missed going out more than men did during the pandemic. Women are also more concerned about contracting COVID-19 from food than men are. According to Byrd et al. (2021), consumer risk perceptions also vary according to their financial concerns and the COVID-19 risk group category level. Furthermore, Tuzovic et al. (2021) also found that the frequency of contact with the elderly population determines consumers' worries of becoming infected. In terms of other individual physiological motives, Dedeoğlu and Boğan (2021) found that the human need to socialize and the affect regulation (a person's tendency to choose a specific 'soul food') is the most prominent motives for visiting upscale restaurants during the pandemic.

*Collective norms.* The imposed collective norms seem to influence the individual and the collective purchasing behaviors (Zhong et al., 2021). In this view, Hakim et al. (2021) found that solidarity to the foodservice sector was a new and situational factor affecting Brazilians intentions to visit a restaurant during the pandemic. The influence of cultural differences was also reported by Janssen et al. (2021). Similarly, Yang et al. (2020)

reported that ethnicity, political ideology, eat-in habits, and restaurant diversity moderate the effects of the pandemic on stay-at-home orders.

The majority of the above-presented studies focused on analyzing the various aspects of customer risk perceptions. However, no study employed a marketing (or holistic) approach to analyzing restaurant customers' expectations, which is also important because customer satisfaction is positively correlated with restaurant firms' profitability. Therefore, restaurant managers should rethink, re-adopt, and restructure their business models and optimize their resources to satisfy customer demand and generate profitable business operations during and after the pandemic (Madeira et al., 2020).

Based on the above-presented literature review findings, we pose our first research question (RQ1), as follows: *Are there statistically significant differences in customers' quality expectations from restaurant providers before and after the COVID-19 pandemic?*

By answering our main RQ, we are also trying to determine if and how the COVID-19 emergency impacts consumers' behaviors in terms of quality expectations. Specifically, from the future perspective, we are attempting to investigate which marketing attributes will best explain customer quality expectations in the post-COVID-19 era. Accordingly, the second research question (RQ2) was developed: *Which marketing quality dimensions will most significantly determine restaurant customers' expectations after the COVID-19 pandemic?*

### 3. Research method

#### 3.1. Research process and instrument design

In the first part, a qualitative research study was performed to identify previous studies related to changes in customers' quality expectations and buying behavior in relation to the pandemic. Studies related to the aforementioned research topic were retrieved from major scholar databases for tourism and hospitality research from January to May 2021.

In the next part of the study, customers' quality expectations were analyzed based on a modified questionnaire developed by Kukanja et al. (2017). The original questionnaire comprises 35 quality indicators merged into seven (7P) quality dimensions and provides a methodological framework for assessing service quality from a marketing perspective. The scale was primarily used in restaurant-quality studies (Kukanja, 2017; Kukanja et al., 2017) and provided a methodological framework for many other marketing-based service quality studies (Anjani et al., 2018; Rafdinal & Suhartanto, 2020; Khalil, 2021).

To address the specifics of the current situation, seven indicators were added to the original version of the questionnaire (one to each dimension). The included items were: use of local ingredients (Pressman et al., 2020); availability of sanitizers (Zhang et al., 2021); employment of staff from the local environment (Wang et al., 2021); the possibility of using information technologies (IT) (Brewer & Sebby, 2021); information about implemented safety protocols (Tuzovic et al., 2021); food delivery and/or take away (Yang et al., 2020); and the possibility of using alternative means of payment (Grobys, 2021). Therefore, the final questionnaire is composed of 42 indicators belonging to the seven marketing dimensions (see Table 1). In the second part of the questionnaire, research items related to respondents' demographic characteristics (age, education, gender, and income) and their consumer habits (frequency of visiting restaurants, average spending per person (ASP), and expected changes in buying behavior) were also included. To ensure each item's understandability and verify that the duration of the survey was appropriate, a pilot study was conducted with 40 participants.

## 3.2. Data gathering and research method

To understand how the pandemic impacts customers' quality expectations, the online survey was delivered via social media and web-link as previously done by Brewer and Sebbby (2021). The target population were customers that had dined in restaurant facilities prior to the pandemic within the previous 12 months, as done by (Wei et al., 2021). The following types of restaurant facilities were included in the study – fine dining restaurants, Inns, and fast-food restaurants. Respondents were asked to indicate their quality expectations before and after the pandemic on a five-point ordinal-type Likert scale ranging from 1 (not important) to 5 (very important). The survey captured data from March to June 2021. Based on a snowball sampling method, we collected 560 questionnaires, of which 421 were completed.

Information about respondents' characteristics was presented using descriptive statistical analysis. To answer our RQs, a nonparametric two related samples sign test and two EFAs were performed. All data were analyzed using SPSS (version 26) software.

## 4. Research results

### 4.1. Descriptive statistics

Findings show that the respondents were, on average, thirty years of age. The sample was predominantly composed of female respondents (64.2%). The largest group of respondents had completed secondary education (44.5%), 20% were less educated than that and 35.5% more than that. The net monthly income for 65.1% of the respondents was up to €1000. Before the crisis, the largest group of respondents (42.6%) visited a restaurant a few times per month, 30.9% reported visiting a restaurant a few times per week, and only 0.5% of respondents reported not visiting a restaurant at all. In terms of ASP before the crisis, the largest group of respondents (41.4%) spent between €11–20, 29.9% spent between €6–10, 8.1% indicated ASP up to €5, and only 2.6% of customers reported an ASP higher than €50 when dining out. In terms of the structure of restaurant facilities, the largest group of respondents indicated that they had predominantly dined in fast-food restaurants (40.4%), followed by inns (34.2%) and fine-dining restaurants (25.4%).

Results indicating customers' after-crisis buying behavior show that the largest group of respondents (36%) is still planning an average ASP of €11–20, 26.1% of them indicated an ASP of €6–10, 20.9% were planning to spend only up to €5, and 2.6% of respondents were planning to spend over €50 when visiting a restaurant. The largest group of respondents (36.5%) is planning to dine out a few times per month, followed by those who plan to visit a restaurant a few times per week (18.7%), while 16.3% of respondents indicated that they do not plan to dine out after the crisis is over. Interestingly, 88.9% of respondents claimed that the crisis would not influence their quality expectations. However, the above-presented results suggest a significant change in habits, indicating a lower frequency and a lower ASP when planning to visit a restaurant after the crisis.

The results presented in Table 1 indicate that all 42 indicators were evaluated relatively highly. The average mean value (M) is 3.69 before and 3.83 after the crisis. The highest-rated dimension before (M=3.99) and after the crisis (M=4.24) was Physical evidence. Conversely, before and after the crisis, the lowest expectations were related to the dimension Promotion (M= 3.23 and M=3.39, respectively). The dispersion of the data is presented by the values of standard deviations (SD). Interestingly, within each dimension (before and after the crisis), the highest SDs were in most cases related to the new variables (I– 6, 12, 18, 24, 30, 36, and 42), indicating that customers were very polarized in their responses (for all seven indicators SD= >1).

**Table 1**  
**Customers' expectations – Descriptive statistics**

7P	No.	Indicators	Before the crisis		After the crisis	
			Mean	SD	Mean	SD
Product	1	Selection of dishes	4.07	0.95	4.09	0.91
	2	Size of portions	3.79	0.86	3.80	0.88
	3	Food taste	4.51	0.87	4.51	0.85
	4	Food appearance	3.72	0.87	3.77	0.86
	5	Food safety perception	4.23	0.94	4.42	0.86
	6	Use of local ingredients	3.45	1.02	3.65	1.03
Physical evidence	7	Restaurant cleanliness	4.38	0.89	4.60	0.81
	8	Presentable service staff	4.12	0.89	4.29	0.85
	9	Sense of comfort	4.22	0.80	4.27	0.82
	10	Sense of security	4.03	0.90	4.20	0.90
	11	Restaurant design in accordance with food offerings	3.95	0.87	4.03	0.89
People	12	Availability of sanitizers	3.22	1.26	4.09	1.06
	13	Sufficient number of service staff	3.98	0.75	4.02	0.79
	14	Importance of the presence of the restaurant manager for quality offerings	3.04	1.02	3.15	1.07
	15	Distracting presence of other customers	3.46	1.01	3.53	1.05
	16	Hospitable service staff	4.38	0.81	4.40	0.78
	17	Professionally competent service staff	3.83	0.87	3.93	0.89
Processes	18	Employment of local staff	3.18	1.09	3.32	1.15
	19	Appropriate answers from service staff	4.09	0.71	4.13	0.74
	20	Helpfulness of service staff	4.06	0.76	4.09	0.77
	21	Responsiveness of service staff	4.30	0.74	4.34	0.71
	22	Restaurant opening hours	3.86	0.82	3.95	0.85
	23	Service waiting time	4.14	0.78	4.19	0.78
Promotion	24	Possibility of using IT	3.06	1.07	3.29	1.16
	25	Visible marketing signs	3.20	0.96	3.35	1.02
	26	Compliments and signs of special attention	3.33	0.88	3.40	0.91
	27	Recommendations from service staff	3.55	0.85	3.64	0.85
	28	Special offers and sales campaigns	3.34	0.97	3.43	1.02
	29	Advertising activities in media	2.82	1.02	3.00	1.16
Placement	30	Information of safety protocols	3.15	1.02	3.53	1.07
	31	Accessible entrance	3.92	0.75	3.98	0.76
	32	Accessible parking area	4.05	0.88	4.08	0.87
	33	Neat surroundings	3.57	0.82	3.62	0.83
	34	The restaurant is worth the distance travelled	3.78	0.85	3.81	0.88
	35	The restaurant enhances indirect distribution	2.69	1.06	2.75	1.13
Price	36	Possibility of food delivery and/or take away	3.11	1.06	3.81	1.08
	37	Understandability of prices	4.16	0.76	4.17	0.77
	38	Accurate bill	4.15	0.91	4.15	0.94
	39	Value for money	4.27	0.70	4.33	0.72
	40	Price competitiveness	3.74	0.87	3.79	0.90
	41	Possibility of surcharges for extra security of services (e.g., sanitizers)	2.53	1.15	2.89	1.26
	42	Use of alternative means of payments (e.g., cryptocurrency)	2.22	1.12	2.37	1.23

Source: Authors' own research.

## 4.2. Sign test

To answer RQ1, we verified any statistically significant differences ( $\alpha < 0.05$ ) between all observed pairs of indicators before and after the crisis. A nonparametric two related samples sign test was used because we could not confirm a normal distribution of the dataset, and all indicators were ordinal variables. Results indicate statistically significant differences between all 7P dimensions (the difference in averages between common importance of all indicators before and after the crisis was 0.13). In all cases, customer expectations were evaluated higher after the crisis. The highest average differences were identified between the dimensions of Physical Evidence (0.26), Promotion (0.16), Place (0.15), Price (0.11), and Product, People, and Processes (0.08), respectively. At the individual level, the highest differences were found for the most pandemic-related indicators, such as I12 (0.87), I36 (0.70), I30 (0.38), I41 (0.36), I24 (0.23), and I7 (0.21). Interestingly, the lowest differences were found for the most 'traditional dining' indicators, such as I1, I3, and I37, respectively. Results of the sign test provided the answer to the first RQ.

## 4.3. Exploratory factor analyses (EFAs)

Next, two EFAs were performed to understand better the factor structure of customers' quality expectations prior to (EFA I) and after the crisis (EFA II). As our research factor-model seeks the fewest factors that can account for the common variance of a set of indicators and attempts to understand the shared variance through a small set of latent variables that link our indicators into a common factor, we decided to use the Principal Axis Factoring Method (PAF). Another decision for using PAF is that we could not confirm a normal distribution of the dataset (a Kolmogorov-Smirnov test was used) for any of the selected indicators (EFA I and II).

Next, reliability analysis was performed for all sets of indicators. Cronbach's Alpha ( $\alpha$ ) indicates a high level of internal consistency ( $\alpha \geq 0.9$ ) for both sets of data: EFA I ( $\alpha = 0.925$ ) and EFA II ( $\alpha = 0.930$ ). In terms of suitability of the data, the values of the Kaiser-Meyer-Olkin measure of Sampling Adequacy (KMO) and the Bartlett test of sphericity indicated that all indicators were suitable for performing EFAs. The values of the aforementioned indicators for EFA I were KMO (0.916) and Bartlett test ( $\chi^2 = 5,166.994$ ,  $df = 528$ ), and for EFA II were KMO (0.916) and Bartlett test ( $\chi^2 = 5,922.027$ ,  $df = 630$ ). After a few iterations for both models, all indicators with too low communalities ( $< 0.4$ ) were excluded from further analyses. Excluded indicators for EFA I were – I34, 36, 24, 22, 15, 38, 2, 6, and 18. Excluded indicators for EFA II were – I34, 42, 24, 15, 6, and 18. Therefore, 33 indicators with satisfactory communalities were selected for inclusion in the final EFA I model; and 36 indicators were selected for inclusion in the final EFA II model.

Based on rotated factor matrix solutions (Varimax with Kaiser normalization was applied), we have selected the solution with four factors, which explain 43.5% of the variability in the final EFA I model and the solution with five factors, which explain 45.8% of the variability in the final EFA II model. Only factors containing three or more indicators with satisfactory factor loadings ( $> 0.4$ ) were retained in both models, which enabled meaningful interpretation of both factor structures. The final rotated factor models are presented in Tables 2 and 3.

**Table 2**  
*EFA I*

I.	Factors			
	Product-physical evidence	Promotion	People	Price
8	0.757			
3	0.712			
7	0.704			
10	0.667			
5	0.650			
9	0.629			



**Table 2 (continued)**

4	0.582			
1	0.567			
11	0.549			
21	0.518			
16	0.480			
35		0.693		
41		0.668		
29		0.606		
30		0.589		
42		0.556		
28		0.503		
12		0.491		
25		0.443		
27			0.494	
26			0.486	
19			0.469	
14			0.457	
20			0.438	
31			0.417	
13			0.410	
17			0.407	
33			0.402	
39				0.610
37				0.581
40				0.567
23				0.471
32				0.457
Variance	15.95%	10.78%	8.42%	8.29%

Source: Authors' own research.

Based on the research results presented in Table 2, the extracted four factors were logically named after the content prevalence of their marketing indicators. According to the percentage of their total explained variances, it is evident that four factors composed of five marketing dimensions (out of seven) best explain customers' expectations prior to the crisis (in order of importance): Product-Physical evidence, Promotion, People, and Price.

**Table 3**  
**EFA II**

I.	Factors				
	Product-physical evidence	Placement - promotion	People	Price	Processes
7	0.714				
8	0.706				
5	0.696				
10	0.655				
9	0.634				
3	0.612				
4	0.521				
11	0.520				
1	0.503				
12	0.489				

**Table 3 (continued)**

35		0.644			
29		0.639			
28		0.628			
30		0.612			
41		0.564			
25		0.491			
36		0.408			
33		0.406			
19			0.586		
20			0.575		
27			0.551		
16			0.476		
14			0.457		
26			0.457		
21			0.455		
17			0.446		
13			0.436		
39				0.661	
37				0.586	
38				0.586	
31				0.424	
40				0.423	
32				0.422	
23					0.476
22					0.451
2					0.454
Variance	13.80%	10.41%	9.35%	7.36%	4.91%

Source: Authors' own research.

As can be seen from the rotated factor matrix solution presented in Table 3, it is evident that customers' expectations after the crisis will primarily relate to the following five factors, composed of seven marketing dimensions (in order of importance): Product-Physical evidence, Placement-Promotion, People, Price, and Processes. The first four marketing dimensions were merged into two common factors, which were named after the predominant content of their indicators.

The results of both EFAs clearly (re)confirm differences in customers' quality expectations before and after the crisis. The results of EFA II show the factor structure of customers' marketing expectations after the crisis and thus provide the answer to RQ2.

## 5. Discussion

In reviewing the literature, no data were found on the association between changes in customer quality expectations before and after the pandemics. Accordingly, this paper aimed to investigate differences in customers' expectations for restaurant-quality offerings before and after the pandemics (RQ1) and to determine the most important marketing quality dimensions after the re-opening of restaurant facilities (RQ2). Based on research results, we found statistically significant differences in customers' quality perceptions before and after the crisis. The highest positive differences were found for the dimension of Physical Evidence, indicating that customers will have even much higher expectations for the tangible elements of restaurant offerings after the crisis.

The factor structure of customers' expectations before the crisis revealed that the most important marketing quality dimensions for determining customers' expectations consisted of 33 indicators and four factors,

assembled of five marketing dimensions (in order of importance): Product-Physical Evidence, Promotion, People, and Price. Accordingly, two dimensions (Processes and Placement) did not prove to be the common latent variables in explaining restaurant customers' expectations before the pandemic (see Table 2). Research results indicate that before the pandemic, customers had the highest expectations regarding the tangible elements of restaurant-quality – Product (food) and Physical evidence (environment). Especially the following indicators, belonging to the two aforementioned dimensions, proved to be crucial for assuring restaurant-quality – I8 (Presentable service staff); I3 (Food taste), I7 (Restaurant cleanliness), and I10 (Sense of security). The dimension Promotion was best represented by I35 (Restaurant enhances indirect distribution). In terms of the functional quality, which is best expressed through the dimension People, I26 (Compliments and signs of special attention), I27 (Recommendations from service staff), and I19 (Appropriate answers from the service staff) revealed to be most significant for assuring restaurant quality. Interestingly, Price was the least important quality dimension before the crisis, with I39 (Value for money) and I37 (Understandability of prices) as its most important quality indicators.

In contrast, the factor structure of customer expectations after the crisis revealed a much more complex composition of quality expectations. The post-crisis factor structure consists of 36 indicators and five key factors, composed of seven marketing dimensions (in order of importance): Product-Physical Evidence, Placement-Promotion, People, Price, and Processes. The factor structure revealed a relatively coherent composition of customers' marketing expectations after the crisis since 36 indicators (out of 42) belonging to the initial seven marketing dimensions formed the five extracted factors (see Table 3). Research results show that tangibles (Product-Physical Evidence) will remain the most important quality dimension after the crisis, with I7 (Restaurant cleanliness), I8 (Presentable service staff), I5 (Food safety perception), and I10 (Sense of security), as its most significant quality indicators. The second dimension, Placement-Promotion, will be best represented by I35 (Restaurant enhances indirect distribution), I29 (Advertising activities in the media), and I28 (Special offers and sales campaigns). The dimension People will be largely defined by indicators I19 (Appropriate responses of service personnel), I20 (Helpfulness of service staff), and I27 (Recommendations from service staff). The fourth most important dimension will be Price, largely represented by I39 (Value for money), I37 (Understandability of prices), and I38 (Accurate bill). The last dimension, Processes, will mainly be defined by indicators I23 (Service waiting time) and I22 (Restaurant opening hours).

Analysis of results from EFAs indicates a more complex quality structure after the crisis (EFA II). Additional four indicators – I36 (Possibility of food delivery), I38 (Accurate bill), I2 (Size of portions), and I22 (Restaurant opening hours) were added to the initial set of indicators identified in EFA I. The results of this study reveal the importance of the additionally identified quality indicators for assuring restaurant quality in the post-COVID era. Interestingly, from 33 indicators identified in EFA I, only one item (I42- Use of alternative means of payment) was excluded from EFA II. It is relatively difficult to explain the exclusion of this indicator since many studies reported the increasing use of digital currencies during the pandemic (Civelek et al., 2021; Grobys, 2021). However, more research on this topic is suggested.

In comparing the importance of the different marketing quality dimensions before and after the crisis, the dimensions Processes and Placement proved to be important in explaining restaurant customers' expectations after the pandemic, since the post-pandemic factor structure consists of five key factors composed of seven marketing dimensions. Accordingly, we might assume that, from the marketing-mix perspective, customers will be more demanding after the crisis. Moreover, respondents also reported that they plan to have higher expectations from restaurant providers after the crisis. Our research results corroborate the findings of Yost and Cheng (2021), who reported that things after the pandemic would not be the same as before.

Nevertheless, a more detailed analysis of the different marketing quality dimensions included in both EFAs reveals that the five constructs that best explain customer expectations before and after the crisis remain Product, Physical Evidence, Promotion, People, and Price (see EFA I and II). This finding is in line with results of

the different pre-pandemic studies, in which food (Namkung & Jang, 2007), tangibles (Mosavi & Ghaedi, 2012), price level (Kwun & Oh, 2004), people (Kukanja et al., 2017), and location (Yang et al., 2020) were found to be the crucial elements for satisfying restaurant customer demand.

One of the most interesting findings refers to the excluded indicators from EFA I (nine indicators) and EFA II (six indicators). Among the excluded indicators, five variables remained the same (I- 34, 24, 15, 6, and 18) in which (I- 6, 18, and 24) have been introduced to the questionnaire additionally. It is relatively difficult to explain the exclusion of these manifested indicators, as all five indicators above were important elements for explaining customers' quality expectations in many previous studies. For example, Kukanja et al. (2017) confirmed the importance of the disrupting presence of other customers (I15), while Karagiannis and Andri- nos (2021) highlighted the importance of using local ingredients (I6). The exclusion of the aforementioned indicators from the factoring process of identifying the underlying (latent) structure of customers' expecta- tions after the crisis (EFA II) is also interesting because customers reported significantly higher expectations for all five indicators after the crisis (see Table 1). Statistically significant differences were also found between all five observed pairs of indicators. Moreover, some of these indicators proved to be important determinants of customers' expectations during the pandemic in previous studies. For example, during the lockdown, cus- tomers extensively relied on IT technologies (I24) (Luo & Xu, 2021). Nevertheless, based on research results, it seems that after the crisis, customers will still prefer the traditional (hospitable) approach when visiting a restaurant (see Table 3). Therefore, we might conclude that the crisis has not significantly influenced (raised) the importance of the excluded five indicators for the overall explanation of the factor structure of restaurant customers' quality expectations after the crisis.

These findings might somehow be related to the prevalence of respondents included in our study, which had indicated a relatively low ASP (up to €20) when visiting a restaurant. Therefore, this could mean that they might be a Product-oriented segment of diners.

## 6. Conclusion

This paper contributes to the marketing and restaurant management literature by providing a detailed un- derstanding of the importance of the different marketing indicators before and after the crisis. By applying a 7P research concept, we have also facilitated an international benchmarking research process.

Nevertheless, several limitations of this research need to be addressed to provide suggestions for future re- search. First, this study included only domestic customers. Therefore, the following studies should apply an international perspective and include the different segments of customers. Second, we applied a quantitative research method and collected data by employing convenience sampling. It is suggested that future research applies combined research methodologies. Especially a qualitative research approach could provide a more profound understanding of changes in customer expectations. Third, this study was performed over a limited period. As this is an ongoing pandemic, subsequent studies should use a longitudinal approach to understand better the impact of the crisis on the restaurant sector. Fourth, data collection that traditionally took place in person was performed online, which might have also influenced the quality of the research. Moreover, customers were asked to indicate their future intentions, which may not necessarily translate into actual be- havior, although previous research (Sheeran & Webb, 2016) confirmed that behavioral intention is a proxy for actual behavior. Therefore, the ongoing monitoring of customer expectations is suggested.

Our research findings offer restaurant managers potential directions on revising their marketing strategies and business models. First, sharing information on customers' expectations within the industry is recommended. Second, restaurants should promote their offerings according to customers' expectations to avoid misleading expectations and create enjoyable customer experiences. As customers reported having high expectations about restaurant safety protocols, managers should also clearly communicate what type of co-creation behavior is

expected from customers to provide a safe restaurant environment. Third, managers should properly train their employees to provide high-quality restaurant services and offers. Finally, we recommend managers keep monitoring customers' expectations and buying patterns.

As transparency of information plays a vital role in customer buying behavior (Foroudi et al., 2021), restaurant associations could also assist their members in analyzing customers' expectations and risk perceptions and help them adjust their business models proactively.

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