MANAGING THE QUALITY OF SERVICES OFFERED BY ACCOMMODATION FACILITIES DURING THE COVID-19 PANDEMIC AND EPIDEMIOLOGICAL THREAT

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Purpose: The COVID-19 pandemic has left a significant mark not only in the area of health but also in the functioning of the economies of various countries. Strong influences of the pandemic are visible, among others, in the activities of accommodation facilities around the world. The main objective of the article is to analyse and evaluate the opinions of respondents on the quality of services offered by accommodation providers before, during the COVID-19 pandemic during the epidemiological emergency. The judgments of respondents were confronted with their ideas about the ideal entities in this industry, offering a satisfactory quality of services and guaranteeing satisfaction.

Design/methodology/approach: The study is based on a review of available literature sources, industry reports and the results of our own empirical research carried out using the CAWI method based on a prepared questionnaire. The methodology of the empirical research was based on the SERVQUAL model and the Fiederman test.

Findings: The survey found that respondents were dissatisfied with the quality of services provided by lodging facilities, both before, during the COVID-19 pandemic and during the epidemiological emergency, with little difference between perceptions and expectations. The highest level of dissatisfaction resulting from consumer feelings characterized the period of the COVID-19 pandemic. For the respondents, the most important sphere comprising the quality of customer ser-vice was the external appearance of the accommodation facilities, and the least important was the willingness to cooperate and trust (certainty).

Originality/value: The article contributes to the expansion of the research topic of the quality gap of accommodation facilities.

Keywords: accommodation base, COVID-19, lockdown, state of epidemiological emergency, quality.

Category of the paper: Empirical research paper.

1. Introduction

The COVID-19 pandemic has had a significant impact on the activities of economic operators worldwide, particularly in temporary restrictions on the use of services from various industries. The identification of new types of the virus continues to cause public concern (Amirudin et al., 2021; Cheung, et al., 2021). According to data published by the World Bank (The World Bank Group), in 2021, almost four out of ten smaller companies in emerging markets had financial arrears or forecasted such a scenario for the following years. So far, the two-year experience in the face of the COVID-19 pandemic has shown that only active policies and public financial sup-port can stem the crisis and the observed economic slow-down and high inflation. The latest forecasts for global GDP growth in 2022 by the International Monetary Fund have been revised downwards by 0.5 percentage points to 4.4%, while the figure for 2023 is expected to be 3.8% (World Economic Outlook Update. Rising Caseloads, a Disrupted Recovery, and Higher Inflation).

Some activities or branches of the economy were particularly affected by the negative impact of the COVID-19 pandemic due to the restrictions imposed and the temporary suspension of their operations. The literature indicates that the industries most affected by the COVID-19 pandemic were tourism, transport and catering (Muangmee et al., 2021; Alkharabsheh, Duleba, 2021). Within tourism, direct restrictions on activity targeted, among others, accommodation operators (Hu et al., 2021). Following the declaration of the COVID-19 pandemic by the World Health Organisation (WHO), local and international travel bans, and airport and border closures were imposed in many countries to limit the spread of the SARS-CoV-2 virus (Bajrami et al., 2021). Not all sectors were affected, for example, those involved in digitisation and new technologies. Services provided by such opera-tors or products offered for sale do not require a fixed base (Kuzior et al., 2021). Accommodation services are a form of activity that cannot be transferred strictly to the Internet. Both the owners of accommodation facilities and the customers of the services they offer have had to adapt to the situation Akincilar i Dagdeviren (2014) point out that consumer opinions are an important factor determin-ing the demand for these services. Therefore, the main objective of the research, based on the assumptions of the SERVQUAL model and Fiederman's Anova Test, is to analyse and evaluate the opinions of respondents on the quality of services offered by accommodation providers before and during the COVID-19 pandemic and during the epidemiological emergency.

2. Literature review

2.1. The quality of the services provided

Convincing a customer to choose the service of a given entity is an extremely important, difficult and demanding process. It is necessary to have a solid foundation, in the form of a properly tailored marketing, financial or technical background. However, the most important issue is the service itself, which must be designed in a way that meets customer requirements and has the features desired by the recipients (Kowalik et al., 2018). Services, in turn, are understood as all manifestations of human economic activity, having an intangible character and characterized by interactivity between the entity providing the service and the recipient (Van Looy et al., 2013). The characteristic features of services are their intangible character, simultaneous production, distribution and consumption, diversity, perishability and impossibility to store them, as well as the impossibility to acquire ownership of them. In the services offered by accommodation facilities, it is crucial to identify the most important and less important criteria for the selection of accommodation by different customer groups. The literature mentions the quality of services offered as a factor that strongly influences consumers' decision to choose a place to stay (Alauddin, Yamada, 2019).

Service quality is one of the key drivers of sustainable business growth and competitive advantage. Research on service quality has been carried out for many years for various segments of the economy (Puriwat, 2017). Businesses known for offering high-quality services have a stronger and more sustainable competitive advantage than others (Lucini et al., 2020). In turn Chang (2008) considers the concept of service quality from the point of view of the customer, who may be guided by different values, evaluation criteria and circumstances. Nowadays it is identified in technical, economic and marketing terms (Jain, Aggarwal, 2015). It is shaped by the discrepancy between expectations and the final evaluation of the ser-vice by customers (Angelova, Zekiri, 2011). Personnel, working in the service industry, especially hospitality services, are expected to act quickly and efficiently and provide quality services. Personnel acting in this way contribute to shaping and improving the level of service quality (Pizam, Shapoval, Ellis, 2016). Wolniak and Zasadzień-Skotnicka (2009), point out that the quality of offered services is shaped by many factors, including material elements (facilities, room, equipment, staff appearance), speed of response (timeliness of services, willingness to help customers), confidence (knowledge, qualifications and experience of employees, courtesy and ability to create an atmosphere of trust and confidence), empathy (care about the customer, individual approach to customers), organization and work efficiency, or the image and culture of the organization.

Quality factors also include responsiveness, reliability and dependability, assurance (respect and friendliness of the service, possession of skills and knowledge, inspiring trust and freedom from danger and risk), empathy (ease of contact with the service provider), and the material components of the service process (Dabholkar et al., 2000).

Consumers' perception of service quality is a complex, multi-dimensional process. To quantify this process, it is common to use the SERVQUAL model (Ravichandran, 2010), based on the perception gap between received and expected service quality (developed by Parasuramana et al., 1985, 1988, 1994), which originally consisted of 10 dimensions, which were eventually reduced to five: reliability, responsiveness, empathy, assurances and tangibles (Subiyakto, Kot, 2020). The key measurement tool of the SERVQUAL method is a survey questionnaire, consisting of 22 statements, which are assessed twice by respondents. In the first stage, the requirements for an ideal ser-vice are evaluated, and in the second stage, their actual level is assessed. For the assessment of the statements, a Likert-type scale is most often used. In the third part of the questionnaire, the respondent assigns grades for the importance of service and quality dimensions (Baki et al., 2009).

The model has been subjected to extensive scrutiny in the literature over the years, with widespread agreement that the dimensions identified are important aspects of service quality, but skepticism as to whether they apply to evaluating the quality of all service industries (Douglas, Connor, 2003). Cronin & Taylor (1992) pointed out the discrepancy between expectations and performance in assessing service quality. In contrast, Kang and James (2004) argued that SERVQUAL focuses more on the process of service delivery than on other attributes, especially those related to the technical dimension. This is why, among others, Cronin and Taylor (1992), as well as Grönroos (2007) pointed out the difference between perceived service and expected service. As a result of further re-search, Grunions, Rust and Oliver (1994) proposed a three-component model explaining service quality through service product, service delivery and service environment. The indicated components are in line with the idea of technical and functional attributes derived from the model of Grönroos (2007), who focused on comparing customers' expectations of services and their previous experiences. This model has been called "total perceived service quality" and examines what the customer is really looking for and what elements they are evaluating. Quality in this model is based on two dimensions: 1) technical, which refers to the result, i.e. what is delivered to the customer, or what the customer receives as a result of the service; 2) functional, indicating how the service is provided. These dimensions affect a company's image and perception of quality in different ways, as pointed out in studies by Grönroos (2007), James (2011).

2.2. Customer satisfaction as a special determinant of service quality

The attempt to estimate the impact of the quality of ser-vices provided by accommodation facilities on the satisfaction and subsequent loyalty of their guests began by defining the terms used. Customer satisfaction is a feeling of satisfaction or disappointment resulting from

a comparison between the performance of a product or service and the expectations of them (Yussupova et al., 2016; Makanyeza et al., 2016). Customer satisfaction is treated as a specific determinant of service quality. In the literature, it is defined as a response to the good or bad quality of a product or service. This approach is usually emotion-al (Klementova et al., 2015). Unfulfilled expectations can create a basis for negative emotions such as anger or regret (Min et al. 2015), while positive feelings generate satisfaction (Xu, Li, 2016). Customer loyalty is the intention or actual realization to purchase products or services again from the same parties and the desire to maintain a stable and long-term relationship with the seller (Flavián, Guinalíu 2006). Stum and Thiry (1991) recognize that customer loyalty concerning buying behavior manifests itself through making systematic purchases, purchasing other products or services from the same company, spreading positive opinions about the business and not succumbing to the actions of competitors. According to Reichheld, loyalty should be considered in a broader way than the repeatability of purchases. He draws attention to the willingness to make an investment or personal sacrifice to strengthen the relationship. This means that the services offered are satisfactory in terms of the values recognized rather than the price (Reichheld, 2003).

Given the above, it should be recognized that customer satisfaction is crucial for both the survival of hotels and the stability of their operations (Zeng, Gerritsen, 2014). The literature mentions some characteristics of accommodation facilities guests that influence the evaluation of satisfaction levels (Nobar, Rostamzadeh, 2018). Such characteristics include expectations, interests, nationality, seasonality, culture, travel experience and sociodemographic characteristics (Khorsand et al., 2020). According to Bitner and Hubbert (1994) the relationship between service quality and customer satisfaction should not be overlooked. Satisfaction should be analyzed as arising from each contact with the service provider, as well as the overall satisfaction resulting from the services provided. The former is related to customer satisfaction or dissatisfaction experienced with each contact with the service provider, while the latter is the sum of impressions from all contacts and experiences.

According to some authors, there are unequivocal rea-sons why companies lose customers. LeBoeuf (1987) indicates that these are: change of place of residence, establishing contacts with other companies, more favorable offer of the competition, dissatisfaction with products or services offered by the company, as well as indifference of service staff. Organizational factors can affect the provision of quality service in both negative and positive ways (Frost, Kumar, 2000).

According to the literature review, quality of service is closely related to customer satisfaction and loyalty. Increases in business costs due to the effects of the pandemic, mainly the decisions made at government levels in this regard to limit the transmission of the virus, can have a significant impact on the level of quality of the service provided by most operators. Due to the existing gap in research on the formation of the quality of services offered by operators of accommodation facilities during an epidemiological emergency, it was deemed

appropriate to conduct research, which was divided into two stages. The first stage was a pilot study on the evaluation of service quality before and during the COVID-19 pandemic. The second stage was a proper study conducted during the epidemiological emergency. The results of the studies conducted are presented in this paper. The article adopts the following research hypotheses:

H1: Pandemic COVID-19/epidemic emergency has a statistically significant impact on respondents' beliefs about the quality of services provided by accommodation facilities operators.

H2: Customers of accommodation facilities were not satisfied with the quality of services provided before and during the COVID-19 pandemic or during the epidemiological threat.

H3: The disproportion between the perception and expectations of respondents as to the quality of services provided by operators of accommodation facilities was greater during the COVID-19 pandemic than during the state of epidemiological emergency or before the outbreak of the COVID-19 pandemic.

3. Research methodology

The idea of this article was to show the level of customer service quality of accommodation facilities in the con-text of the COVID-19 pandemic. To determine the quality of services provided by accommodation facilities, the study used the SERVQUAL method and Friedmann's analysis of variance. The method allows to specify the service gap, understood as the difference between an experience (perception) and customer expectation. And the application of Friedman's analysis of variance made it possible to determine how the COVID-19 pandemic affected the quality of customer service in accommodation facilities, and whether this effect was statistically significant. In this study, the authors used the triangulation method to conduct the research. Triangulation is the use of more than one approach to achieve the set research problem. Combining the results of two or more research methods (methodological triangulation) presents a more complete and reliable picture of the obtained results, and thus drawing the right conclusions (Heale, Forbes, 2013) . The first step that was implemented was a case study, through which a thorough analysis of the research problem posed was carried out. The next step was to conduct a survey, which should be considered a pilot study. The questionnaire was divided into two blocks. The first referred to the motives, preferences and behavior of customers of accommodation facilities both before and during the COVID-19 pandemic, while the second part consisted of the SERVQUAL method modified for the study, consisting of 15 questions, supplemented by a 5-point Likert scale. The survey in the form of an online questionnaire was carried out through the use of the portal https://swpanel.pl/. The survey was conducted in two rounds, first pilot surveys were conducted

during the pandemic then surveys proper during the epidemic emergency. Then the obtained results of the survey were presented using selected statistical methods.

The pilot survey was conducted in the period from 02/08/2022 to 02/18/2022 and a total of 619 people took part in it, of which the number of women participating in the survey was 423 (68% of all respondents). The most numerous group were women aged 26-35 (20%) and 18-25 (19%). In the remaining groups, the number of women did not exceed 15%, while in the study the group over 66 years of age accounted for the least women, which constituted 2% of the respondents, respectively. As in the case of women, men were dominated by people aged 18-25, however, the number of people in this group did not exceed 45 people. The number of men aged 26-35, i.e. 25% and 36-45, was at a similar level, which translates into 21% of all respondents. In the remaining age groups, the number of men did not exceed 14% of the respondents, and over 66 there were 13 more men than women.

Most of the respondents had secondary education (283). Most people from this group lived in non-tourist cities. Respondents in all types of localities were dominated by those with secondary education (283 people). The second largest group of 19% comprised the respondents with higher education (master's degree). The exception are villages of a non-tourist nature, where the second highest education was vocational (26 people, i.e. 12% of the respondents).

The monthly income most frequently indicated by the respondents was in the range of 2,001-3,000 PLN. About 6/25 of the respondents earn between 0-1,000 PLN. The third largest, indicated by the respondents, was the monthly income in the range of 1,001-2,000 PLN. The monthly income above 3,001.00 PLN was at the same level, oscillating around 15%.

The surveys proper were carried out between 18/05/2022 and 31/05/2022 and involved a total of 1,237 respondents. The number of women reached 845 which translated into 68.31% of the total respondents. The largest group was made up of people in the 18-25 age bracket, with as many as 334 respondents, a group that was by far dominated by women with 241. The number of respondents aged 26-35 was at a similar level (230 respondents. 19% of respondents were in the 36-45 age range, which translates into the third largest group of respondents. In the other groups, the number of women did not exceed 16%, and men 14%. Respondents over 66 years of age accounted for the smallest percentage of people, about 0.06% of all respondents, with the number of women in the age group in question being the lowest at 27 people.

Among the respondents, those with secondary education predominated, with 552 people, accounting for 45% of all respondents. Second among the most frequently mentioned education, respondents indicated a master's degree, which accounted for 19%. The third largest group was made up of people with vocational education (149 people), that is, about 12% of all respondents taking part in the survey.

In all types of localities, respondents were dominated by those with secondary education (552 people). The second largest group equal to 19% were respondents with higher education (master's degree). The smallest number of people with a master's degree resided in tourist

villages. In second place in tourist and non-tourist villages were people with vocational education 42 people and 10 people, respectively.

The most common monthly income indicated by respondents was in the range of PLN 2,001.00-3,000.00. About 23% of respondents earn in the range of PLN 0-1,000.00. The third highest monthly income indicated by respondents was in the range of PLN 3,001.00-4,000.00, and slightly lower by 2 was the share of respondents in the range of PLN 1,001.00-2,000.00. Both women's and men's salaries prevailed in the range of PLN 2,001.00-3,000.00.

4. Results and discussion

4.1. SERVQUAL method

The informational content of Figure 1 illustrates the degree of respondents' dissatisfaction with the quality of services provided by lodging facilities, which in both the pilot and proper surveys is at very similar levels. However, as can be seen, during the epidemiological emergency, the level of dissatisfaction improved minimally, however, as indicated by respondents' answers, it did not reach the level from before the COVID-19 pandemic. Therefore, it should be concluded that hypothesis H2 was formulated correctly: customers of accommodation facilities were not satisfied with the quality of services provided before and during the COVID-19 pandemic or during the epidemiological threat.

Comparing the results obtained from the pilot survey with the data obtained in the actual survey, it can be seen that the analyzed values have improved minimally. How-ever, it should be noted that the level of respondents' dissatisfaction is still above the pre-pandemic COVID-19 values.

The gap between respondents' perceptions and their expectations was at a very low level. The pilot study shows that the discrepancy in unweighted mean scores before the COVID-19 pandemic was in the range of (-0.04 to -0.22). In contrast, dissatisfaction among respondents intensified during the pandemic (-0.53). The survey proper shows that during the epidemiological emergency, the maximum level of dissatisfaction regarding the availability of accommodation without time limits reached a point at (-0.40).
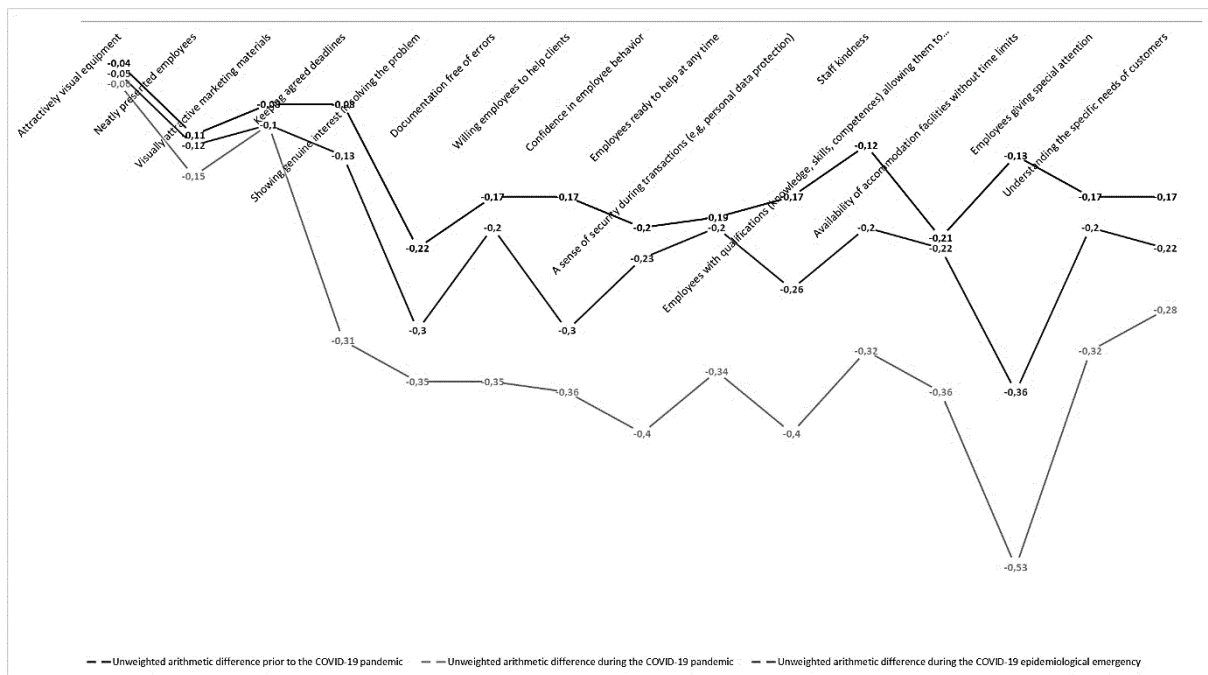
Figure 1. SERVQUAL method.

Source: Author's contribution.

In contrast, prior to the outbreak of the pandemic, dis-satisfaction related to the aspect of sincere interest in solving the problems of those using accommodation bases did not exceed (-0.20). The results obtained, both from the pilot survey and the survey proper, indicate that respondents raised the fewest objections to the provision of accommodation bases (-0.04 and -0.03, respectively). Taking into account the differences in unweighted averages, it can be indicated that of all the spheres of service quality, the sphere of concretes, which is the most resistant to external changes. before, during the COVID-19 pandemic, and in the sphere of epidemiological risk was rated best by respondents, for whom the averages are (-0.08 and -0.10 and -0.09). Respondents, on the other hand, were most dissatisfied with the sphere of empathy, the unweighted average in this area in each country was -(0.16; -0.38 and -0.26). The differences between the other spheres, i.e. reliability, willingness to cooperate or trust in each research period did not exceed (0.06).

Thus, the completed survey allowed positive verification of hypothesis H3: The discrepancy between respondents' feelings and expectations regarding the quality of services provided by accommodation facilities was greater during the COVID-19 pandemic than during the epidemiological emergency or before the outbreak of the COVID-19 pandemic.

Figure 2 shows the importance of the individual spheres of the SERVQUAL method, from the survey. Considering the data contained therein, it can be concluded that for customers of accommodation facilities, the most important sphere comprising the quality of customer service was the external appearance of accommodation facilities during the pandemic as well as the epidemiological threat (25%), which is co-created by the equipment, attractiveness of marketing materials or the appearance of employees.

Another equally important sphere shaping the quality of customer service at the level of 21% and 20 % was the sphere of reliability, consisting of such elements as meeting deadlines, or showing interest in the customers of accommodation facilities. The third most important sphere was empathy manifested, among other things, by understanding individual customer needs. The remaining two spheres were trust and willingness to cooperate in providing services, whose importance is at the level of respectively (18% and 17%) and (17% and 18 %).
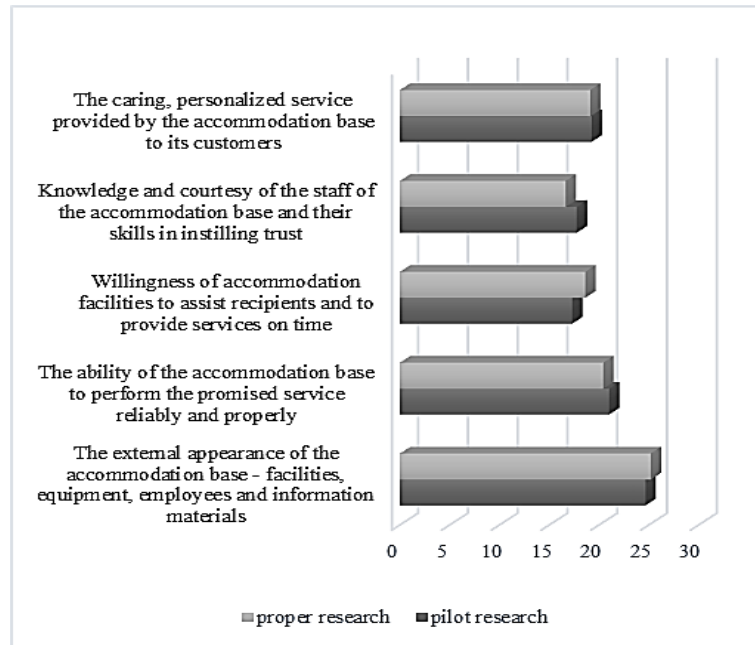

Figure 2. The importance of the areas of the SERVQUAL method.

Source: Author's contribution.

Analyzing the respondents' in Table 1answers through the prism of the importance of individual spheres, it can be seen that the respondents had the most objections to the spheres of empathy (-7.30) and reliability (-7.06), the worst quality of service in this respect is characteristic of the period of the COVID-19 pandemic.

Although the period of epidemiological risk is characterized by a lower level of dissatisfaction with the quality of services provided by accommodation facilities com-pared to the period of the COVID-19 pandemic, the spheres of empathy (-5.05) and reliability (-4.09) are still rated the worst. In this respect, the low level of ratings is influenced by the availability of accommodation facilities without time limits -7.60 (the sphere of empathy) or showing sincere interest in solving the problem -6.14 (the sphere of reliability). As in the case of unweighted aver-ages, the sphere of specifics was rated the best, the respondents are most satisfied with the visually attractive equipment (-1.26). In turn, broken down into individual periods, the average weights in this category are respectively (-1.88, -2.53 and -2.27).

Table 1.

The dimensions of the SERVQUAL method in the assessment of customers of accommodation bases

	Weighted arithmetic difference before the COVID-19 pandemic	Weighted arithmetic difference during the COVID-19 pandemic	Weighted arithmetic difference during the COVID-19 epidemiological emergency
Sphere I-Concrete (palpability)			
Attractively visual equipment	-0.99	-1,48	-1,26
Neatly presented employees	-2,62	-3,70	-3,02
Visually attractive marketing materials	-2,03	-2,47	-2,53
MEAN	**-1.88**	**-2,55**	**-2,27**
Sphere II-Reliability			
Keeping agreed deadlines	-1.77	-6.42	-2,74
Showing genuine interest in solving the problem	-4.72	-7.37	-6,14
Documentation free of errors	-4,20	-7.40	- 4,01
MEAN	**-3,56**	**-7,06**	- 4,29
Sphere III-Willingness to cooperate			
Willing employees to help clients	-2.96	-6.15	- 5,59
Confidence in employee behavior	-3.38	-6.96	-4,34
Employees ready to help at any time	-3.30	-5.87	-3,69
MEAN	**-3.21**	**-6.33**	**-4,54**
Sphere IV-Trust (certainty)			
A sense of security during transactions (e.g. personal data protection)	-3.04	-7.06	-4,28
Staff kindness	-2.18	-5,68	-3,34
Employees with qualifications (knowledge, skills, competences) allowing them to answer the questions	-3.67	-6.39	-3,74
MEAN	**-2.96**	**-6.38**	**-3,79**
Sphere V-Empathy			
Availability of accommodation facilities without time limits	-2.43	-10.30	-7,60
Employees giving special attention	-3.23	-6.13	-3,91
Understanding the specific needs of customers	-3.33	-5.47	-4,20
MEAN	**-3.00**	**-7.30**	**-5,24**

Source: Author's contribution.

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satisfied with the visually attractive equipment (-1.26). In turn, broken down into individual periods, the average weights in this category are respectively (-1.88, -2.53 and -2.27).

4.2. Friedman test

Friedman analysis of variance was used to verify the hypothesis of equality of means in more than two populations. Table 2 shows the rank analysis.

Table 2.

Friedman's ANOVA

Variable	Pilot research				Proper research			
	N	Mean	Standard deviation	p-value	N	Mean	Standard deviation	p-value
Q1_B	619	3.64	0.86	<0.001*	1237	3,59	0,91	<0.001*
Q1_D	619	3.38	1.01		1237	3,39	0,98	
Q1_P	619	3.60	1.09		1237	3,52	1,15	
Q2_B	619	3.81	0.97	<0.001*	1237	3,71	0,95	<0.001*
Q2_D	619	3.62	1.08		1237	3.56	1,16	
Q2_P	619	3.92	1.13		1237	3,74	1,09	
Q3_B	619	3.69	0.92	<0.001*	1237	3,63	0,96	<0.001*
Q3_D	619	3.56	1.12		1237	3,49	1,04	
Q3_P	619	3.77	1.08		1237	3,68	1,09	
Q4_B	619	3.81	1.02	<0.001*	1237	3,69	0,99	<0.001*
Q4_D	619	3.59	1.05		1237	3,45	1,16	
Q4_P	619	3.89	1.14		1237	3,62	1,10	
Q5_B	619	3.63	1,12	<0.001*	1237	3,63	0,98	<0.001*
Q5_D	619	3.52	1.05		1237	3,50	1,03	
Q5_P	619	3.85	1.13		1237	3,72	1,09	
Q6_B	619	3.63	0.94	<0.001*	1237	3,61	0,99	<0.001*
Q6_D	619	3.56	1.05		1237	3,47	1,15	
Q6_P	619	3.83	1.13		1237	3,72	1,11	
Q7_B	619	3.81	0.99	<0.001*	1237	3,72	1,00	<0.001*
Q7_D	619	3.69	1.14		1237	3,62	1,07	
Q7_P	619	3.98	1.13		1237	3,80	1,10	
Q8_B	619	3.75	0.94	<0.001*	1237	3,68	0,99	<0.001*
Q8_D	619	3.54	1.05		1237	3,58	1,02	
Q8_P	619	3.95	1.13		1237	3,82	1,20	
Q9_B	619	3.48	1.03	<0.001*	1237	3,44	1,04	<0.001*
Q9_D	619	3,38	1,05		1237	3,33	1,05	
Q9_P	619	3.67	1.13		1237	3,58	1,16	
Q10_B	619	3.80	0.98	<0.001*	1237	3,67	1,04	<0.001*
Q10_D	619	3.57	1.08		1237	3,57	1,07	
Q10_P	619	3.97	1.12		1237	3,82	1,20	
Q11_B	619	3.88	0.94	<0.001*	1237	3,80	1,01	<0.001*
Q11_D	619	3.69	1.06		1237	3,65	1,10	
Q11_P	619	4.01	1.11		1237	3,89	1,17	
Q12_B	619	3.79	0.97	<0.001*	1237	3,70	1,03	<0.001*
Q12_D	619	3.63	1.05		1237	3,61	1,08	
Q12_P	619	3.99	1.05		1237	3,86	1,13	
Q13_B	619	3.70	1.025	<0.001*	1237	3,66	1,06	<0.001*
Q13_D	619	3.34	1.10		1237	3,29	1,10	
Q13_P	619	3.82	1.14		1237	3,73	1,16	

Cont. table 2.

Q14_B	619	3.45	1,00	<0.001*	1237	3,41	1,03	<0.001*
Q14_D	619	3.30	1.03		1237	3,34	1,03	
Q14_P	619	3.62	1.10		1237	3,54	1,12	
P15_B	619	3.64	0.98	<0.001*	1237	3,60	0,99	<0.001*
P15_D	619	3.56	1.00		1237	3,53	1,02	
P15_P	619	3.87	1.07		1237	3,75	1,12	

Source: Author's contribution.

In both the pilot study and the study proper, two statistical tests, the Kolmogorov-Smirnov test and the Shapiro-Wilk test were used to assess the conformity of empirical distributions of the studied variables with the normal distribution. A significance level of 0.05.

The informational content of Table 3 shows that the values of the mean and standard deviation in both con-ducted surveys are at similar levels. It should be noted, however, that in the state of epidemiological emergency, the results obtained are at a slightly lower level, which thus translates into better assessments of respondents as to the quality of services in accommodation bases.

Taking into account the pilot study as well as the study proper, the values of all the statistics obtained are statistically significant at the level of less than 0.001. This means that there is a statistically significant difference between the state during the pandemic/epidemic emergency and the state before the pandemic and the ideal state. The research conducted allowed positive verification of hypothesis H1: pandemic COVID-19 / epidemic emergency has a statistically significant impact on respondents' beliefs about the quality of services provided by accommodation facilities operators.

5. Discussion

One of the commercial industries most affected by COVID-19 is the hospitality segment. During the COVID-19 pandemic, many governments imposed drastic travel and movement restrictions, as well as temporary bans on lodging providers. As a result, previous research has mainly focused on assessing the impact of the COVID-19 pandemic on a particular business. In contrast, this study also addresses the state of the epidemiological threat (post-pandemic COVID-19 status). The study is divided into two parts. The pilot study focuses on analyzing and assessing changes in customer satisfaction with the quality of services provided by lodging companies during the COVID-19 pandemic. In turn, the research proper refers to perceptions of the quality of services offered by lodging establishments after the end of the COVID-19 pandemic state. The studies conducted were juxtaposed by comparing the periods studied. The research was carried out using the SERVQUAL method, modified for the purpose of the work, which made it possible to identify discrepancies between the experiences of customers

of accommodation providers and their desires. The paper also used the Friedman test, examining with it whether the periods in question have a significant statistical effect.

Madar (2017) surveyed a sample of 120 customers of Hotel "Kronwell" at the end of 2013. The responses of the respondents showed that the main factors of customer dissatisfaction were poor lighting and lack of ventilation in the rooms' toilets. In addition, most of the respondents were disappointed with the level of knowledge and the behavior of the staff, which according to them were not appropriate for high-standard hotels. The survey also identified areas of customer dissatisfaction, such as additional services (little space in the spa areas, too narrow range of treatments not suited to the customer, not sufficient variety in the restaurant menu). Research conducted by Nikolskaya et al., (2018) has shown that the quality of hotel services is linked to the need to protect the environment, as well as to the increase in tourists' demand for environmentally friendly services and goods.

The analysis of the quality of service performed on a sample of Swedish hotels in Norrköping suggests that respondents focused mostly on reliability. Furthermore, empathy and tangibles were important for the customers, followed by the willingness to cooperate. Bhuian (2021) indicates in his research that trust is a less important element influencing the quality of service in the hotel industry.

Research conducted in the hotel industry during the COVID-19 pandemic showed that travelers pay special attention to health protection and infection avoidance aspects when choosing their accommodation. Thus, hotels must comply with WHO requirements and governmental decisions too (Nilashi et al., 2021). These studies also confirm the obtained results. It should be noted, however, that a large part of respondents participating in the survey did not travel, while those who decided to travel were mainly guided by the price of accommodation.

Peres and Paladini (2022) discussed the quality of customer service in Brazilian hotels during the COVID-19 pandemic. The paper discusses the quality of service by analyzing attributes such as room, infrastructure, reservation, and staff. As the authors note, low occupancy rates in Brazilian hotels negatively affected service levels. The COVID-19 pandemic in this case contributed to the suspension of maintenance work, the reduction of food and beverage services and the reduction of access to social spheres, as well as recreational activities. In addition, staff shortages contributed to problems with the timely provision of services. Similarly, as in the research undertaken in this study, Peres and Paladini (2022) found that the COVID-19 pandemic had a negative impact on ratings of the elements that make up service quality. However, in contrast to their study, the analysis of the results in this study suggests that respondents in the COVID-19 pandemic had the most reservations about empathy and reliability.

Yusuf Günaydın (2022) conducted research on the impact of hotel service quality on hotel guest satisfaction during the COVID-19 pandemic and the impact of the "Safe Tourism" certificate on their behavior. As a result, it was found that the quality of service provided in

hotel facilities and the level of guest satisfaction during the pandemic influenced guests' willingness to visit hotels again. It was also shown that having a "Safe Tourism" certificate has a positive impact on the choice of hotel facilities for the vacation season. The study also noted that continuous measurement of service levels underlies quality improvement in hotels.

Chen, Kuo and Tsaur (2022), in their study, specifically pointed out that the hotel services industry is on the brink due mainly to the impact of the COVID-19 pandemic. In order to ward off losses, the authors proposed that luxury hotels in the post-pandemic period split into hotels offering the same services at a lower cost. The study showed that moving away from "luxury" hotels and reducing the quality of services is one way to reduce the large losses created during the COVID-19 pandemic period. However, Albattat and Amer (2016) showed that budget hotels often face numerous complaints among their customers about unclean and uncomfortable rooms, lack of hot water, unpleasant staff and bad food, which is caused by lack of resources and poor service management.

Referring to a study by Mckinsey & Company (2020) on consumer sentiment triggered by the COVID-19 pandemic and its implications for their purchases, behavior and motivation, statistics for most countries show a sharp decline in anticipated spending on tourism and hospitality activities. Pappas and Glyptou (2021), in their study, also pointed to a decline in international travel in the first quarter of 2020 relative to the previous year.

The research undertaken in this study has shown a statistically significant relationship in terms of respondents' belief in the quality of services provided by accommodation providers before and during the COVID-19 pandemic/epidemic emergency (positively verified H1). The conducted research shows that the surveyed clients of accommodation facilities were dissatisfied with the quality of services provided both before the COVID-19 pandemic, during the COVID-19 pandemic and during the epidemiological threat (hypothesis H2 was positively verified).However, it was indicated that the disparity between the feelings and expectations of respondents about the quality of services provided by accommodation facilities was greater during the COVID-19 pandemic than before its outbreak than during the state of epidemiological emergency or before the outbreak of the COVID-19 pandemic (hypothesis H3 positively verified).

A study by Shao-Cheng and Yu-Huan (2022) found a significantly negative relationship between the threat caused by the COVID-19 outbreak and the satisfaction with service in a hotel. Employees, who are under stress offer a poorer quality of service, which has a direct negative impact on hotel guest satisfaction. Similar conclusions were reached by Srivastava and Kumar (2021), who in their study showed a significant relationship between interest in hotel offerings and satisfaction with stay and service quality and the types of sanitation measures implemented related to preventing the spread of COVID-19 in hotels. They also identified practical recommendations for improving customer satisfaction in the hotel industry during a pandemic. Published research shows that service quality is one of the main factors influencing consumer satisfaction. The relationship between the quality of service and customer satisfaction

is strong, as indicated in earlier literature in many studies (Alnawas, Hemsley-Brown 2019). Service quality should be considered as a multidisciplinary factor, depending on the area studied and significantly affecting customer satisfaction.

6. Conclusion

The economic impact of the COVID-19 pandemic has been analyzed in a number of scientific studies (McCloskey, Heymann, 2020; McKibbin, Fernando, 2021; Nicola, et al., 2020). Among other things, public rescue strategies for the tourism and hospitality industry in various countries have been evaluated (Androniceanu, 2020; McCartney, 2020). The negative determinants of the pandemic on the hospitality industry have also been pointed out, as it relies heavily on human contact. Since the onset of the public health crisis, the hospitality industry has experienced serious financial losses. Many hotels have laid off thousands of employees on a permanent or temporary basis, or offered free accommodation to medy workers. Some hotels were also converted into temporary hospitals (Niestadt, 2020; Sanabria-Díazat et al., 2021). Gursoy et al. (2020) suggest that customers will not return natively when hotels reopen. Krishnan et al. (2020) also note that it may take until 2023 or later to return to pre COVID-19 levels. In light of the cited studies, it is noteworthy to assess the quality of services offered by the hotel industry from the point of view of the customers most affected by the pandemic

The COVID-19 pandemic and the introduced restrictions aimed at stopping or reducing virus transmission had a significant impact on the operation of accommodation facilities in worldwide. The introduced lockdowns, the need to close hotels or limit their occupancy as regards the number of guests, resulted in a decrease in the number of accommodation bookings or cancellation of already agreed arrivals. Accommodation establishments, regardless of any restrictions aimed at them, incurred constant costs of running their operations. The financial situation of many operators has significantly deteriorated, which has also had an impact on the quality of services provided, as observed by interviewees. Some entities were closed down as they were no longer able to operate profitably, as evidenced by the decreasing number of accommodation facilities.

In addition, currently, the operations of all businesses, including accommodation facilities, are affected by high inflation, which is reflected in increases in four important cost groups, i.e. electricity, gas, waste disposal and property tax. Increases are also visible in the prices of food or building and household materials. In addition to this, the geopolitical situation in eastern Europe also has an impact on the operation of business facilities.

This article aimed to analyse and evaluate the opinions of respondents on the quality of services offered by accommodation providers before and during the COVID-19 pandemic. The conducted empirical research confirmed that the COVID-19 pandemic/state of

epidemiological emergency has a statistically significant impact on the respondents' beliefs about the quality of services provided by these entities, which confirmed the H1 hypothesis. The second hypothesis (H2), was also verified positively, as respondents were dissatisfied with the quality of services provided by accommodation units, before, during the COVID-19 pandemic and during the period of epidemiological threat. The last hypothesis was confirmed H3, meaning that the differential between the feelings and expectations of respondents about the quality of services provided by accommodation facilities was greater during the COVID-19 pandemic than during the state of epidemiological emergency or before the outbreak of the COVID-19 pandemic. The Anova Fiederman test was used to verify the hypotheses. All considerations were based on the SERVQUAL model. The article also attempts to determine the impact of the quality of accommodation services on customer satisfaction. The aim of the article has been achieved and the research hypotheses have been verified. Accommodation facilities to reduce pandemic losses and calm their financial situation (during the COVID-19 pandemic), began to place less emphasis on the quality of services, which in turn was reflected in the opinions of respondents and was identified by them.

The research limitation may be a sample limited to those using https://swpanel.pl/. In Poland, the epidemiological state is scheduled to be lifted is April this year so the area of further research may be the state after the restrictions are lifted. The direction of future considerations should take into account the reference of the obtained results to the economic situation of individual countries and the economic and financial situation of customers, and especially taking into account a new factor the sense of security in the face of the war in Ukraine.

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