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Safety and Quality of Restaurant Service as Factor of Restoring Tourist Mobility in the Gastronomic Tourism Destination of Ukraine

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ABSTRACT

The safety and quality of restaurant service should serve as one of the factors for restoring the tourist flow to destinations, reconsidering the role of providing service to consumers of tourist services in accordance with the requirements of the European standards of service quality, market activity of restaurant business entities under the conditions of exit from quarantine restrictions. The authors consider theoretical, methodological and practical problems of assessing the quality and safety of restaurant service on the example of the catering establishments in Odesa region of Ukraine. To analyze the quality of components of the sphere of restaurant service to tourists, the authors applied methods of taxonomic analysis which combines a number of comparison methods on multidimensional objects. As a part of the tools for assessing the safety and quality of services at service enterprises, the authors used the recommendations of the WTTC protocols for establishments providing services to travelers. The proposed measures and approaches as to the assessment of the safety and quality of restaurant service allow small businesses to focus their efforts on improving the quality characteristics of restaurant services under conditions of overcoming the consequences of the COVID-19 pandemic.

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Keywords: Tourism; Gastronomy; Small business enterprises; Destination; Taxonomic analysis.

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In early 2020, the world faced an unprecedented crisis in the systems of healthcare and economy. The COVID-19 pandemic has clearly demonstrated that the economies of both individual countries and the European community as a whole are very dependent on tourism and sectors related tom it (Marques Santos, Madrid, Haegeman, and Rainoldi, 2020). The tourism industry of Ukraine similar to other countries was the first to experience the consequences of the active phase of the quarantine. Most hotels and restaurants remained closed until mid-May 2020 and were not able to admit visitors legally. The restrictions also affected such mass events as festivals, concerts, sport competitions, which usually attract guests from various cities and countries. This resulted in the fact that tourist, resort-recreational and health facilities (camp sites, sanatoriums, boarding houses, health complexes, catering establishments), which almost completely ceased to perform their activities, appeared to be the ones of the most seriously affected by the quarantine restrictions. «In 2020 in Ukraine tourism and hospitality industry lost UAH 83 billion in revenue in the time of the crisis caused by the global pandemic and quarantine. In particular, since March 2020, the tourist flow in Ukraine has fallen by 75%. The lockdown in tourism, culture and creative industries can lead to a loss of about 10% of GDP within the nearest 5 years» (Korrespondent, 2020).

The global crisis has conditioned the changes in the implementation of business strategies in the tourism industry, in particular with respect to greater localization of tourist destinations, short-term planning, staff redundancy, mobility and flexibility of market operators. Severe quarantine measures and social distancing policies have forced tourist and restaurant business to actively search for the ways to restore the tourist flow, ensure the safety of travelers and attract tourists to their establishments. Researchers define that today's global tourists' centers are more urbanized than ever, with more than half of the world's population living in urban centers, so the possibility of spreading diseases through contact between tourists and the local population is growing. Cities are becoming incubators with all the conditions for outbreaks (Alirol, Getaz, Stoll, Chappuis and Loutan, 2011). International travel routes have connected the urban world and large metropolitan areas like never before. Accordingly, it is important to take the necessary preventive measures to protect against infectious diseases (Neiderud, 2015). Therefore, timely detection, response, and subsequent control of infectious disease outbreaks in cities is a key public health and public policy issue (Boyce, Cordoba Asprilla, van Loenen, McClelland, Rojhani, 2022). These challenges actualize the development of a mechanism for ensuring and measuring quality in the field of restaurant service, safety of services in tourist destinations.

1. Research background and context.

The general recovery of tourist flow and travelling geography will first of all be determined by the interaction of «economic instruments and levers concerning healthcare, including restrictions to travelling» (Hall, Scott and Gössling, 2020). In their

work Mansfeld and Pizam (2006) draw attention to the «formation of safety measures, depending on the forms and types of tourist servicing, encounter with the wildlife, contamination with various disease and/or injuries resulting from natural catastrophes and daring minds». «In the time of unstable global relationship, it is becoming more and more necessary of tourist destinations to demonstrate that they are safe for accommodating tourists» (Hall, Timothy, and Duval, 2012). Before the Covid-19 pandemic safety was one of the most important tourism factors, especially in the sphere of public eating, however, it remained invisible in most cases: its existence was based on the trust, but at present, the role of safety in the sphere of quality of services, unfortunately demands reconsideration. After the Covid-19 pandemic the objective feeing of safety will be guaranteed by the state, with the subjective one being guaranteed by the supplier of services. The appearance will be more important for recovering the trust of guests than real safety.

Since 2020, the words "viability" and "hygiene" have become the key words not only for the restaurant business, but also for the entire international tourism industry. Experts in restaurant business were not concerned more with new products in the menu and wine list, but with creating the most hygienic environment for the guests of a food establishment, so that they could safely visit cafes and restaurants. They were supported by the manufacturers of professional hygiene products dealing with the proper equipment of kitchens, dining rooms and restrooms in accordance with the novel standards. Cleanliness and safety are the first criteria for a restaurant's success in the new reality.

For example, to guarantee safety in hotels and restaurants of the International Accor Group, enhanced hygiene and prevention measures were introduced for tourists to stay. The ALLSAFE label Certificate, developed in collaboration with Bureau Veritas, «introduces new protocols and standards for higher cleanliness and ensures that the chain of Accor Hotels and Restaurants satisfies all anti-epidemic measures» (Accor launches the Cleanliness and Prevention ALLSAFE label, 2020). Thus, the World Travel and Tourism Council, together with the governments, experts in the field of healthcare and other industry associations are working to achieve «effective protocols for restoring tourist traffic by developing meaningful action plans that optimize the efforts aimed at the recovery of the industry within the entire sector of tourism and hospitality» (WTTC, 2020). Part of the protocols includes provision of the public and private sectors with information and tools for interaction and implementation in order to make people feel safe. However, according to the WTTC experts, the international program Safe Travels»: Global Protocols & Stamp for the New Normal encourages the private sector of the tourist and restaurant business to act in accordance with the general international standards in order to ensure the safety of its employees and

travelers as the sector transfers to a new level and as the new information about the COVID-19 appears. «The specially designed "Safe Travels" Stamp will allow travelers to recognize companies that have adopted global standardized protocols in the field of health and hygiene throughout the world, so that consumers can experience "safe travel". Hotels, restaurants, airlines, cruise lines, tour operators, attractions, transport and airports, and other sectors of the tourist industry will be able to use a special stamp after the health and hygiene protocols recommended by the WTTC are implemented in the establishments that provide services to travelers» ("Safe Travels": Global Protocols & Stamp for the New Normal, 2020). Hotel and restaurant businesses of Ukraine have also become active participants of the mentioned international process (fig.1). However, the existing temporary positive trends are not able to completely compensate the loss caused by the "downtime" of the business. The adaptive quarantine has not become a panacea for the tourism sector – often the regions simply do not comply with any quarantine restrictions, so private mini-hotels and their catering establishments become the centers of the coronavirus spreading (National tourism organization of Ukraine, 2020).

Figure 1. Destinations and Associations using "Safe Travels" Stamp.
Source: https://wttc.org/COVID-19/Safe-Travels-Global-Protocols Stampcompiled

The expected economic recession in Ukraine, the decline in the welfare of the population, which will result in the inability to spend money on recreation, will aggravate the destructive effect on the industry. Destinations which are much dependent on tourism need to achieve the balance between «healthcare issues and social, economic interests, destination reputation» (Hassan, and Soliman, 2021). Therefore, restaurant entrepreneurs have to focus on the tools improving the safety and quality of services under the conditions of the quarantine restrictions. The impact of external factors has led to the fact that more than a half of the enterprises in the industry have become unprofitable. Thus, the results of the research for automation of cafes and restaurants Poster by the regions of Ukraine, «conducted in January 2021 by

the company demonstrate that the strongest reduction in the revenue was observed in restaurants – 58% and bars – 51% compared to the same period of the previous year. Misunderstanding of the quarantine terms, lack of the well-established delivery processes, and information panic in the period led to the temporary closure of more than 60% of restaurateurs» (Second lockdown: worst of all for restaurants and bars - Poster study, 2021). Under conditions of the quarantine limitations of tourist flow Ukrainian restaurateurs have to focus on modern factors of local consumption: the low purchasing power of the greater part of the population and lack of well-established goods logistics. This fact resulted in to the search for new approaches to substantiating the characteristics of consumption and provision of services with a focus on a specific region, local culture, security, and the cost of services. The COVID-19 pandemic has stopped the movement of people, which automatically created extremely serious challenges for the tourism industry (Cocco, 2020; Lew, Cheer, Brouder, and Salazar, 2020; Qiu, Park, Li, and Song, 2020), so it is necessary to draw attention of the governments and experts to the elaboration of measures for recovering «the safety of human mobility as an element of synergy between migration, culture and tourism» (Montanari, 2012). The consequences of the COVID-19 pandemic have shown that most pandemic response measures require local authorities continuously monitor the state of public health in tourist regions, measure the quality and safety of hospitality services.

The Odesa region of Ukraine was chosen by us to study the quality and safety of restaurant services for several reasons. Firstly, at the time of the current study, the region took the second place in the country in terms of tourist tax payment in 2021 and is one of the most popular tourism destinations in the country (State Agency for Tourism Development of Ukraine, 2022). Secondly, with the support of the EU, the region is implementing the project "Roads of Wine and Taste of Ukrainian Bessarabia" as part of the EU pilot project "Support to the Development of the Geographical Indications System in Ukraine" (The roads of wine and the taste of Ukrainian Bessarabia united more than twenty participants, 2020). The project activities include the development of enogastronomic tourist routes in Odesa. Given the growing importance of gastronomic tourism as a direction for the development of the regional economy, territorial communities and catering establishments in Ukraine, the chosen issue is relevant and explains the choice of the research area.

2. Material and methods.

The purpose of the research is to analyze the state of activity of establishments of restaurant service of a tourist destination under conditions in the quarantine limitations and recovery of tourist mobility, as well as to improve the tools for estimating quality and safety of services provided by smaller business enterprises of restaurant economy sphere. Our analysis of the restaurant service is based on the hypothesis as to the fact that indices characterizing its quality depends both on

objective characteristics of tourist consumption (conditions of the service in restaurants, sanitary-hygienic conditions of the protocol implementation, menu assortment, the personnel qualification) and on some values which are not directly observable or measurable (hobbies, interests of tourists, quality of the premises interior and the restaurant atmosphere). Knowledge of the specific features of service, restaurant and tourist services makes it possible to formulate the main criteria for the quality assessment by which the consumers express their attitude to the service (Marković, Raspor, and Šegarić, 2010; Ramseook-Munhurrun, 2012; Soo-Jin, 2020). On the basis of the analysis of scientific literature, it can be assumed that some characteristics of indicators of the service quality are latent indicators, that is, they are not amenable to direct measurement, and are described by a set of so-called signs-symptoms (Yankovyi, 2015). The research conducted provides us with reasons to consider the service quality as a set of properties and characteristics of a restaurant product, resources and forms of the service that enables it to satisfy predetermined or perceived needs of consumers (Lee, and Hing, 1995; Wu, and Mohi, 2015; Adediran and Adebisi, 2021). Scientists consider the system of the management quality of service enterprises as a set of organizational structure, methods, processes and resources required for the realization of the general management of quality (Matviychuk, 2019; Kukanja, Planinc, and Jakulin, 2020).

The formation of loyalty to the restaurant brand and new attraction of new consumers represent an important factor. Consumers determine which restaurants correspond to their idea of quality standards and ignoring the factor results in the fact that customers move to competing restaurants, so the researchers note that customer satisfaction becomes affordable due to providing exceptional prices (Barber, Goodman, and Goh, 2011). Many researchers suggest using the SERVQUAL Methodology in its original form or with changes to assess the quality of tourist and hotel services, as well as questioning consumers of restaurant services in order to identify the strengths and weaknesses of the quality of restaurant service in private business (Markovic, Komsic, and Stifanic, 2013). Scientists consider the quality of tourist services as an important factor for making decisions about trips to tourist destinations and suggest that the quality of restaurant service should be estimated by the mystery shopping method, to determine such evaluation categories as location and important visible information, atmosphere and cleanliness, menu, process of ordering, payment process, staff and delivery (Linderová, Scholz, and Castanheira, 2020).

A number of authors, in order to estimate the quality of services provided by restaurants, suggest using the DINESERV scale method where the main attention is focused on four factors of restaurant service quality: confidence, empathy, responsiveness and reliability, which positively affect customer satisfaction and confirm the relationship between indicators of service quality, satisfaction and loyalty, respectively (Diab, Mohammed, Hassam, Mansour, and Saad, 2016; Abanto, A., Abanto, T., Fajutagana, and Moreno, 2019). Scientists draw attention to managing complaints, and note how control measures affect the general perception of service quality and behavioral intentions of consumers, managing complaints also has to result

in strengthening the business strengths, and not just to concealing or correcting its problems (Shaw-Ching Liu, Sudharshan, and Hamer, 2000). Identification of direct effects of quality management demonstrates that customer orientation has a positive effect on quality assessment, restaurant image, and customer satisfaction (Xia and Ha, 2021). Some scientists are of the opinion that benchmarking methods are a key tool for checking the effectiveness and quality of service in the field of tourism as to further determination of the directions of development of tourist destinations (Hermans, 2018; Tien-Chin, Wang, Huang, and Shu-Li, 2018; Wise, Perić, and Đurkin, 2019), as well as suggest applying content analysis methods for reviews of the Trip Advisor search app users regarding the quality of restaurant service (Lei and Law, 2015), which it is relevant for restoring mobility of tourists.

For the further analysis, it is advisable to select priority indicators dealing with the assessment of the quality of restaurant customer service, which includes a number of consecutive stages performed by means of methods of taxonomic analysis (Wei, Tang, Zhao, Lin, and Wu, 2020). The researchers recommend to apply tool of taxonomic analysis in order to assess the level of formation of conditions for creation of local integrated production and trading systems (Heim and Sinha, 2005; Ivanchenko, Mitsenko, Mishchuk, and Shaleva, 2019) and assessment of entrepreneurial risk at enterprises of small business (Miles, 2014).

In the course of our research, the data on restaurant consumers' feedback was collected from TripAdvisor, a well-known international social network for travelers. The study covered a sample of 450 restaurant consumers, using a random sampling technique that ensured equality of all members of the population. We focused on 10 restaurants that are listed on TripAdvisor and are geographically located in the city of Odesa, have the status of small businesses, belong to a homogeneous gastronomic culture, and provide services to tourists and locals. Finally, we examine the relationship between the popularity of a destination among tourists and the geographical location of restaurant establishments, selecting them as objects for observation and further analysis.

Our application of the taxonomic analysis method is related to the need to provide a holistic assessment of the levels of safety and quality of service in restaurant service establishments, where various indicators are used for analysis, which has to be systematized for further diagnostics. The category "quality of restaurant service" is characterized by the presence of many indicators, a large number of technological links, the influence of gastronomic preferences, consumer feedback, and service culture. Therefore, a methodology was chosen that is aimed at selecting the most informative, diagnostic and latent indicators, which allows reducing the dimensionality of the original information space of features without losing important indicators. It should be noted that the method of taxonomic analysis is universal; it can be used not only in studies of statistical units belonging to a population, but also to analyses the properties of a single unit.

The Euclidean distance, which best corresponds to intuitive ideas about the proximity of objects in three-dimensional space, is most commonly applied in taxonomic analysis. Moreover, the Euclidean distance successfully fits in traditional statistical indicators such as rms (standard) deviation and variance, with its mathematical form. Calculation of the C_{io} distance between individual objects and the development standard (reference object) P_o by means of the Euclidean distance is performed by the formula:

$$C_{io} = \sqrt{\left[\sum (Z_{ij} - Z_{oj})^2 \times \lambda_j\right]}, \quad i = 1,...,m, \tag{1}$$

where λ_j is the weighting factor for the j indicator.

weighing factors λ_j, reflect the degree of importance of each j-th indicator. Their values are within the interval from 0 to 1. At the same time, the sum of the weighing factors must be equal 1. In the theory of multivariate analysis, there exist various ways of determining weighting factors. In practice, the latter are more often determined on the basis of expert assessments. The obtained distances serve as initial values which are used to determine the taxonomic indicator of the level of development of an object (μ_i), which characterizes the degree of its similarity to the reference object. The calculation is performed in the following sequence:

- arithmetic mean distance from the reference object ($\overline{C}_o$):

$$\overline{C}_o = \frac{\sum C_{io}}{m} \tag{2}$$

- rms (standard) deviation of distances from the reference object (S):

$$S = \sqrt{\frac{\sum (C_{io} - \overline{C}_o)^2}{m}} \tag{3}$$

- taxonomic indicator of the level of development of the i object (μ_i):

$$\mu_i = 1 - \frac{C_{io}}{\overline{C}_o + 2S} \tag{4}$$

The higher the value of the taxonomic indicator for the i-th object, the higher the measure of its similarity to the reference object and, accordingly, the higher the level of the development. Differences in the methods of calculating the taxonomic indicator are inherent in the classical and modified algorithms. Therefore, in order to eliminate

or at least to reduce the likelihood of these errors, we propose to use a combined algorithm for taxonomic analysis that combines the positive aspects of the two main procedures. The higher the value of the taxonomic indicator for the i-th object, the higher the measure of its similarity to the reference object and, accordingly, the higher the level of the development.

3. Results and discussion.

3.1. Regional analysis and data collection.

The regional distribution of the geography of food establishments in Ukraine indicates that almost half (44%) of all Ukrainian public food establishments are concentrated in two regions of Ukraine – Kyiv (28.7%) and Odesa (15.3%). More than 75% of the Ukrainian market of food establishments is located in five regions of Ukraine – Kyiv, Dnipropetrovsk (8.0%), Lviv (8.3%), Odesa and Kharkiv (15.3%) regions. The leader as to the number of food establishments is Kyiv region, followed by Odesa and Kharkiv regions. Unfortunately, according to the data of the end of 2020, the general trend of opening new cafes, bars and restaurants in Ukraine is negative: the total number of operating food establishments decreased (Restaurant consulting, 2021). The data by the index of the number (density) of operating food establishments per thousand inhabitants by regions of Ukraine (with the exception of Donetsk and Luhansk regions), the state for the end of 2020 are shown in Fig. 2.
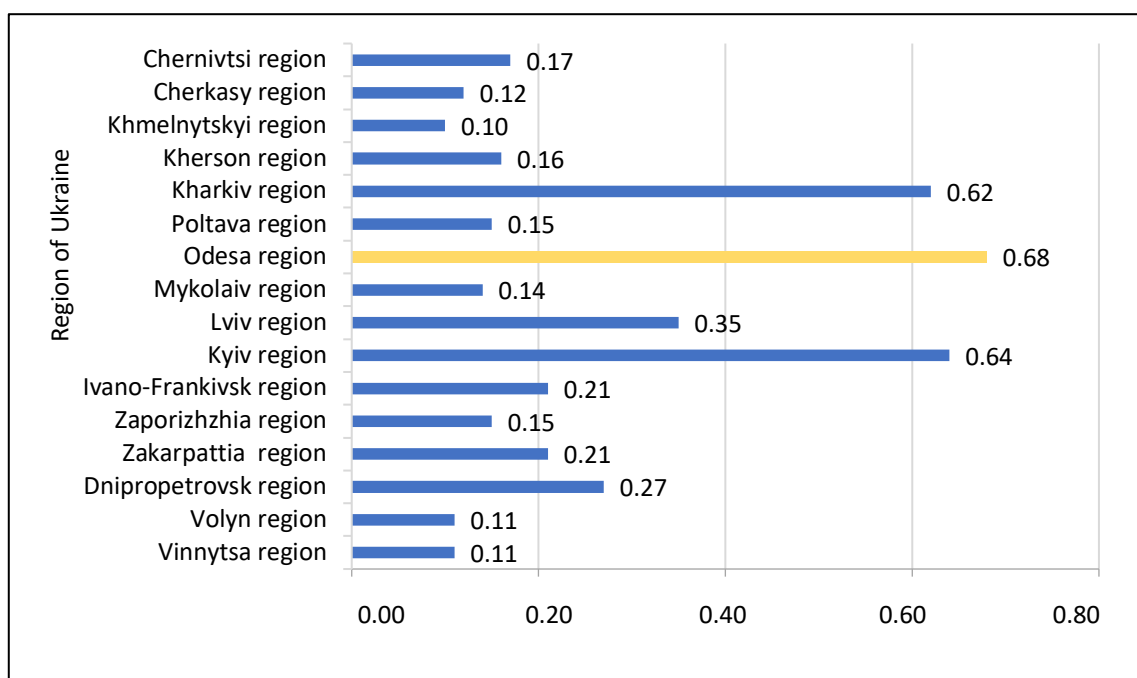

Figure 2. Operating food establishments per thousand inhabitants by regions of Ukraine (with the exception of Donetsk and Luhansk regions), for 01. 01. 2021.
Source: compiled by the structure of the distribution of the restaurant market of Ukraine in 2020

Fig.2 does not show regions of Ukraine where the indicator is less than 0.1 per thousand people, namely: Zhytomyr, Kirovohrad, Rivne, Sumy, Ternopil and Chernihiv regions. As we can see from the geographical distribution of destinations, Odesa region and the city of Odesa are the leader in the number of restaurant establishments per a thousand inhabitants. Tourist infrastructure of Odesa has been developing dynamically for the past decade, with special attention to high standards of service and attracts tourists from Central and Western Europe, Israel, Canada and the USA. The city is characterized by the phenomena, when rent for the holiday time and arrival of new groups of foreigners trigger the processes, which are connected by scientist with tourism gentrification (Domínguez-Mujica, González-Pérez, Parreño-Castellano, and Sánchez-Aguilera, 2021). In accordance with the statistical data the region hosts approximately 208 accommodation establishments, 396 catering establishments and 321 resort establishments, which can host tourists. However, the local budget of Odesa was at risk of losing 2/3 of income during the pandemic. If in 2018 Odesa was visited by 3.2 mln of tourists, in 2019 by 3.3 mln, last year during the pandemic the city was visited by a little more than 2 mln tourists, 13% of whom were foreigners and the rest – citizens of Ukraine from other regions (Bridging the distance – corona in den regionen. Serie, teil 5: Odesa, 2020).

As in most countries of the Black sea region, welfare of dwellers of such cities and town was guaranteed by stable annual flow of tourists, with the local economy of restaurant sector being based on small family enterprises which serve both foreign and inner tourists. Geographical and commercial role of Odesa as a big Black Sea commercial port attracted to it large ethnic groups with different cultural and gastronomic traditions, evidences of which still can be seen in the contemporary city landscape, toponomy and gastronomic culture of the population.

At the same time, it is necessary to pay attention to the peculiarities of the modern development of restaurant industry of Ukraine and the consumption culture of its residents, which in contrast to countries of Central and Eastern Europe does not give preference to fast food establishments and self-catering but develops more the segment of traditional national Ukrainian cuisine and signature menus from ethnic dishes in restaurant service establishments, which is a characteristic feature of gastronomic culture of the local population and attracts international tourists. Owners of business invite foreign chefs, who come to work in Ukrainian traditional restaurants. This modern tendency of consumption of restaurant services by foreign tourists can be observed in Ukraine. Tourists who care of the healthy lifestyle want to obtain high-quality local products and know where and how they are grown, in what way they are transported and how these factors affect the environment. At the background of such changes in consumers' behaviour there appear market places which link farmers and restaurants by geographical signs. It is necessary to draw attention to mis-correspondence of expectation (level) of the safety between local population visiting and consuming products from restaurants and foreign tourists who arrive in the city of Odesa. For instance, local restaurants with a low average bill recovered very quickly at

the time of relaxation of the quarantine measures of 2020 because their audience consists of young people who are not afraid of the disease and visit known to them restaurants without extra quarantine limitations, in contrast to foreign tourists who regard the safety of food consumption in the countries which have opened for tourists as an important factor.

It is necessary to point out that in contrast to some European countries, under conditions of the quarantine limitations in 2021, residents and international tourists did not have to show tests or "green" certificates about vaccination to visit restaurants. Local entrepreneurs-owners of restaurants on the coast of Odesa region were the first among other coastal territories of the country to recover their tourist activity, which decreased after COVID-19 outbreak. In the period when severe quarantine limitations were withdrawn, demand for the staff for seasonal work in the sphere of service appeared. Thus, according to the data of the State Employment Centre of Ukraine, in the period from June to mid-July of 2020 tourism and the sphere of restaurant service were in TOP-5 professional spheres (the number of vacancies increased by 94%) and in TOP-5 fields (hotels, restaurants, public catering, catering +58%) as to the number of published vacancies (The labor market is reviving in Ukraine, 2020). It is assumed that the consequences of the COVID-19 pandemic should be not so painful for the tourist industry of Ukraine as in other European countries, as the volume of the international tourist component of Ukraine in the total economy is much smaller.

The general factors mentioned above conditioned the choice of the city of Odesa as a tourist destination with recreation infrastructure and restaurant service similar to coastal cities and towns of Albania, Bulgaria, Greece, Romania and Turkey for the research of the state of safety and quality of the service in establishments of restaurant service under conditions of the quarantine limitations. In our opinion, estimation of the quality of service of restaurants and other catering establishments provides operators with the basis for creating a regional product of gastronomic tourism as a direction on the tourist map of Eastern Europe. There is no doubt that safety and quality of restaurant service constitute an important component of gastronomic tourism development, playing an important role in formation of the tourist image of the region and development of scenarios of recovery of the international tourist flow (Qiu, Wu, Dropsy, Petit, Pratt, and Ohe, 2021). In the current limited conditions of recovering the international tourist flow, the implementation of marketing techniques and scientific methods for assessing the quality of safe service and formation of loyalty measures for service consumers is relevant for tourist and restaurant businesses.

3.2. Data processing and analysis.

An empirical study of the state of safety and quality of servicing was conducted on the example of 10 restaurants in the city of Odesa which are located along the coast, have

similar organizational and legal form of conducting business, and the type of economic activity is aimed at providing restaurant services to tourists and local residents.

The assessment of indices of safety and quality restaurant service was performed by means of the methodology of taxonomic analysis and content analysis of reviews provided by consumers and users of the above-mentioned Internet sites. This made it possible to highlight the objective picture of the work of employees, see the staff with the eyes of consumers, identify the weaknesses and strengths of each restaurant establishment, including such important components as the physical environment, the assortment of dishes, the atmosphere of interaction between the staff and clientele, the competence of employees and corresponds to modern directions of research areas (Lei, and Law, 2015). The combination of the two above-mentioned methods will make it possible to determine the overall index of the rating position of each establishment among the studied entities of restaurant business.

We performed the analysis of consumers' reviews in the period of the quarantine limitations in activity of the said restaurants in May-August 2020. The sample corresponds to the section of the TripAdvisor site - "Odesa Restaurants", which is presented by the COVID-19 Safe filter (Odesa Restaurants, 2021). Content analysis of the distribution of user information provides an opportunity to qualitatively assess the overall impression of the safety levels and food services quality for further research. To interpret the results, we summarized the ranking of restaurants. included in the sample based on more than 450 customer reviews and users of the leading travel website TripAdvisor, given a 10-point scale (Table 1).

Table 1. Summary rating of sampled restaurants in Odesa based on reviews of users of the TripAdvisor website.

Establishment name	Establishment symbol	Establishment address	Establishment website	Specialization of establishment (cuisine)	Summary rating based on sites content analysis, points
REEF	01	77, Fontanska Doroha Str.	https://reefodessa.com/	Mediterranean, Ethnic, European	9
Ryba	02	155, Fontanska Doroha Str.	https://www.instagram.com/restaurant_riba/?hl=ru	Mediterranean, Japanese, European, Ukrainian	6
YUG	03	15, Maiachnyi Ave.	http://yug.in.ua/	Mediterranean, European, Ukrainian	8
Di Mare	04	6, Prymorska Str.	https://dimare.od.ua/	Mediterranean, European, Ukrainian,	7
Terrace Sea View	05	1B, Lanzheron Pliazh Str.	https://www.terraceodessa. com	Mediterranean, Ethnic, European	8
Kador Restaurant	06	66/3, Frantsuzkyi Boulevard	http://kadorrestaurants.com	Mediterranean, European	7
Assol	07	"Arcadia" Beach	http://www.assol.od.ua/	Mediterranean,	6

				Ukrainian	
Katran	08	13, Maiachnyi Ave.	https://katran-club.com.ua/restoran/	Mediterranean, Ethnic, Japanese	6
Columbus	09	90/32, Novoberehova Str.	https://columbus-odessa.com.ua/	Mediterranean, European, Ukrainian	7
Maman by Sea	10	1, Lanzheron Pliazh Str.	https://maman-sea-lounge-and-grill.business.site/	Mediterranean, Ethnic, Ukrainian	7

Source: compiled by the authors

For the further research of the service and safety quality under conditions of overcoming the consequences of the COVID-19 pandemic 6 indices that satisfy the requirements of international standards for the quality of tourist services, the Protocols of the "Safe Travels" program: Global Protocols and Stamp for the New Normal, national protocols as to the requirements and the quarantine limitations in the activity of food establishments in the EU countries were selected:

1. Sitting guests in establishments of public catering at a distance of not shorter than 1.5 meters between seats at separate tables with no more than 4 consumers at a table (without the participation of children under 18 years of age);
2. The staff and guests of the restaurant employees have to wear masks and gloves, with the guests undergoing the procedure of the temperature measuring and cleaning with disinfectants taking place in accordance with the regulations;
3. The average time spent on order completion;
4. Quality of service culture;
5. The level of a customer's satisfaction after communication with the restaurant staff;
6. The compliance of consumers' expectations with the actual services in terms of the volume and assortment of the menu.

For benchmarking of the indices mentioned above as the main object for our research we chose restaurant industry establishment "04", which was conditioned by a number of reasons: the restaurant is located on the very shore of the Black Sea, in Odesa Sea Terminal, which is a hallmark of the city, it very successfully combines Ukrainian and Mediterranean cuisines in its menu, it is a nominee for the award "Sol", but has certain problems regarding the management of quality, which was reflected in the analysis of consumers and tourists' reviews.

As a reference object Restaurant "01", its main competitor as to the service quality and assortment, was chosen. The information about the establishments included in the sampling is provided in an impersonalized form, that is, they are marked with two-digit numbers, under which they will appear in the process of presenting the study results. Calculations of indicators for comparative assessment of safety and quality of service in restaurant establishments using the combined taxonomy method were carried out according to the algorithm presented in the paper (Bedradina, and Nezdoyminov, 2019) and formulas (1-4). In order to assess 6 selected indices with the aim of the

further taxonomic analysis, the authors of the article conducted their own expert evaluation of the state of safety and quality of the service in the said restaurants by structural measurement units which are determined by a set of values of several features in the multivariate analysis (points by a 10-point scale, minutes, percent). The results of the expert evaluation of the indices of the level of the service safety and quality in restaurants of the Odesa city are given in Table 2. As we can see, weighting factors reflect the degree of each index importance. Their calculating values are within the interval from 0.1 to 0.25 (formula 1). Thus, indices 2, 4, 6 are the most essential, which is characteristic of the safety of consumption and service at a restaurant under conditions of the quarantine limitations (table 2). In our opinion, safety and quality of the service are latent indices, i.e. incapable of direct measurement, and describable by a set of so-called signs-symptoms.

Table 2. Primary values of indicators for assessing the quality of safety and service in restaurants in Odesa.

Establishment symbol	1. Sitting restaurant guests according to the security protocol, points	2. Restaurant staff and guests wearing masks and gloves, guests having their temperature taken, points	3. Average time spent on order completion, min.	4. Quality of service culture, points	5. Customer satisfaction from communication with restaurant staff, %	6. Compliance of consumers' expectations with the actual services provided in terms of the volume and assortment of the menu, %
01	9.0	9.0	40.0	7.0	100.0	90.0
02	5.0	4.0	55.0	6.0	65.0	65.0
03	8.0	7.0	50.0	8.0	80.0	80.0
04	6.0	7.0	55.0	7.0	80.0	75.0
05	8.0	8.0	45.0	5.0	90.0	80.0
06	7.0	8.0	60.0	4.0	75.0	60.0
07	5.0	6.0	65.0	6.0	60.0	55.0
08	6.0	7.0	60.0	5.0	65.0	75.0
09	6.0	6.0	65.0	6.0	65.0	65.0
10	8.0	8.0	50.0	7.0	70.0	70.0
Weighting factors	0.1	0.25	0.1	0.2	0.15	0.2

Source: calculated by the authors

Therefore, the correct results of the evaluation can be obtained exclusively by means of methods of comparative multivariate analysis. Final calculations and ranking of the restaurants studied, performed on the basis of unified taxonomy are presented in table 3.

Table 3. Ranking of restaurants in the city of Odesa by the results of assessment of the quality of safety and service based on the unified taxonomic method.

Restaurants	Classic algorithm		Modified algorithm		United results	
	μ^c_i	R^c_i	μ^m_i	R^m_i	μ^u_i	R^u_i
01	0.4556	7	-0.0104	10	2.3269	1

02	0.3537	10	0.5893	6	0.8350	5
03	1	1	0.4574	8	1.3450	4
04	0.7550	3	0.6661	4	0.7270	7
05	0.7756	2	0.3432	9	1.7996	2
06	0.4212	9	0.6033	5	0.7767	6
07	0.4270	8	0.8566	2	0.5086	10
08	0.7056	4	0.7454	3	0.6723	8
09	0.5226	6	1	1	0.5581	9
10	0.6255	5	0.5719	7	1.4354	3

Source: calculated by the authors

Analyzing the data in table 3, we would like to draw your attention to the fact that Restaurant "04" selected by us occupies the 7th position as to the general index of safety and service quality according to the rating calculated on the basis of unified taxonomy. In comparison with the leader «01» (μ^o_i = 2.3269) it has considerable drawbacks. Restaurant «01» is the most successful among the ten restaurants according to the ranking results, with restaurant «07» being an outsider. Thus, it can be concluded that the authorities of restaurant «04» need to increase the level of safety and service quality. By the index of safety of "sitting the restaurant visitors in accordance with the protocol" the restaurant was evaluated by 6 points, the index "The level of service culture" was evaluated by 7 points, which indicates insufficient level of professional training of the restaurant staff for providing servicing under conditions of the quarantine limitations.

Thus, under modern conditions of reduction of international mobility of tourists, limitations as to visiting catering establishments in most countries attractive to tourists, governmental institutions and local authorities, entrepreneurs of restaurant business and profile organisations have to develop strategic measures as to safe consumption of restaurant sphere services, apply the data of service quality monitoring in catering establishments on the basis of marking methods of evaluation of safety and service quality, spread of modern technologies of feedback with consumers of services.

Basing on the conducted research the authors suggest specific measures aimed at increase of safety and quality of servicing tourists at restaurant business enterprises in the selected tourist destination:
1. In order to attract international and inner tourists to establishments of restaurant business to implement the measures recommended by the WTTC experts, the Program "Safe Travels": Global Protocols and Stamp for the New Normal.
2. For business owners and restaurant managers to constantly update information on their own websites as to compliance with safety measures in restaurant service at their establishments in order to attract tourists.
3. To make the participation of restaurant managers in professional online trainings, webinars, programs dealing with safety under conditions of limited quarantine and service culture more active.
4. To conduct technical re-equipment of the system for control of quality of restaurant logistics services.
5. To implement the principles of "feedback" with the consumer in the work of

managers, conduct exit polls, beta testing as to the formation of loyalty and image of the restaurant.

6. To improve the system for monitoring tourist complaints about the safety of consumption of services and the quality of products of the restaurant own production and restaurant suppliers, tendencies in consumption behavior of healthy eating, technologies of preparing dishes which link farmers and restaurants with geographical reference in the countries of Eastern Europe.

4. Conclusion.

As it was shown in the research that during the quarantine restrictions, most people active in tourism were forced to reduce the number of domestic and international trips. In tourist regions, this has led to job losses and affected the restaurant profits, which has made the situation of small businesses worse.

The presented research performed the evaluation of the levels of safety and quality of restaurant service, aimed at overcoming the consequences of the Covid-19 pandemic, reduction of the negative impact of the critical events in destinations of the Black Sea region. It has been determined that in order to develop measures for improvement of safety and quality of tourist servicing, the results of monitoring the compliance with the requirements of national quarantine protocols and the international program "Safe Travels" represent the best basis. At macrolevel tourism suffers from imbalance in forms of extra tourism in the EU cities and towns and on European coasts, while other countries suffer from reduction in the number of tourists (Montanari, 2021), which is typical of Ukraine under modern conditions.

To develop measures as to recovery of tourist mobility due to increase of levels of safety and quality of restaurant service on the coastal territories of Ukraine, ranking of enterprises by method of unified taxonomy for ten establishments of restaurant business was conducted. By the results of the ranking of enterprises of restaurant business directions and reserves for increasing safety and quality of service in restaurants of the coastal destination were determined. The tools for evaluation of quality and safety of the service suggested by the authors will enable restaurateurs of other regions of Eastern Europe who have similar problems increase the level of tourist satisfaction, eliminate differences between expectations of tourists and real provided restaurant services, too, and also will add to modern methods for evaluating quality at enterprises of hospitality sphere (Kukanja, Planinc, and Jakulin, 2020; Xia, and Ha, 2021).

For the geography of trips, safety and quality of services of the local gastronomy play an important role in determination of the tourist destination, and creation of gastronomical impressions is becoming a part of development of new tourist directions. That is why the research of the state of safety and quality of the service of

local restaurants provides tour operators the basis for formation of regional tourist product of gastronomic tourism. Gastronomy and high-quality restaurant service constitute an important factor of mobility which effects the geography of tourist routes and motivates the visit itself, with gastronomic tourism being more and more recognized as a catalyst for regional development, capable of obtaining a decent place on the tourist map of Eastern Europe.

The results of the conducted research assist in performing monitoring of safety and quality of services of local tourism by taking into account the COVID-19 pandemic in the field of catering, elaboration of regional tourism politics in order to overcome the pandemic consequences.

The limitations of our study are the following circumstances. There may be other latent indicators for measuring the quality and the safety of restaurant service that may also affect the evaluation model for different categories of restaurant service establishments. The study was conducted for a specific tourist destination, so the factors of the gastronomic culture of the population, the requirements of national protocols in the field of health and hygiene could have influenced some of the results. In our opinion, due caution should be exercised in generalizing the results to other service sectors, so the results of the current study are specific to the category of consumption in restaurant service establishments. Our study focused on the level of safety and quality of service in 10 restaurant establishments in Odesa and did not include restaurant chains. The geography of the study can be expanded to other food establishments in the region by their types and specialization. Future researches may be aimed at assessing the levels of quality and safety of service of national restaurant chains. Analysis of the impact of various indicators for assessing the quality and safety of services of restaurant business entities in other tourist regions of Ukraine will help to generalize the results which will be obtained in future studies.

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