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CONSUMER PREFERENCES AND SEGMENTATION OF CONSUMERS OF FOOD SERVICES IN POLAND – DURING PANDEMIC

Abstract: *The research aimed to explore preferences regarding the selection of collective consumption, with attention being given to the following three research constructs: the attractiveness of collective consumption, economic determinants for using the offer of food services, as well as social and cultural determinants for consumer behaviours on the food services market. The research was conducted through a direct channel, using a questionnaire prepared to this end. The research process, during which primary data was gathered, comprised the following three stages: qualitative research, quantitative pilot research and proper quantitative research. The proper quantitative research covered a representative random sample of 2,102 Poles aged above 18.*

The article presents the results of research carried out to examine preferences regarding the use of food services provided by restaurants and attempts to categorise consumers of food services into segments. Empirical material was gathered and analysed to identify five consumer segments.

The data obtained not only supplements existing research by providing up-to-date pandemic-related information on changing preferences on the food services market and gives restaurant owners (restaurateurs) guidance on designing food product architecture for individual consumer segments, but also provides a starting point for research hypotheses that can be formulated in future scientific research.

Keywords: *Consumer Preferences, Consumer Segmentation, Restaurants, SARS-CoV-2, Poland*

1. Introduction

A contemporary consumer lives in volatile, uncertain and complex reality. Things are changing around, and so are consumers – as well as their purchasing behaviours and preferences. The pace of behavioural changes in people's life style all over the world was undoubtedly increased by the COVID-19 pandemic, a contagious disease caused by the SARS-CoV-2 coronavirus (World Health Organization, 2020). This also refers to consumption patterns observed in every category, including foodstuffs or food services. Furthermore, some speculations as to whether the changes being seen, which have accelerated the already existing trends, will be short-term or permanent, have been verified, among other things, by research results revealed in a PwC global consumer survey of June 2021, showing that these changes continue. The foregoing may mean a

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historical and irreversible change in consumers' behaviours (The Global Consumer, 2021). The example transformations taking place, as referred to, have either a direct or indirect bearing on demand of the target market. Hence the monitoring of market needs and the adjustment of the food services offer to the extent possible and with a view to meeting expectations have assumed now so profound importance. One of the consequences of the aforesaid actions, which businesses need to take in order to maintain their market position, includes the division of target markets into relatively uniform groups of purchasers, that is to say, market segments.

The article shows the results of research into Polish consumers' preferences regarding food services rendered by restaurants, with attention given to the following three research constructs: the attractiveness of collective consumption, economic determinants for using food services, as well as social and cultural determinants for consumer behaviours on the food services market. Based on the research results, five consumer groups (segments) were identified.

2. Materials and methodology

The preferences regarding the selection of collective consumption were researched between February and June 2020, covering a representative random sample of 2,102 Poles aged above 18. The primary objective of the research was to seek respondents' opinion about: the attractiveness of collective consumption, economic determinants for using the offer of food services, as well as social and cultural determinants for consumer behaviours on the food services market.

2.1. Survey design

The research was conducted as a three-step process, in which the proper quantitative research was carried out after qualitative and quantitative pilot research. A research method employed for the ***first stage of the research*** was "brainstorming" (AlMutairi, 2015; Ritter & Mostert, 2018), a method based on group thinking, which is designed to generate new ideas and seen as one of the heuristic research methods. The research was performed on 14 January 2020 at the Faculty of Sport and Tourism Management of Academy of Physical Education in Katowice (*Akademia Wychowania Fizycznego im. Jerzego Kukuczki w Katowicach*). Eleven experts participated in the research, and its aim was to diagnose key analysis areas relating to contemporary consumers' preferences regarding food services, with attention given also to current issues. The research encompassed four phases (Table 1).

Table 1. Phases of 1st Stage of Research Process – "Qualitative Research"

Phase No.	Scope of Actions
1	Appointing a session coordinator, who was the author of the publication, as the project owner and originator.
2	Analysing the tasks to be performed.
3	Running a session in order to generate solutions to the problem being analysed.
4	Running a session in order to verify and assess the solutions to the problem identified.
5	Ending the sessions and dissolving the team.

Source: Author's concept

Before the proper research was conducted, pilot research was carried out using a research method based on an individual in-depth interview covering a target group of 50 respondents. Their remarks and comments were given consideration, and based on them several questions were modified to draft the final version of the survey.

The third research stage, which aimed to explore Polish consumers' preferences for purchasing food services, was performed between February and June 2020.A research instrument applied at this stage of the research was the authors' own questionnaire survey, comprising respondents' characteristics and 23 main questions classified into three analysis areas (research constructs): the attractiveness of collective consumption (ACC), economic determinants for using food services by contemporary consumers (E), social and cultural determinants for consumer behaviours on the food services market (SC) (The questionnaire survey will be provided to every reader who wishes to receive it.).

Originally, it was decided to approach the respondents through two channels: an indirect and direct channel using the same research instrument, that is to say, a questionnaire survey: "Preferences Regarding Selection of Collective Consumption". On account of the pandemic situation in Poland, and consequently, due to a full lockdown imposed on 16 March 2020 (five days following the announcement of the state of global pandemic by the WHO) by the Polish government within Poland, the author gave up one of the originally planned data collection methods (face-to-face interviews) and decided to conduct the research entirely using a CAWI (computer assisted web interview) method. The questionnaire used for the research is available on www.ankieter.awf.katowice, as part of an own project. During the research, respondents answer to what extent they accept individual statements, using a five-point scale (where 1 means that 'I totally disagree', and 5 – 'I totally agree'). The analysis reveals which of the groups of preferences mentioned determine choices made by consumers on the food services market and identifies differences among respective groups of respondents.

2.2. Statistical analysis

Once the data collection process was completed, survey answers were retrieved from the university's survey system: ankieter.awf.katowice.pl. The data was validated in the course of the operationalisation and statistical analysis of variables, and subsequently, selected quantitative instruments were applied. For the statistical analysis of empirical material gathered by the author during the research, diverse statistical tools were used. The empirical material was initially examined using descriptive statistics elements: measures of location, measures of variability, structure indicators.

The following were applied for the interpretation of results obtained: cluster analysis, discriminant analysis, canonical analysis, ANOVA, Cronbach's alpha test (Dryglas & Salamaga 2016, 2018; Greenacre, 1993; Hair et al., 2006).

The results were evaluated using computer programmes MS Excel and Statistica PL (version 13.3).

3. Research results

3.1. Sample profile

The initial sample drawn for the research into preferences regarding the selection of collective consumption comprised 2,102 respondents, however, the size of the sample may be slightly different, which stems from the fact that certain data was missing for specific detailed analyses. Missing data for certain specific categories of questions usually did not account for more than 5% of observations. The observations for which data was missing were factored out and not included in specific analyses, which led to a change in the size of the final research sample. The base sample at the confidence level of 0.95 makes it possible to reach an estimation error for parameters of not more than 2.2%, which is satisfactory. After excluding the missing data, for the purpose of this publication, in the majority of analyses, the base sample was narrowed down to 1,976 observations, which were considered in most analyses.

Table 2 shows an initial demographic profile of respondents along with the categorisation of consumers into individual segments. The respondents taking part in the research were representatives of all Polish sixteen provinces. Of all complete answers, 1,253 (63.41%) were given by women and 723 (36.59%) by men.

People having families with two children were the dominant group of all those polled **(2)**.They account for nearly one-fourth of all respondents, n=463 (23.38% of those covered by the research).Another group was comprised of respondents whose family model was a single **(6)**, n=449 (22.68% of those polled), followed by respondents belonging to a one-child family **(1)**, n=326 (16.46% of those covered by the research).Other large group of people responding to the survey included those whose family models were other than those listed in the survey **(7)**, n=289 (14.60% of respondents), childless married couples **(5)**, n=245 (12.37%) and married couples with three children **(3)**, n=158 (7.98%).People having four and more children **(4)**, n=50 (2.53% of those surveyed) formed the smallest group.

Figures contained in Table 2 demonstrate that the vast majority of those polled had a job **(1)** n=1,284 (65.05%). Almost one-fifth of the respondents stated that they were either a schoolboy/schoolgirl or a student **(4)**, n=350 (17.73%). People collecting retirement/ disability pension **(3)** accounted for 10.13% of those polled (n=200). Whereas the rest of respondents were: housewives **(5)** and the unemployed **(2)**, n=73 (3.7%) and n=67 (3.39%) respectively.

Nearly one-third of research participants, n=650 people (32.86%), answered that they had received an MA degree **(8)**. People who completed secondary education **(4)** comprised only a slightly smaller percentage, n=597 (30.18%), followed by respondents holding a BA degree **(6)**, n=199 of those surveyed (10.08%). Respondents who received other type of education made up less than 10%.

People having post-secondary education **(5)** accounted for 8.34% of those polled (n=165), people holding a B.Eng. degree **(7)** – n=160 (8.09%), and those who acquired basic vocational education **(3)** – n=154 (7.79%).Given the level of education of those taking part in the research, the following respondents comprised the smallest percentage: those who responded that they completed primary education **(1)**, n=31 (1.57% of those surveyed) and those who completed junior secondary school **(2)**, n=22 (1.1%).

Table 2. Selected Social and Demographic Characteristics of Research Sample Responding to Survey

<table>
<tr><th colspan="12">Category</th></tr>
<tr><th colspan="2">Sex[(1)]</th><th colspan="2">Family model[(2)]</th><th colspan="2">Employment status[(3)]</th><th colspan="2">Education[(4)]</th><th colspan="2">Age[(5)]</th><th colspan="2">Province[(6)]</th></tr>
<tr><td rowspan="4">1</td><td rowspan="4">1,253 (63.41%)</td><td>1</td><td>326 (16.46%)</td><td>1</td><td>1,284 (65.05%)</td><td>1</td><td>31 (1.57%)</td><td>1</td><td>462 (23.35%)</td><td>1</td><td>96 (4.85%)</td></tr>
<tr><td>2</td><td>463 (23.38%)</td><td>2</td><td>67 (3.39%)</td><td>2</td><td>22 (1.11%)</td><td>2</td><td>484 (24.46%)</td><td>2</td><td>72 (3.64%)</td></tr>
<tr><td>3</td><td>158 (7.98%)</td><td>3</td><td>200 (10.13%)</td><td>3</td><td>154 (7.79%)</td><td>3</td><td>293 14.81%)</td><td>3</td><td>64 (3.23%)</td></tr>
<tr><td>4</td><td>50 (2.53%)</td><td>4</td><td>350 (17.73%)</td><td>4</td><td>597 (30.18%)</td><td>4</td><td>409 (20.67%)</td><td>4</td><td>65 (3.28%)</td></tr>
</table>

Table 2. Selected Social and Demographic Characteristics of Research Sample Responding to Survey (continued)

Category											
Sex[(1)]		Family model[(2)]		Employment status[(3)]		Education[(4)]		Age[(5)]		Province[(6)]	
2	723 (36.59%)	5	245 (12.37%)	5	73 (3.70%)	5	165 (8.34%)	5	331 (16.71%)	5	67 (3.39%)
		6	449 (22.68%)			6	199 (10.06%)			6	224 (11.32%)
		7	289 (14.60%)			7	160 (8.09%)			7	149 (7.53%)
						8	650 (32.86%)			8	74 (3.74%)
										9	61 (3.08%)
										10	39 (1.97%)
										11	101 (5.10%)
										12	803 (40.58%)
										13	43 (2.17%)
										14	31 (1.57%)
										15	60 (3.03%)
										16	30 (1.52%)

[(1)]Item no. in the 'Age' category:**1:** female, **2:** male

[(2)]Item no. in the 'Family model' category:**1:**two parents + one child, **2:**two parents + two children, **3:**two parents + three children, **4:**two parents + four and more children, **5:** childless married couple, **6:** a single, **7:**Other answer.

[(3)]Item no. in the 'Employment status' category:**1:** has a job, **2:** the unemployed, **3:** collects retirement/disability pension, **4:** schoolboy/schoolgirl or student, **5:** housewife.

[(4)]Item no. in the 'Education' category:**1:** primary education, **2:** junior secondary school, **3:** basic vocational education, **4:** secondary education, **5:** post-secondary education, **6:** BA degree, **7:** B.Eng. (Bachelor of Engineering) degree, 8: MA degree.

[(5)]Item no. in the 'Age' category:**1:**18-25, **2:**26-40, **3:**41-55, **4:**56-70, **5:**>70.

[(7)]Item no. in the 'Province' category:**1:** Dolnośląskie Province, **2:** Kujawsko-Pomorskie Province, **3:** Lubelskie Province, **4:** Lubuskie Province, **5:** Łódzkie Province, **6:** Małopolskie Province, **7:** Mazowieckie Province, **8:** Opolskie Province, **9:** Podkarpackie Province, **10:** Podlaskie Province, **11:** Pomorskie Province, **12:** Śląskie Province, 1**3:** Świętokrzyskie Province, **14:** Warmińsko-Mazurskie Province, **15:** Wielkopolskie Province, **16:** Zachodniopomorskie Province.

Source: own elaboration based on research

4. The results of the empirical study

Table 3 demonstrates questions included in the survey along with selected figures reflecting answers showed on a Likert scale, i.e. a mean, standard deviation and a coefficient of variation.

Table 3 shows that consumers' preferences regarding social and cultural behaviours received on average the highest score (mean: 4.32), and in this area the answers exhibited the lowest variability, meaning that respondents' answers to questions included in this area were most consistent. Consumers' preferences regarding the 'Attractiveness of collective consumption' had, on average, the lowest score (mean: 3.47). Furthermore, answers given as part of this area showed the biggest variability, which demonstrates that results obtained from respondents diverged in this area to a greater extent.

Table 3. Review of Variables Used in Analysis and Selected Figures Corresponding to Variables

Preference area	Variable/Factor symbol	Mean	Standard dev.	Coefficient of Variation
Attractiveness of collective consumption	ACC1	3.720	0.863	0.232
	ACC2	3.875	0.705	0.182
	ACC3	4.049	0.716	0.177
	ACC4	4.731	0.548	0.116
	ACC5	2.116	0.745	0.352
	ACC6	1.875	0.484	0.258
	ACC7	3.899	0.720	0.185
	ACC8	3.972	0.720	0.181
	ACC9	3.903	0.758	0.194
Economic determinants for using food services	E1	4.615	0.660	0.143
	E2	4.742	0.457	0.096
	E3	4.155	0.641	0.154
	E4	3.789	0.691	0.182
	E5	4.024	0.772	0.192
	E6	4.088	0.524	0.128
	E7	4.312	0.521	0.121
Social and cultural determinants for consumer behaviours on the food services market	SC1	4.705	0.617	0.131
	SC2	4.183	0.590	0.141
	SC3	4.140	0.580	0.140
	SC4	4.230	0.542	0.128
	SC5	4.847	0.389	0.080
	SC6	4.024	0.661	0.164
	SC7	4.101	0.647	0.158

Source: own elaboration based on research

The consistency of classification of variables contained in Table 3 was tested using Cronbach's alpha. Table 4 shows results relating to this coefficient.

Table 4. Cronbach's Alpha Results for Three Consumer Preference Areas

Preference area	Variable/Factor		Cronbach's α
Attractiveness of collective consumption	X1-X9		0.787
Economic determinants	Y1-Y7		0.789
Social and cultural behaviours of consumers	Z1-Z7		0.788

Source: own elaboration based on research

The first element, before commencing the proper analysis, was to verify the reliability of the research instrument applied. To this end, calculations were made using Cronbach's alpha in order to test the reliability of the questionnaires, and to be precise, of the internal consistency of instruments utilised. Cronbach's alpha values for the respective groups of consumer preference areas are high, which demonstrates that variables forming these groups were selected reliably. Furthermore, Cronbach's alpha for each group of factors is lower than the value determined for all factors (0.799), hence excluding any of the groups of areas being evaluated will not enhance the reliability of the entire set of preferences under evaluation.

To sum up, high levels of Cronbach's alpha for each of the dimensions identified demonstrate their internal consistency and prove that elements comprised by them were classified properly.

During another research stage, uniform segments of respondents whose preferences were as similar to each other as possible were singled out. Consumers were categorises into respective segments based on 23 variables identified for three research constructs, i.e. the attractiveness of collective consumption, economic as well as social and cultural determinants for consumer behaviours.

Customer profiles were established based on results produced by employing a *k*-means method, designed to obtain various, possibly different *k* clusters, i.e. segments. The number of clusters was determined on the basis of the initial grouping of customers using Ward's method with Euclidean distance (Figure 1).

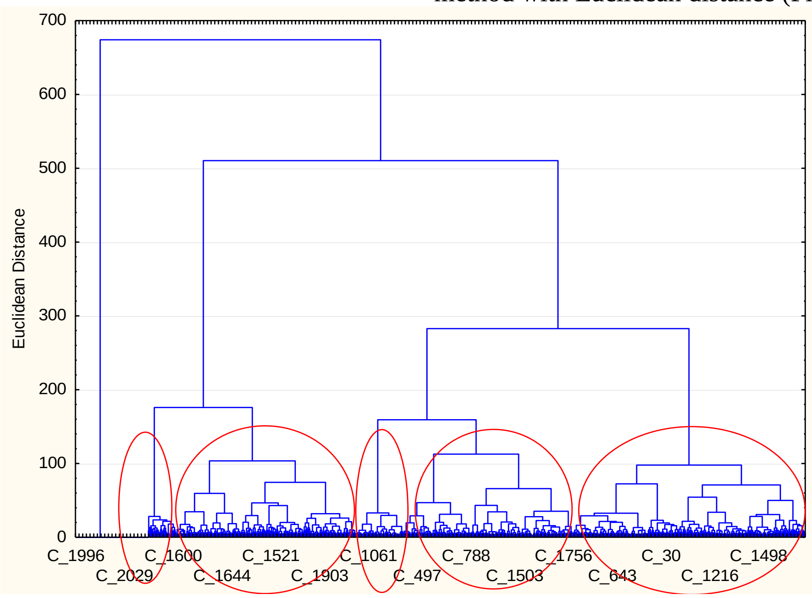

Figure 1. Consumer Grouping Results – Ward's Method
Source: own elaboration based on research

Consequently, the number of clusters was set (k=5).Grouping was based on results from answers given on a Likert scale to questions concerning the following areas: the attractiveness of collective consumption (ACC), economic determinants for using food services (E), social and cultural determinants for the behaviours of consumers on the food service market (SC).Respondents classified into each of the segments (clusters) have similar preferences and beliefs as regards the selection of restaurants and differ from respondents categorised into the other groups, which proves that the structure of consumers' preferences regarding the satisfaction of their eating needs outside home at venues run by entities providing food services (restaurants) exhibits a repeatable pattern.

Table 5 shows average values corresponding to answers to individual questions given in segments identified. In addition, the last two columns of the table contain the results of a one-way analysis of variance (ANOVA). The analysis was conducted to verify whether respective variables representing the areas of the attractiveness of collective consumption (ACC), economic determinants for using food services (E), social and cultural determinants for the behaviours of consumers on the food service market (SC) considerably diversified clusters/segments created.

Table 5. Consumer preference's attributes factor mean among segments

Variable /Factor	Connoisseurs-aesthetes	Tradi-tionali-sts	Economic consumers	Innovators	Conservati-ve consumers	F	Significance (p-value)
ACC1	3.720	3.969	2.959	4.311	2.132	364.372	0.000
ACC2	3.875	4.233	3.344	4.556	2.459	418.917	0.000
ACC3	4.049	4.171	3.769	4.573	2.913	207.274	0.000
ACC4	4.731	4.225	4.289	4.653	3.622	125.752	0.000
ACC5	2.116	2.225	2.143	2.718	2.453	28.994	0.000
ACC6	1.875	2.967	3.476	3.124	2.655	139.587	0.000
ACC7	3.899	3.528	2.241	4.282	3.156	251.724	0.000
ACC8	3.972	3.214	4.279	4.070	3.048	107.457	0.000
ACC9	3.903	2.654	3.782	3.597	2.658	142.769	0.000
E1	4.615	3.505	4.633	4.051	3.378	189.523	0.000
E2	4.742	3.899	4.616	4.583	3.628	196.579	0.000
E3	4.155	3.823	4.361	4.575	3.805	74.044	0.000
E4	3.789	3.293	3.789	4.117	3.357	71.767	0.000
E5	4.024	3.538	4.452	4.515	3.574	114.825	0.000
E6	4.088	3.608	4.316	4.362	3.541	116.049	0.000
E7	4.312	4.058	4.469	4.748	3.847	100.595	0.000
SC1	4.705	3.680	4.694	4.396	3.541	156.670	0.000
SC2	4.183	3.777	4.252	4.607	3.492	110.464	0.000
SC3	4.140	3.697	4.269	4.454	3.480	105.492	0.000
SC4	4.230	4.045	4.371	4.672	3.775	99.232	0.000
SC5	4.847	4.235	4.578	4.752	3.874	156.913	0.000
SC6	4.024	3.505	3.599	4.238	3.360	65.797	0.000
SC7	4.101	3.829	4.330	4.536	3.538	83.725	0.000

Source: own elaboration based on research

A detailed analysis of results derived from answers on a Likert scale led to the specification of the respondent segments identified, with attention given to five significance classes. The segmentation procedure enabled the population surveyed to be classified into five segments. Table 6 demonstrates the respondents' demographic profile and their categorisation into respective consumer segments.

Given the size of the sample, *connoisseurs-aesthetes* comprised the biggest group (30.16%). These were followed by consumers referred to as *traditionalists* (20.70%), *undemanding* consumers (18.52%) – ranked third, innovators (17.66%) – ranked fourth, whereas the last group, making up the lowest percentage, were *economic consumers* (12.96%).

For consumers classified into the **connoisseurs-aesthetes** segment (n=596, 30.16% of those surveyed), especially with regard to the attractiveness of collective consumption, eating together is perceived as an opportunity to gain information and knowledge, and when they are to choose a restaurant, they pay particular attention, to a greater extent than consumers categorised into the other segments, to building architecture and interior design, as well as other consumers' opinion. Regarding economic determinants, consumers representing this segment, as those who benefit from economic growth, visit venues serving food more often and do not believe that a change to an unemployment rate has had any bearing on activity relating to the use of services provided by such venues. Given the area referred to as the social and cultural behaviours of consumers, a distinguishing characteristic of people categorised into the first segment, 'connoisseurs-aesthetes', is that they are aware of the powerful effect of women's employment status, which is nowadays changing the family's eating model, and that they attach considerable importance to a strong impact of tourism expansion on greater demand for eating outside home.

An average representative of this segment is a single working woman residing in Śląskie Province (aged between 26 and 40), who received higher education (an MA degree).

Consumers called **traditionalists** (n=409, 20.70% of those surveyed), as far as the attractiveness of collective consumption is concerned, very often disagree with a claim that going to a restaurant with your family is nowadays not seen as luxury but a way of spending time together and do not consider the building architecture and interior design to be an important criterion for selecting a given restaurant. A unique characteristic of consumers being traditionalists is that they received a relatively low score for economic determinants for dietary habits, which include the considerable impact of: the social market economy on a greater number of business entities engaged in the food services sector; of households' changed expenditure structure on the popularity of food services; or of people's greater affluence on turnover generated by businesses providing food services. Furthermore, consumers categorised into this segment are of the opinion that an increase in people's income translates into them using food services more often.

An average representative of this segment is a working woman residing in Śląskie Province (aged between 26 and 40), who has a family of two children and received higher education (an MA degree).

People falling within the segment of **undemanding** consumers (n=366, 18.52% of those surveyed) had a low score for categories contributing to the attractiveness of collective consumption, economic determinants and social and cultural behaviours of consumers. Consumers representing this segment usually do not seek new and untypical dishes when going to a restaurant, pay less attention to new dishes, are reluctant to order dishes characteristic of cuisine served in other countries, which are well-known and typical in a given region, treat food, to a lesser extent, as an opportunity for sharing information and knowledge and do not consider building architecture or interior design a criterion for selecting a given restaurant. As regards economic determinants, respondents falling within this segment do not perceive inflation or deflation as a phenomenon which has any bearing on the use of food services outside home and do not think that economic growth is a contributing factor behind consumers' decision to use such services more frequently. They believe, however, only to a lesser degree, that an increase in people's income translates into them using food services more often. Consumers representing this segment maintain that women's employment status rather does not change the family's eating model, the higher level of education and professional competences of people do not change the concept of preparation and consumption of meals – products which are organic, natural and served in individually selected proportion; they do not believe that restaurant services are used to a greater extent and claim that neither knowledge nor information affects the eating preferences of many people actively striving to satisfy their spiritual and bodily needs. Those classified into this segment claim that tourism expansion in many regions of Poland does not considerably increase demand for good-quality restaurants meeting tourists' expectations, whereas the culture of meal consumption at restaurants does not necessarily outweigh the at-home consumption model on account of prevailing trend of spending time.

An average representative of this segment is a working woman residing in Śląskie Province (aged between 18 and 25), who has a family of two children and completed secondary education.

A distinctive characteristic of respondents falling within the segment of **innovators** (n=349, 17.66% of those surveyed) is that they have a high score for categories contributing to the attractiveness of collective consumption, economic determinants and social and cultural behaviours of consumers. Consumers categorised into this segment seek mainly new and untypical dishes, when reading a menu, they pay attention to new dishes, are keen on ordering dishes characteristic of cuisine served in other countries, which are well-known and typical in a given region, when choosing a restaurant, they are guided by its brand, are able to devote a lot of time to looking for an attractive venue where they could eat some food and believe that going to a restaurant is a way of spending a leisure time. As for economic determinants, these consumers mainly agree with a view that a rise or decline in unemployment is a factor that either increases or reduces people's activity in using food services, the social market economy increases the number of business entities engaged in the food services sector, changes in households' expenditure structure have an impact on the popularity of food services and that the greater people's general affluence is, the higher turnover is generated by businesses providing food services. In majority of cases, consumers representing this segment substantially support a claim that: the higher level of education and professional competences of people changes the concept of preparation and consumption of meals – products which are organic, natural and served in individually selected proportion; the pace of today's life results in a new model of humans' living, who more and more often use restaurant services; the time which they should spend for preparing at least one meal can be devoted to leisure activities and the pleasures of life, including, culture in general; knowledge and information affect the eating preferences of many people actively striving to satisfy their spiritual and bodily needs; the culture of meal consumption at restaurants outweighs the at-home consumption model on account of a prevailing trend towards spending time actively among other people; listening to music evokes positive mood, resulting in greater consumption and bringing people together.

An average representative of this segment is a working woman residing in Śląskie Province (aged between 18 and 25), who has a family of two children and received higher education (an MA degree).

A typical characteristic of **economic** consumers (n=256, 12.96% of those surveyed) is that, when selecting a dish, they do not rely on other consumers' opinions and believe that going with your family to a restaurant is nowadays not seen as luxury but a way of spending time together. Consumers categorised into this segment, when choosing a place in which they can have a meal, usually do not look for famous brands of restaurants and are not of the opinion that finding a good restaurant in their region is time-consuming but worthwhile, given the attractiveness of a restaurant. Furthermore, consumers value music setting at places serving food: listening to music evokes positive mood, resulting in greater consumption and bringing people together.

An average representative of this segment is a working man residing in Śląskie Province (aged between 26 and 40), married, without children, who received higher education (an MA degree).

Table 6. Socio-demographic profiles of consumer's attributes segments

Category	Item [1]	Segment					-
		Connoisseur-aesthetes	**Traditionalists**	**Economic consumers**	**Innovators**	**Undemanding consumers**	All
Sex	1	334 (56.04%)	279 (68.22%)	126 (49.22%)	246 (70.49%)	268 (73.22%)	1,253 (63.41%)
	2	262 (43.96%)	130 (31.78%)	130 (50.78%)	103 (29.51%)	98 (26.78%)	723 (36.59%)
Family model	1	87 (14.60%)	68 (16.59%)	28 (10.94%)	78 (22.29%)	65 (17.66%)	326 (16.46%)
	2	121 (20.30%)	102 (24.88%)	45 (17.58%)	94 (26.86%)	101 (27.45%)	463 (23.38%)
	3	44 (7.38%)	34 (8.29%)	28 (10.94%)	27 (7.71%)	25 (6.79%)	158 (7.98%)
	4	15 (2.52%)	8 (1.95%)	13 (5.08%)	5 (1.43%)	9 (2.45%)	50 (2.53%)
	5	94 (15.77%)	25 (6.10%)	63 (24.61%)	26 (7.43%)	37 (10.05%)	245 (12.37%)
	6	144 (24.16%)	101 (24.63%)	49 (19.14%)	74 (21.14%)	81 (22.01%)	449 (22.68%)
	7	91 (15.27%)	72 (17.56%)	30 (11.72%)	46 (13.14%)	50 (13.59%)	289 (14.60%)
Employment status	1	392 (65.55%)	276 (67.48%)	130 (51.59%)	250 (71.43%)	236 (64.66%)	1284 (65.05%)
	2	21 (3.51%)	11 (2.69%)	24 (9.52%)	2 (0.57%)	9 (2.47%)	67 (3.39%)
	3	78 (13.04%)	11 (2.69%)	60 (23.81%)	17 (4.86%)	34 (9.32%)	200 (10.13%)
	4	91 (15.22%)	95 (23.23%)	20 (7.94%)	72 (20.57%)	72 (19.73%)	350 (17.73%)
	5	16 (2.68%)	16 (3.91%)	18 (7.14%)	9 (2.57%)	14 (3.84%)	73 (3.70%)
Education	1	13 (2.17%)	3 (0.74%)	9 (3.52%)	1 (0.29%)	5 (1.37%)	31 (1.57%)
	2	4 (0.67%)	7 (1.72%)	1 (0.39%)	6 (1.71%)	4 (1.09%)	22 (1.11%)
	3	58 (9.70%)	19 (4.66%)	42 (16.41%)	20 (5.71%)	15 (4.10%)	154 (7.79%)
	4	152 (25.42%)	152 (37.25%)	57 (22.27%)	109 (31.14%)	127 (34.70%)	597 (30.18%)
	5	63	36	24	20	22	165

[1] Descriptions of items for categories correspond to Table 1.

		(10.54%)	(8.82%)	(9.38%)	(5.71%)	(6.01%)	(8.34%)
	6	47 (7.86%)	51 (12.50%)	15 (5.86%)	37 (10.57%)	49 (13.39%)	199 (10.06%)
	7	69 (11.54%)	16 (3.92%)	41 (16.02%)	13 (3.71%)	21 (5.74%)	160 (8.09%)
	8	192 (32.11%)	124 (30.39%)	67 (26.17%)	144 (41.14%)	123 (33.61%)	650 (32.86%)
Age	1	92 (15.38%)	63 (15.40%)	56 (21.88%)	127 (36.29%)	124 (33.81%)	462 (23.35%)
	2	184 (30.77%)	127 (31.05%)	82 (32.03%)	42 (12.00%)	50 (13.66%)	484 (24.46%)
	3	66 (11.04%)	46 (11.25%)	18 (7.03%)	81 (23.14%)	82 (22.40%)	293 14.81%)
	4	138 (23.08%)	92 (22.49%)	64 (25.00%)	56 (16.00%)	60 (16.39%)	409 (20.67%)
	5	118 (19.73%)	81 (19.81%)	36 (14.06%)	44 (12.57%)	50 (13.66%)	331 (16.71%)
Province	1	43 (7.19%)	21 (5.13%)	6 (2.34%)	16 (4.57%)	10 (2.73%)	96 (4.85%)
	2	30 (5.02%)	9 (2.20%)	20 (7.81%)	7 (2.00%)	6 (1.64%)	72 (3.64%)
	3	37 (6.19%)	2 (0.49%	13 (5.08%)	6 (1.71%	6 (1.64%)	64 (3.23%)
	4	31 (5.18%)	5 (1.22%)	23 (8.98%)	4 (1.14%)	2 (0.55%)	65 (3.28%)
	5	30 (5.02%)	10 (2.44%)	13 (5.08%)	10 (2.86%)	4 (1.09%)	67 (3.39%)
	6	52 (8.70%)	52 (12.71%)	23 (8.98%)	43 (12.29%)	54 (14.75%)	224 (11.32%)
	7	51 (8.53%)	23 (5.62%)	23 (8.98%)	26 (7.43%)	26 (7.10%)	149 (7.53%)
	8	16 (2.68%)	13 (3.18%)	14 (5.47%)	21 (6.00%)	10 (2.73%)	74 (3.74%)
	9	22 (3.68%)	11 (2.69%)	14 (5.47%)	6 (1.71%)	8 (2.19%)	61 (3.08%)
	10	14 (2.34%)	5 (1.22%)	13 (5.08%)	5 (1.43%)	2 (0.55%)	39 (1.97%)
	11	32 (5.35%)	17 (4.16%)	16 (6.25%)	20 (5.71%)	16 (4.37%)	101 (5.10%)
	12	192 (32.11%)	212 (51.83%)	41 (16.02%)	160 (45.71%)	198 (54.10%)	803 (40.58%)
	13	9 (1.51%)	5 (1.22%)	17 (6.64%)	6 (1.71%)	6 (1.64%)	43 (2.17%)
	14	16 (2.68%)	3 (0.73%)	6 (2.34%)	2 (0.57%)	4 (1.09%)	31 (1.57%)
	15	18 (3.01%)	15 (3.67%)	9 (3.52%)	10 (2.86%)	8 (2.19%)	60 (3.03%)
	16	5 (0.84%)	6 (1.47%)	5 (1.95%)	8 (2.29%)	6 (1.64%)	30 (1.52%)

Source: own elaboration based on research

The results of the one-way analysis of variance revealed that with the significance level of 0.05, all variables considerably differentiate the respondent segments identified from each other. Additionally, the Tamhane's T2 post hoc test and Bonferroni's test demonstrated that there were significant differences in all pairs of consumer segments created (at a significance level of $p < 0.001$). The foregoing corroborates a view that the segmentation presented in this article is appropriate, consumer groups are cohesive and sufficiently separable.

Subsequently, to determine which preference dimensions discriminate, to the largest extent, the resulting company segments, a discriminant analysis was performed. Its results, expressed as canonical discriminant function coefficients, eigenvalues and corresponding canonical roots, canonical correlation coefficients, Wilks' lambda values and related values of $\chi 2$ statistics are presented in Tables 7 and 8.

Table 7. Eigenvalues of canonical roots

Canonical function	Eigenvalue	Canonical correlation	Percentage of variance explained by function	Wilks' lambda	Chi-square	df	Significance (p-value)
1	2.636	0.851	31.53%	0.055	5727.618	92	0.000
2	1.326	0.755	27.97%	0.200	3179.230	66	0.000
3	0.727	0.649	24.05%	0.465	1512.988	42	0.000
4	0.246	0.444	16.45%	0.803	434.101	20	0.000

Source: own elaboration based on research

Table 8. Discriminant analysis of Consumer preference's attributes factors

Variable/Factor	Function 1	Function 2	Function 3	Function 4
ACC1	-0.402	0.404	0.018	-0.110
ACC2	-0.541	0.278	-0.172	-0.349
ACC3	-0.293	0.142	-0.202	-0.246
ACC4	-0.098	-0.039	0.256	-0.199
ACC5	-0.009	0.117	-0.163	0.356
ACC6	-0.024	0.065	-0.734	-0.027
ACC7	-0.354	0.526	0.489	0.481
ACC8	-0.191	-0.260	-0.095	0.023
ACC9	-0.193	-0.401	0.201	0.093
E1	-0.058	-0.447	0.097	-0.248
E2	-0.197	-0.250	0.222	-0.091
E3	-0.088	-0.001	-0.243	0.371
E4	-0.147	-0.078	-0.003	0.321
E5	-0.133	-0.148	-0.204	0.216
E6	-0.061	-0.156	-0.151	0.044
E7	-0.170	0.095	-0.217	0.068
SC1	-0.100	-0.342	0.118	-0.080
SC2	-0.196	0.017	-0.119	0.227
SC3	-0.192	-0.158	-0.165	0.037
SC4	-0.129	0.098	-0.260	0.120
SC5	-0.125	-0.166	0.337	-0.300
SC6	-0.152	0.047	0.219	0.247
Z7	-0.140	-0.061	-0.244	-0.016
intercept	15.446	3.482	3.067	-2.710

Source: own elaboration based on research

Relevant results shown in Table 6 indicate that all canonical functions statistically significantly differentiate the groups of respondents surveyed in terms of their preferences regarding *the attractiveness of collective consumption (ACC)*, *economic* *determinants for using food services (E), social and cultural determinants for the behaviours of consumers on the food service market (SC).* The values of canonical correlation coefficient are diverse for respective discriminant functions. The highest correlation coefficient was recorded for the first two discriminant functions, a moderate coefficient – for the third function, whereas the fourth discriminant function produced the lowest coefficient. The first discriminant function explains approx. 31.53% of intergroup variance, the second one – approx. 27.97%, the third one – approx. 24.05% and the fourth one the remainder of intergroup variance.

To determine the redundancy levels of motivational dimensions examined in the discriminant analysis, Wilks' lambda and partial Wilks' lambda statistic was used. Table 9 shows relevant results.

Table 9. Wilks' lambda and F test for consumer preference's attributes factor

Variable/Factor	Wilks' lambda	Partial Wilks' lambda	F	Significance (p-value)	Tolerance
ACC1	0.063	0.873	71.164	0.000	0.783
ACC2	0.064	0.860	79.778	0.000	0.810
ACC3	0.059	0.935	33.896	0.000	0.937
ACC4	0.056	0.977	11.574	0.000	0.923
ACC5	0.057	0.963	18.914	0.000	0.939
ACC6	0.072	0.766	149.855	0.000	0.958
ACC7	0.079	0.695	215.462	0.000	0.937
ACC8	0.059	0.931	36.268	0.000	0.964
ACC9	0.064	0.865	76.751	0.000	0.916
E1	0.060	0.919	42.954	0.000	0.852
E2	0.057	0.967	16.479	0.000	0.778
E3	0.057	0.970	14.999	0.000	0.855
E4	0.056	0.976	12.069	0.000	0.899
E5	0.057	0.969	15.621	0.000	0.817
E6	0.056	0.989	5.354	0.000	0.818
E7	0.056	0.984	8.126	0.000	0.746
SC1	0.058	0.945	28.789	0.000	0.888
SC2	0.056	0.976	12.054	0.000	0.837
SC3	0.056	0.973	13.438	0.000	0.857
SC4	0.056	0.983	8.428	0.000	0.800
SC5	0.057	0.970	15.122	0.000	0.820
SC6	0.057	0.962	19.244	0.000	0.901
SC7	0.056	0.974	13.078	0.000	0.904

Source: own elaboration based on research

Based on the values of Wilks' lambda and F test computed for each factor, it was determined that all factors are of great relevance in the discriminant model (at a significance level of $p < 0.001$).Preferences associated with a question: '*I do not rely on other consumers' opinion when choosing a dish*' had the highest tolerance index standing at 0.958, which implies approx. 4.2% redundancy of this preference factor in correlations showed in the model. The lowest level of tolerance amounting to 0.746 was observed for preferences relating to a question: '*The greater people's general affluence, the higher turnover of businesses providing food services*', which indicates approx. 25.4% redundancy of that factor. Table 10 demonstrates classification accuracy results of the discriminant analysis.

Table 10. Evaluation of segment formation by classification results

Segment case	Predicted group consumer					Total
	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	
Segment 1	566 (94.97%)	16 (2.68%)	3 (0.50%)	10 (1.68%)	1 (0.17%)	596 (100%)
Segment 2	13 (3.18%)	384 (93.89%)	1 (0.24%)	10 (2.44%)	1 (0.24%)	409 (100%)
Segment 3	6 (2.34%)	11 (4.30%)	231 (90.23%)	3 (1.17%)	5 (1.95%)	256 (100%)
Segment 4	9 (2.58%)	10 (2.87%)	2 (0.57%)	328 (93.98%)	0 (0.00%)	349 (100%)
Segment 5	1 (0.27%)	18 (4.92%)	0 (0.00%)	0 (0.00%)	347 (94.81%)	366 (100%)

The results showed on a matrix of respondent classification accuracy indicate a relatively high percentage of individuals classified accurately into each of the five segments having a different profile of preferences regarding *the attractiveness of collective consumption (ACC), economic determinants for using food services (E), social and cultural determinants for the behaviours of consumers on the food service market (SC)*.The highest precision of classification was recorded for segment 1 (94.97% of correctly classified respondents), whereas the lowest – for segment 3 (90.23% of respondents properly classified into the segment).

Classification accuracy was not lower than 90% for any of the segments, which demonstrates that the discriminant analysis pertaining to consumers' preferences was highly accurate.

5. Results discussion

A consumer decision-making process has been always an interesting issue that has drawn the attention of people engaged in the management of entities operating in the food services sector. The proper identification of that issue, the understanding of determinants that incline contemporary consumers to certain market-specific decisions, allows creating an added value for a consumer. Nowadays, in the era of global changes which are taking place very rapidly, this has assumed particular importance. The segmentation analysis led to the initial recognition of factors considered to be determinants for Polish consumers' use of restaurant services.

Consumers' preferences as to the selection of collective consumption in segments identified are determined not only by social and demographic variables, but also economic factors. The research carried out using the instrument called "Preferences Regarding Collective Consumption", covering a sample of 2,102 respondents (which, after factoring out missing data, was narrowed down to 1,976 people) has led to a conclusion that Polish consumers using restaurant services can be categorised into five segments comprising: connoisseurs-aesthetes (n =596, 30.16%), traditionalists (n=409, 20.70%), innovators (n=349, 17.66%), conservative consumers (n=366, 18.52%), economic consumers (n=256, 12.96%).It was submitted that of all five clusters (segments) identified in analyses focused on preferences regarding the use of restaurant services, the largest group was *connoisseurs-aesthetes*, that is to say, people for whom eating food together is an opportunity for sharing beliefs and information, who – combining the consumption of food outside home with a social aspect and being the beneficiaries of economic growth – are visiting venues serving food more often than ever before, despite current circumstances. An emotional value, seen by consumers as a relevant factor when eating outside home, is reflected also in the results of other research (Ha & Jang, 2013).

The research conducted also showed that, when selecting a restaurant, they pay attention, to a greater degree than consumers classified into the other segments, to building architecture, interior design and other people's opinions (Pedraja & Yagüe, 2001). Furthermore, they emphasise that women's employment status is an important contributing factor behind a change in the family's eating model, which is manifested in more frequent consumption of food outside home (Cullen, 2004; Harrington et al., 2011; Harrington et al., 2013).

Customers referred to as traditionalists are people who nowadays do not perceive going to a restaurant as a traditional form of satisfying hunger, nor as a reason for spending time together, but instead, who prefer the traditional eating model where meals are consumed at home not only every day, but also on special occasions. Scepticism about eating outside home expressed by a certain group of consumers may be justified by the current global situation arising from the outbreak of the pandemic of COVID-19, a contagious disease caused by the SARS-CoV-2 coronavirus. The results of other research (Chiciudean et al., 2019; Galanakis, 2020; Global Consumer Trends, 2021; Hailu, 2020; Lee & Caine-Bish, 2021; Sigala, 2020) also support the foregoing thesis. There is also such a group of consumers who are more and more eager to cut expenditures on eating outside home, claiming that cooking at your own house, especially for bigger families, is cheaper. The foregoing is corroborated by the results of other research (Stewart et al., 2004; Yang et al., 2021). They further assert that neither building architecture nor interior design is perceived by them as a significant criterion for choosing a restaurant. On the other hand, having examined economic determinants for traditionalists' use of food services outside home, it follows that – according to them – an increase in people's income leads, to the biggest extent, to greater demand for consumption outside home.

Customers seen as *innovators* are people who most often seek new and untypical dishes when reading a menu, pay attention to new dishes and are keen on ordering food characteristic of cuisine served in other countries (Byrd et al., 2021).

Consumers representing this segment focus, to a large extent, on a brand of a venue, are able to devote more time to find a restaurant which will suit their preferences. This is a segment of conscious consumers who have included restaurant services in their everyday eating habits. They are keen on eating food outside home. Furthermore, they are aware that economic factors stimulate demand for food services and have an impact on the frequency of using such services outside home. Research results are consistent with other reports. This is concurrent with previous research, which places particular focus on factors driving demand for food services, including, specifically: the attractiveness of collective consumption (Namkung & Jang, 2007; Fatimah et al., 2011; Duarte Alonso et al., 2013; Yang et al., 2017), economic factors (Kwun & Oh, 2004; Nguyen et al., 2018), social and cultural factors (Kim et al., 2016).

Undemanding customers make up a consumer segment which, as demonstrated by the research, had a low score for all variables. This is a group of consumers with respect to whom it is difficult to identify key preferences regarding the use of food services outside home. When going to a restaurant, they usually do not seek new and untypical dishes, building architecture and interior design is not so important criterion for choosing a restaurant. They do not treat eating outside home as an opportunity for social meetings. These consumers are not convinced of the impact of economic factors on demand for using food services outside home.

An economic consumer is a person who, when selecting dishes, does not rely on other people's opinions, underlines the value of a social aspect of using food services, believes that music setting is of special importance to them while having a meal (Ajzen, 2015; Shin et al., 2020; Shin et al, 2021). Moreover, when choosing dishes, they do not take into account a brand of a restaurant, but appreciate the quality of existing food infrastructure. The foregoing conclusion is consistent with the results of other research which emphasises the fact that quality in the food services sector may be an essential factor increasing the level of consumer loyalty towards restaurants after a service has been provided (Chen et al., 2021).

In the face of a growing phenomenon of eating outside home, the research results presented herein extend the body of knowledge of the relative meaning of restaurant selection criteria. The segmentation of food services consumers discussed above contributes to the knowledge of consumer preferences regarding food services; the adequacy of the segmentation was proved not only by statistical analyses, but also by results obtained by other researchers.

Furthermore, drawing on the research results, factors determining the selection of a restaurant, given occasions for eating outside home, were put in order of importance. The analyses carried out herein and the review of previous research into restaurant management indicate that the factors which impact the selection of a restaurant by contemporary consumers include (Blackwell et al., 2001; Foxall, 2004; Choi & Zhao, 2010; Opolski-Medeiros & Salay, 2013; Duarte Alonso et al., 2013; Ponnam & Balaji, 2014; Durante & Laran, 2016; Asioli et al., 2017; Chua et al., 2020; Chirumbolo et al., 2021):

- Food quality correlated with the price.
- Variety of the offered menu.
- Level of customer service.
- Architecture of the building and interior.
- Emotional value.
- Recommendations.

The last two years showed it was a time of hard lessons for many businesses, but first and foremost, for the food services sector. The Polish food services industry is changing very quickly. Globalisation, the pandemic, climate issues, generational shifts, which create a new consumer, leave their mark on this industry with every consecutive decade.

As indicated by the research results obtained, restaurants are most often chosen by medium- and high-income earners, which is usually associated with higher education these people acquired – this is reflected in other research results (Okrent, et al., 2018; Lee & Caine-Bish, 2021; Mialki et al., 2021).

Given the contemporary environment in which consumers operate, it appears that today nobody can easily predict changes in consumers' purchasing behaviours. Nevertheless, it is beyond any doubt that they already have, and will have, an impact on companies' search for innovative solutions in the food services area – solutions which will address consumers' needs. Furthermore, as submitted by F. Shaw, changes in purchasers' behaviours are the most powerful factor that determines the operations of contemporary companies (Shaw, 2002).

Radical changes in the contemporary environment occurred in 2019 and were caused by the pandemic, which quickly turned to an emerging public health crisis. Eventually, on 11 March 2020, the World Health Organisation (WHO) announced that COVID-19 was a pandemic. Moreover, as demonstrated by latest research, the economic crisis arising from the pandemic is substantially different from the previous crises which global economies had to face so far, both in terms of its root cause and a degree of "severity" (Ding et al., 2020). The consequences of these interruptions are serious and have long-term effects that may affect the activities of companies operating in the restaurant industry on multiple levels simultaneously, including procurement, production and distribution (Ivanov 2020a; Choi, 2020; Ivanov, 2020b; Ivanov & Dolgui, 2020; Cappelli & Cini, 2020; Ramelli & Wagner, 2020). Nowadays, restaurant managers must hence be aware that, given the present circumstances, the restaurant industry will have to confront new challenges arising from time to time, not only with regard to changing consumer preferences – and consequently, changing market demand, but also as regards interruptions to a supply chain, maintaining the high security level of services and retaining consumer confidence (Centers for Disease Control and Prevention, 2020; Galanakis, 2020; Hailu, 2020; Sigala, 2020; Weersing & Fulton, 2020).

6. Theoretical implications

Changes taking place in the contemporary world, which are very dynamic in their nature, create a new model of a consumer of the food services sector, who continuously reorganises their consumption needs, and when making choices, is guided by both external determinants and internal factors, being more and more aware in this respect. A company's success depends on a holistic approach and the consistency of all variables. Analysing consumers' needs, their behaviours and preferences by carrying out continuous examination to explore factors which currently determine consumers' decisions, consequently, leading to greater demand for restaurant services, is particularly important to the food services industry, which stems from the relatively high heterogeneity of related products and services, and may become useful in restaurant management (Lasek et al., 2016).The segmentation of consumers has both practical and theoretical implications, results in a better understanding of consumers' needs and their profile, as well as provides a starting point for the effective planning of marketing communication activities and gaining long-term competitive advantage.

In consideration of the key factors that influence one's choice of a restaurant, understanding how diversified – according to consumers – their hierarchy of values is has strategic importance for further development of the knowledge of consumers' decision-making, their preferences as to purchasing services, and provides potential space for devising effective restaurant marketing strategies. As demonstrated by previous research in the literature on the subject relating to the food services sector, there is a gap in an understanding of the factors which influence customers' decisions to eat outside home, but due to the fact that the phenomenon under consideration is changing very rapidly, the situation requires systematic research and analysis in this regard (Jin et al., 2012; Ha & Jang, 2013).

This research attempted to fill the gap in the literature by identifying key factors in consumers' preferences, with attention being given to three research constructs: the attractiveness of collective consumption, economic determinants for using food services, as well as social and cultural determinants for using such services. On the basis of the research results, the factors which determine opportunities for having a meal outside home were identified (providing a basis for the categorisation of food services consumers into segments) and, based on that, restaurant segments were specified to better explain reasons behind consumers' decisions, and consequently, to include the current (pandemic) circumstances in which consumers have to operate nowadays to the results of earlier research. Considerable importance must be attached to the research instrument developed by the author, namely "Determinants for Consumers' Use of Food Services", being a theoretical contribution to this research, which can be useful not only for future researchers who will attempt to carry out similar research, but also managers of companies serving food who will devise a development strategy for their businesses in order to handle many changes and cope with precarious situations taking place in today's reality. Hence the authors of this publication hope that this research will enrich the literature on consumers' decision-making regarding out-of-home eating by including the preferences based on which the following five consumer segments were identified: aesthetes and connoisseurs, traditionalists, economic consumers, innovators and conservative consumers. It is also noteworthy that mechanisms influencing the behaviours of consumers on the food services market are being analysed continuously and dynamically, leading thus to new observations which cannot be always examined thoroughly, however, this leaves plenty of room for further research that scholars may perform in the future. To sum up, it can be claimed that the results of the research performed may provide a basis for further multifaceted scholarly investigation, not only in the field of management and quality science, but also in the area of food and nutrition technology and psychology.

7. Limitations and future research

This research has certain limitations concerning both methodology and opportunities for application. The sample drawn for the research consisted mainly of people aged above 18, hence an attempt to extrapolate the results to the entire population must be made with some caution. Furthermore, a disproportion of sample size in respective Polish provinces (regions) was noted. Consumers' preferences regarding the use of food services may vary, depending on the territorial range of a given country (Choi et al., 2009; Henriques et al., 2009; Pezenka & Weismayer, 2020, Karaman & Kemal, 2021). Another limitation was that respondents came only from one country. Despite the aforesaid limitations, the results obtained (particularly, given the big size of the sample: n=2,102 respondents) are of a practical nature, identifying the preferences of consumers on the food services (restaurant) market and describing consumer segments. Due to the fact that the research was conducted mainly amid a global crisis arising from the pandemic of COVID-19, a contagious disease caused by the SARS-CoV-2 coronavirus (WHO, 2020), the research instrument put forward herein, which is called: "Preferences Regarding Selection of Collective Consumption", may be used to develop a comparative analysis of possible changes in consumers' preferences regarding the use of food services in pandemic and post-pandemic times.

The said instrument may be also useful for intercultural comparison in the field being analysed.

The research results give restaurant owners (restaurateurs) guidance on designing food product architecture for individual consumer segments and provide a starting point for the formulation of research hypotheses in future scientific research.

8. Summary

This research reveals new findings and contributes to a better understanding of determinants and mechanisms that shape consumers' today's preferences in the food services sector. The article presents the segmentation of Polish consumers. It is comprised of five segments, which are diversified in terms of preferences regarding the selection of collective consumption (entities such as restaurants) and take into consideration three research constructs: the attractiveness of collective consumption, economic determinants for using food services, as well as social and cultural determinants for consumer behaviours on the restaurant market. The article identifies consumer profiles and behaviours relating to the use of food services for each of the segments. The research exhibited differences among the segments, which were identified based on contemporary consumers' preferences revealed.

To sum up the above discussions, it can be claimed that the behaviours and preferences of contemporary consumers do not indicate unequivocally a trend towards the homogenisation or heterogenisation of consumption. The reason why issues relating to the identification of consumers' preferences regarding the use of restaurant services amid rapid global changes (Samli, 2012; Nezakati, 2013) need to be further researched (and why current consumer segments must be identified from time to time based on these issues), is not only the fact that the issues in question are of considerable relevance, but also that there are relatively few comprehensive and up-to-date empirical studies in this respect. The identification of consumers' purchasing preferences, provided that it is appropriate and reflects current circumstances, may provide a valuable source of inspiration for managerial circles, foster an environment conducive to creating a food service tailored to purchasers' needs and allow for taking proper actions related to a marketing strategy being pursued.

Taking into consideration the research performed and the review of the current literature on the subject, the authors present the following key findings and conclusions:

1. In many aspects, food starts to mean much more than just fulfilling its basic function, namely, to satisfy hunger. Contemporary consumers more and more frequently pay attention to an aesthetic and hedonistic dimension of food – pleasure from taste and visual appearance. Food is also becoming an ideological and political instrument, which is confirmed by multiple food movements (Fair Trade).
2. Having considered fundamental aspects of food, what still bears considerable relevance is a social need for sitting together at one table, and nowadays, restaurants begin to serve a function of a so-called third place between home and work.
3. It is a growing trend that consumers not only expect a restaurant to provide food, but they also see it as a place where they can feel emotions and enjoy experiences, and it appears that the pandemic has been only a catalyst for these needs.
4. Respondents classified into each of the segments (clusters) have similar preferences and beliefs as regards the selection of restaurants and differ from respondents categorised into the other groups, which proves that the structure of consumers' preferences regarding the satisfaction of their eating needs outside home at venues run by entities providing food services (restaurants) exhibits a repeatable pattern.
5. By identifying the groups exhibiting typical behaviours with respect to food services, current trends can be included in existing instruments, which are already known in the literature (such as Food-Related Lifestyles, FRL) (Bredahl & Grunert, 1997; Sholderer et al., 2004; Buckley et al, 2005), extending thus the scope of their application considerably. The foregoing has also laid foundations for dividing the market into smaller segments which may be analysed in relation to preferences regarding the use of restaurant services.
6. The segmentation of food services consumers, as discussed herein, contributes to the knowledge of preferences for the selection of restaurants and its adequacy was proved by multiple statistical analyses.

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