

MODEL OF THE FACTORS AFFECTING THE CHOSEN WAY OF INSTITUTIONAL CATERING

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—Abstract —

The present study reflects the sub-results of a national 1000-person-survey with a basic objective to characterise the members of hungarian institutional catering according to the food consumer preferences, the eating habits and the value system besides the demographic characters. During the data processing of the research we carried out two- and multi-variable correlation examinations with the help of Chi-square-trial, factor-, cluster- and variance-analyses besides descriptive statistics.

On the basis of the results the consumer segmenst of hungarian intstitutional catering can be characterised by means of relevant criteria and the special marketing activities which are necessary to target the consumer segments of institutional catering can be outlined.

Keywords: *food preferences, institutional catering, value systems*

JEL Classification: M50

1. INTRODUCTION

In our paper we would like to present the food preferences and motivations of institutional catering from a value-oriented aspect. The actuality of the topic arises from

the value-system changes of the past decade, which have led to the so-called „central values” even in the West European nutrition tendencies such as health, ethical considerations, time and pleasure.

As a result of these changes, the analysis of values and value trends that shape purchase have come to the foreground of the research on food consumer behaviour. During our examinations we started from the fact that value had several impacts on consumer behaviour and product choice at purchase so the models that explain food consumer behaviour based on the value systems served as the starting point of forming the concept of the research. These theories assume that consumers’ decisions and food selection go back to the value system and lifestyle (Grunert, 1996; Horváth, 1996; Dagevos-Gaasbeek, 2001). They have one thing in common, i.e. they approach the features of a concrete product such as food while starting from the level of abstract values.

The primary objective of our examination was to synthesise the factors that influence the consumers of institutional catering and prove that the value based theories are valid on the consumer market of institutional catering.

2. THE RESULTS AND THE BACKGROUND OF THE RESEARCH

2.1. Literary review

The main objective of our research was to create such a model that comprises the factors that influence the way of institutional catering. As far as we know, in Hungary complex consumer examinations concentrating on this market have not been carried out so far.

To create our model we relied on national and international professional literature on eating out and the preliminary surveys on institutional catering (Table 1.).

Table-1: Factors and sources of the theoretical model

Model factor	Short explanation, justification, description and source
value system lifestyle	The value system based (food) consumer preferences proved the relationship between the consumers’ choices of concrete food and the attitude to general human values. (Grunert, Baadsgaard, Larsen and Madsen, 1996)
socio-demographic features	The characteristic features of customers based on their socio-demographic features. (Hayden, 2007) (Nayga & Capps 1994)
food consumer preferences	Food consumer preference as a factors influencing eating outside the household. (Blisard & Cromartie, 2001) (Naylor, Droms and Haws, 2009)
habits of nutrition	The impact of the attitude to cooking on eating outside the household. (Becker, 1965)
subsidies	Subsidies like luncheon vouchers provided by the place of work.
circumstances of eating at work and general features of the place of work	Eating possibilities and facilities provided by the place of work. The number of employees, the ownership structure of the place of work. (Mikesné, 2004)

Source: own compilation

Even in the 1960s an attempt in international specialist literature was made to define the factors that influence the amount and structure of consumption outside the household as a model. Among the factors that determine expenditure Becker (1956) in his model named several factors that are connected to households or their people.

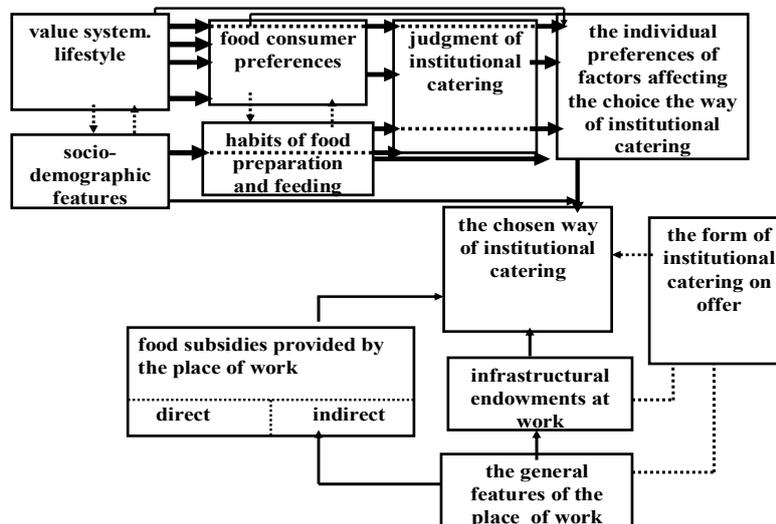
In further empirical research McCracken-Brandt (1987), Nayga-Capps (1994) and Byrne et al. (1998) stated that the more people who live in the household, the more economical cooking at home is and the less they spend on eating out. Cromartie (2002), Kinsley (1990) and Hayden (2007) also pointed out that eating out was differentiated depending on how many members the household has and what the marital statuses are.

Blisard and Cromartie (2001) examined the preferences of food consumption and eating habits from the aspect of age.

2.2 Model development

As a result of the examinations we established our model that concentrates on two sets of variables: one of them embraces the factors that influence consumers and the other one includes the features of the employers (Figure 1.). To prove that this model is justified we applied a 1000-member national survey in 2009.

Figure-1: The research model of the factors affecting the chosen way of institutional catering



Source: own compilation

Based on the results we concentrated on the criteria that can be connected to consumers, first of all the relationship of food preferences and motivations of institutional catering as well as the value system.

2.3. Method

During the empiric research quantitative and qualitative research methods were used. There were four phases in the research in 2003, 2005 2007 and 2008. The first three surveys were quantitative ones based on pretested standardised questionnaires.

Phase 1.: 2003. Pest county (197 assessable questionnaires);

Phase 2. :2005. Békés county (182 assessable questionnaires);

Phase 3.: 2007. Heves county (198 assessable questionnaires).

The objective of all the three data recording was to ensure the amount of information necessary for the creation of the model, to base the national survey as well as to refine and outline the research topic.

Phase 4: The national survey comprised the fourth phase of our quantitative research

A face-to-face questioning was applied with the help of a pre-tested standardised questionnaire between May-July 2009. In the case of the national sample planned for 1000 persons a conscious sample taking was carried out based on the quota. The national adult employees were regarded as the sampling population so the compounds of the sample are special from the aspect that the older generation above 60 is in a smaller proportion in it than in the total population of the country. The quotas were formed by regions based on the 2008 employment data of the Central Statistical Office (hereinafter referred to as CSO). The proportion of the most important age group (between 18 and 59) of the research in the sample is the same as their share in the sampling population.

For recording and statistical processing of the data of the preliminary examinations, SPSS 11. 5 programme while in the case of the 1000-member research SPSS 13. 0 was applied.

While processing the results of the quantitative research, bi-and multi-variable correlation analyses were made with the help of Chi-square trial, factor-, cluster-and variance analysis. in addition to descriptive statistics. Segmentation was carried out by K-means clusterising process at all times. In the case of all processes, several trials were made but only the results of the professionally best explicable and statistically suitable segmentations are detailed when outlining certain research results. Significance-and F-values were taken into consideration in the case of the correlations examined by variance analysis. In the case of the Chi-square trials the examination of the intrinsic correlations of the certain relationships were made on the basis of the adjusted standardised residual values (AdjR).

2.4. Results

2.4.1. The results of the value system-based segmentation

Our model serving as the basis of the research is built on the relationship between the value system-based theories. That is why one of the objectives was to explore the link between the segments grouped on the basis of the value system and the consumer groups

as well as the target groups formed on the individual judgment of the utility factors of institutional catering (C4). At first we segmented the sample by the value system. A cluster analysis was carried out on the factor groups of the value factors by K-means process. The procedure resulted in the following segments (Table 1 summarises the statistical results of segmentation):

The „hedonists” (110 persons) are characterised by short-range self-remuneration value hierarchy and love of life approach.

Those „who wish to comply” (500 persons) are who regarded every value dimension more important than average.

The group „without preferences” (123 members) underestimated everything and moreover, it was them who assigned the lowest values to most factors.

The „moralists” (267 persons) are the followers of human values and their value system reflects poise of mind and temperance.

2.4.2. Groups formed by food consumer preferences

As the second step we created food consumer behaviour patterns by judging the utility factors of food selection. As a result of the K-means cluster analysis on the factors, the following segments could be distinguished:

The „trendy health oriented” (118 persons) are those who select food because of its low calorie content, richness in vitamins and exemption from artificial agents.

The most characteristic feature of the „time conscious” (126 persons) is that they love food that is easy to prepare.

The members of the segment „those who want to meet the requirements” (253 persons) ranked each point above the average.

The „quality oriented” (165 persons) are those who look for delicious, tasty and nutritive foods.

Those „without motivation” (144 persons) are the consumers who under-ranked all factors.

In the preference system of the „price conscious” (191 persons) the price-value dimensions had priority.

2.4.3. Groups by individual preferences affecting the selection of institutional catering

As the third step the sample was segmented by K-means cluster analysis on the factors affecting the choice of the way of institutional catering. The process resulted in the following target groups:

The „Lovers of comfort and traditional tastes” (126 persons) look for caterers of traditional tastes and substantial food who provide a wide range of additional services.

Those „who overestimated everything” (241 persons) are the consumers for whom everything was important.

For the „price sensitive” (180 persons) the facts that food should be value for money.

The „fashion –oriented” (137 persons) overestimated all the facts that are indispensable for today’s trendy nutrition.

The „seekers of fast solutions” (190 persons) only regard the quickness of service as the main point and no other factor was ranked higher than average.

Those „without priority” (120 persons) underestimated all factors and none of the utility factors was more important than average. „without priority” (120 persons).

All the segments were characterised by primary criteria at all times and the results obviously show that these features linked to the consumers show a tight relationship with the chosen form of institutional catering. By describing the secondary features of the segments it was proved that the socio-demographic features of the consumer, their food consumer preferences, eating and feeding habits, attitude to institutional catering and the preferences of choosing the form of institutional catering indirectly affect the way of institutional catering. In our research model we presumed that the socio-demographic features directly affect choosing the form of institutional catering so this relationship was also analysed separately.

2.4.4. The connection between food consumer behaviour patterns and the preferences of selecting the way of institutional catering

We examined whether the validity of the value theory could be extended to decisions on preferences playing a role in choosing the way of institutional catering. In accordance with it we analysed what common points there were between the consumer segments of institutional catering and the value system based behaviour patterns. The results of the examination of relations are summarised in Table 2.

Table-2: The connection between the value system based segments and the preferences of choosing the way of institutional catering

Segments by the value system/ Segments by the preferences of	Lovers of comfort and traditional	Over-estimating everything N=211	Price conscious N=180	Fashion oriented N=137	Seekers of fast solutions N=190	Without priority N=120
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choosing the way of institutional catering	tastes N=126					
Hedonists N=110	20.6% AdjR=3.7	8.3% AdjR=-1.6	6.1% AdjR=-2.3	8% AdjR=-1.2	22% AdjR=2.20	11.7% AdjR=0,2
Who wish to comply N=500	34.9% AdjR=-3.6	68.9% AdjR=6.8	48.9% AdjR=-0.3	31.8% AdjR=0.5	27.9% AdjR=-0.9	30.8% AdjR=-4.4
Without preferences N=123	14.3% AdjR=0.7	5.4% AdjR=-3.7	9.4% AdjR=-1.3	32.5% AdjR=2.13	26% AdjR=2.10	36.7% AdjR=3.3
Moralists N=267	30.2% AdjR=0.9	17.4% AdjR=-3.8	35.6% AdjR=2.9	27.7% AdjR=0,2	24.1% AdjR=-1,6	20.8% AdjR=-2.4

Source: own research, 2008. N=997; levels of measure: nominal, Chi-square trial, value=AdjR=adjusted standardised residuum; %=column percentage ratio of segments by the value system in the food consumer cluster ; Chi-square trial test level= 0,00

„Lovers of comfort and traditional tastes” are the consumers typically with high income and higher education working as entrepreneurs who seek eating opportunities that ensure substantial meals for them together with traditional tastes and a wide range of convenience services when choosing the way of eating. They want everything and do not want to miss anything. As the proportion of hedonistic consumers is greater than expected in the segment it seems that looking for pleasure and experience does not only characterise them in terms of eating habits but also on the level of attitude to basic human values. The connection between the value judgment and consumer behaviour refers to the fact that in „overestimating everything” segment the proportion of „those who wish to comply” was significantly higher and that of those „without preferences” was lower than expected and not even the moralist way of thinking was typical of the members of this segment. „Price conscious ”are best characterised by behaviour free from extremities and inconsistency when judging the preferences affecting the choice of the way of eating as well as human values. The proportion of the moralists and those with a balanced value system is higher than expected. In the preferences of „Fashion oriented” we can find the criteria that are regarded important by a modern, trendy consumer. If we include that most members of this group are those „without preferences”, the statements made about the „trendy health oriented” consumers also prevail here. In the segment of „seekers of fast solutions” are the „hedonists” and „without preferences” bigger than expected. The attitude to appreciate time and free time also fits the hedonist behaviour. In our opinion, the relatively high proportion of those „without preferences” can be explained by the instable value system and inconsistent consumer behaviour of the target group. Those „without priorities” are such a unique segment who assessed each factor below the

average. Nothing was of greater importance than the average for them and did not strive to maximise any utility factor. The ratio of those „without preferences” in the group was higher than expected, which is in harmony with this form of behaviour.

2.4.5. The connection between food consumer behaviour patterns and the preferences of choosing the way of institutional catering

One of the main objectives of our examination was to prove that the connection between the segments formed on the basis of food consumer behaviour patterns and the preferences of selecting the mode of institutional catering does exist according to our hypothesis in the research model. This correlation was also separately analysed and we managed to prove that the results of the two segmentations are interrelated. Table 3 reflects the results of the correlation examination.

Table-3: The connection between the segments by the choice of food consuming and the preferences of choosing the way of institutional catering

Food consumer segments/Segments by preferences of choosing the way of institutional catering	Lovers of comfort and traditional tastes N=126	Over-estimating everything N=211	Price conscious N=180	Fashion oriented N=137	Seekers of fast solutions N=190	Without priority N=120
Trendy health oriented N=118	7.9% AdjR=-1.5	11.7% AdjR=-0.1	8.9% AdjR=-1.4	24.1% AdjR=4.7	8.4% AdjR=-1.7	12.5% AdjR=0.2
Time conscious N=126	22.2% AdjR=3.5	7.1% AdjR=-2.9	7.3% AdjR=-2.4	8.8% AdjR=-1.5	18.4% AdjR=2.7	16.7% AdjR=1.4
Those who want to meet the requirements N=253	18.3% AdjR=-2.0	42.3% AdjR=6.9	27.9% AdjR=0.9	29.2% AdjR=1.1	14.7% AdjR=-3.7	7.5% AdjR=-4.8
Quality oriented N=165	15.9% AdjR= -0.2	12.6% AdjR=-0.19	17.9% AdjR=0.5	21.2% AdjR=1.6	14.7% AdjR=-0.7	20.8% AdjR=1.3
Without motivation N=144	18.3% AdjR=1.3	3.8% AdjR=-5.4	15.6% AdjR=0.5	5.1% AdjR=-3.3	23.7% AdjR=4.0	25.8% AdjR=3.8
Price conscious N=191	7.4% AdjR=-0.5	24.6% AdjR=1.5	26.3% AdjR=2.4	7.7% AdjR=-2.4	18.0% AdjR=0.3	16.0% AdjR=-0.7

Source: own research, 2008. N=997; levels of measure: nominal, Chi-square trial, value=AdjR=adjusted standardised residuum; %=column percentage ratio of segments by the value system in the food consumer cluster

In the segment of those „overestimating everything” the majority of „those who want to meet the requirements” prefer eating out, especially frequenting classic restaurants but do not go for institutional catering. They are the ones who search for the possibilities of demonstrative consumption that typically expresses status in eating outside the household. As institutional catering cannot be regarded as a status symbol, no wonder that the members of this segment do not often go the canteens, fast food restaurant in the vicinity of their places of work or inns. The employees for whom „price consciousness” was dominant when choosing the way of institutional catering, they are also „price conscious” in terms of food consumption. The common feature of the two segments is that they expect good quality at a favourable price in both decision making situations. They do not strive to maximise pleasure, do not search for special flavours or specialities, rather they prefer simple offers of good quality they can afford. Making use of institutional catering does not really characterise this segment. Maybe in the case of greater catering subsidies the price conscious group of consumers would be more open to institutional catering. In the target group of „fashion oriented” the members of the segment „trendy, health oriented” were represented in a higher ratio than expected. The result is in harmony with the special features of the two segments outlined earlier. In the group of those „without priority” the food consumers „without motivation” were present in a greater, while those „who want to meet the requirement” in a slighter proportion than expected. This result justifies that the main features of food consumer preferences also affect the judgment of the factors considered when choosing the way of eating. Among the „seekers of fast solutions” the food consumers who are „time conscious” and „without motivation” showed a greater proportion than expected while those „who want to meet the requirements” had a slighter one. The „seekers of fast solutions” is another segment whose members often eat out or at their places of work. The ratio of the group within the sample is 19%, which suggests that although it is not the biggest segment but keeping them is a strategic question for the caterers.

3. CONCLUSIONS AND RECOMMENDATIONS

We have explored the connections between the value system, food consumption and the preferences of selecting the mode of institutional catering. We have proved that the value theories are valid on the consumer market of the food and institutional catering. In our opinion our research results can arouse the interests of the experts in practice as well, due to the following ones. Based on the segments formed during the examination estimation can be carried out on the size of the main target groups of institutional catering and their most characteristic features. Our analysis proved that food consumer groups that can be

regarded as the most important target market of institutional catering based on their choice of food can be characterised by secondary criteria. They belong to the „seekers of fast solutions” or „lovers of comfort-oriented, traditional tastes” among the certain food consumer segments. Our results show that making use of institutional catering best correlates with time-conscious food consumer behaviour but besides time optimisation comfort, product quality and consumer expectations to additional services are also apparent.

The validation of our model justified that the correlation between food consumer preferences, value preferences and selecting the mode of institutional catering can be valid for the consumer market of their countries, as well. In our opinion the validity of our model can be extended to other international markets, as well by taking proper cultural and consumer habits into consideration.

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