MARKETING STUDY ON FOOD PRODUCTS DISTRIBUTED UNDER THE TRADEMARK OF LARGE COMMERCIAL AREAS

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This paper will put forward a study on to the purchasing behaviour of young people in Romania with regard to food products distributed under the trademark of large commercial areas. The subjects of this survey are Romanian young people (men and women) with the age between 20–24 years. The chosen sampling method is the method of quotas, based on selection criteria such as age and sex.

Key words: purchasing behaviour, supplier's own trademark, food products.

INTRODUCTION

This paper focuses on the purchasing behaviour of young people with the age between 20 and 24 years, from Romania, towards the supply of food products under the trademark (Aro, Type, Clever, Kaufland, Real, etc.) of supermarkets that are currently on the market. The chosen sampling method is the method of quotas, a method that allows the construction of a sample with the same division as the population studied, following the already known criteria (such as sex, age, socio-professional category, etc.), in which we will find individuals whose characteristics (geographical, socio-demographic, behavioural, economical, etc.) will be very close to the ones of the reference population (Dragons V., 2000). The structuring

criteria (age and sex) are chosen based on the objectives of the research and the size of the sample (1000 individuals) is determined by taking into consideration the organizational constraints that the study is facing. The non-random sampling method that was chosen was the quota method because it is currently the one most frequently used for surveys in the commercial field (I. Catoiu coord., 1999).

RESEARCH METHODOLOGY

The sampling method. Data on the structure of the population based on the desired criteria have been extracted from the Romanian Statistical Yearbook for 2008 (www.insse.ro).

 $Table \ 1$ The structure of the population and the number of people included in the sample

Sex	The population under research from Romania (young people with the age between 20–24 years)	Percent (%)	The number of people included in the sample (young people with the age between 20–24 years)
Men	865 349	51.15	510
Women	826 759	48.85	490
Total	1 692 108	100	1000

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The marketing study on food products distributed under the trademark of large commercial areas, in Romania, took place from January 1 to January 31, 2011, and the method used for it was the questionnaire. The questionnaire, the tool used to gather information, was developed in several stages: I. Documentation; II. Making the questionnaire; III. Testing the questionnaire.

Hypotheses. This marketing study is based on the following three hypotheses:

- 1. The most frequently purchased food products (basic food products, cold meat, canned food, soft drinks, sweets) by young people belong to the trademarks of Kaufland and Real.
- Young people that buy basic food products (oil, sugar, salt, etc.) that are under the trademark of large suppliers, also buy cold meat, canned food, soft drinks, water, sweets that are under the same trademark.
- 3. The main reasons for buying food products that are under the trademark of big suppliers are: the low price, the quality of the ingredients, the promotional offers, the pleasant taste and the attractive package.

The research method. This stage involves verifying the hypotheses by using various statistical functions (descriptive statistics, correlation, factor analysis).

Hypothesis 1. The food products that are most frequently purchased (basic food products, cold meat, canned food, soft drinks, water, sweets) by young people belong to the trademarks: Aro, Type, Clever, Kaufland and Real.

The description of a variable consists of visualising the number of responses associated with the analyzed variable. According to the descriptive statistics function, it can be concluded that most frequently sold food products are under

the trademark Real and Kaufland. Thus, under Real trademark the following are being bought: basic food products (38.1%), cold meat (39.7%), canned food (39.7%), soft drinks (46.0%), sweets (38.1%). Almost the same categories of food products are bought under Kaufland trademark, but in a smaller percentage: basic food products (28.1%), cold meat (28.6%), canned food (23.8%), sweets (27.0%).

Hypothesis 1 is verified. The food products that are most frequently purchased (basic food products, cold meat, canned food, soft drinks, water, sweets) by young people belong to the trademarks: Aro, Type, Clever, Kaufland and Real.

Hypothesis 2. Young people who buy basic food products (oil, sugar, salt, etc..) from the large suppliers trademarks, also buy cold meat, canned food, soft drinks, water, sweets that are under the same trademark.

Correlation is a statistical function very often used because it summarizes the importance of the relationship between two variables. The Pearson correlation coefficient of two variables allows establishing whether or not two measured variables fluctuate in the same way. The results indicate a coefficient of correlation and significance (Sig.). If Sig. <0.05, we can say that there is a correlation between two variables. The sign ** indicates the fact that a correlation is significant at a value of 0.01.

From the calculations made in Table 3 we are trying to see if there is a relationship between purchasing behaviour regarding the main categories of food products from the trademark of the large areas of supply. According to the correlation function, the people that are buying cold meat under the trademark of big suppliers are also buying soft drinks and canned food under the same trademark (Table 3).

Table 2

The most frequently sold food products

	The supplier's trademark	Valid Percent (basic food products)	Valid Percent (cold meat)	Valid Percent (canned food)	Valid Percent (soft drinks)	Valid Percent (sweets)
Valid	Aro	4.8	-	6.3	-	-
	Tip	6.3	1.6	7.9	-	3.2
	Clever	3.2	1.6	1.6	3.2	-
	Kaufland	28.6	28.6	23.8	17.5	27.0
	Real	38.1	39.7	39.7	46.0	38.1
	Other trademark	12.7	23.8	11.1	25.4	20.6
	Not applicable/ not using	6.3	4.8	9.5	7.9	11.1
	Total	100.0	100.0	100.0	100.0	100.0

*Table 3*Correlations

		Basic food products (flour, oil, sugar etc.)	Cold meat	Canned food	Sweet drinks	Water	Sweets	Other: spices
Basic food products (flour, oil, sugar etc.)	Pearson Correlation	1.000	095	.176	.141	.179	169	.038
	Sig. (2-tailed)		.457	.169	.270	.161	.185	.765
	N	63.000	63	63	63	63	63	63
Cold meat	Pearson Correlation	095	1.000	.251*	.421**	034	.243	131
	Sig. (2-tailed)	.457		.047	.001	.793	.055	.306
	N	63	63.000	63	63	63	63	63
Canned food	Pearson Correlation	.176	.251*	1.000	.285*	.125	.284*	.084
	Sig. (2-tailed)	.169	.047		.024	.328	.024	.513
	N	63	63	63.000	63	63	63	63
Sweet drinks	Pearson Correlation	.141	.421**	.285*	1.000	.011	.241	.122
	Sig. (2-tailed)	.270	.001	.024		.932	.057	.340
	N	63	63	63	63.000	63	63	63
Water	Pearson Correlation	.179	034	.125	.011	1.000	.289*	134
	Sig. (2-tailed)	.161	.793	.328	.932		.022	.296
	N	63	63	63	63	63.000	63	63
Sweets	Pearson Correlation	169	.243	.284*	.241	.289*	1.000	159
	Sig. (2-tailed)	.185	.055	.024	.057	.022		.214
	N	63	63	63	63	63	63.000	63
Other: spices	Pearson Correlation	.038	131	.084	.122	134	159	1.000
	Sig. (2-tailed)	.765	.306	.513	.340	.296	.214	
	N	63	63	63	63	63	63	63.000
* Correlation is signific	cant at the 0.05 level ((2-tailed).						
** Correlation is signif	icant at the 0.01 level	(2-tailed).						

Hypothesis 2 is partially verified. Young people that are buying cold meat under the trademark of big suppliers are also buying soft drinks and canned food under the same trademark.

Hypothesis 3. The main reasons related to buying food products that are under the trademark of big suppliers are: the low price, the quality of the ingredients, the promotional offers, the pleasant taste and the attractive package.

Factor analysis is an exploratory method of analysis of contingency tables developed by J.-P. Benzecri during 1970-1990. This marks a set of

diversified statistical methods whose primary objective is to define the structure of the correlations between a large number of variables (responses to a questionnaire), establishing a common set of dimensions, called factors.

The factor analysis helps identify the dimension of the structure and determine the extent to which each variable can explain each dimension. The two objective of the factor analysis are:

• Summarizing data. The factor analysis highlights dimensions, which, once interpreted, describe the data in a synthetic manner.

 Data reduction. This calculates the scores for each dimension and replaces the original variables.

If by using other methods (regression, analysis of dispersion, etc.) variables are considered as either dependent variables or independent, during the factor analysis, all variables are considered in relation to each other. Factors are created in order to maximize the explanation of the variables, not to predict the dependent variables. Therefore, factor analysis is adapted from an exploratory perspective.

The most used extraction method is the analysis of the principal components. This aims to summarize the quantitative data from a table of individuals/variables.

We are interested to know which are the factors that will be retained or, on the contrary, that will be removed as a result of an exploratory factor analysis. Consequently, as the factors are extracted, it is necessary to assess the convergent

and discriminatory validity of the factor, along with the reliability of the measurement scale. Convergent validity has to do with the fact that the responses obtained by means of various indicators have to be highly correlated; the discriminant validity is demonstrated when one factor is poorly correlated with another factor.

The KMO measurement (Kaiser-Meyer-Olkin) indicates to what extent the retained variables form a coherent set and appropriately measure the concept. This tests whether all partial correlations are weak. KMO values that are between 0.3 and 0.7 are acceptable factorial solutions. In this case, the KMO value is 0.5 (Table 4).

Table 5 points out the variation explained by each element. This must exceed 0.5 to be considered average and 0.65 to be considered good. For the items *quality of the ingredients* and *pleasant taste* the value is 0.792.

This last one-dimensional solution allows the interpretation of the variation in a proportion of 79.153% (Table 6).

Table 4

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	.500	
Bartlett's Test of Sphericity Approx. Chi-Square		25.136
	df	1.000
	Sig.	.000

Table 5
Communalities

	Initial	Extraction			
Quality of the ingredients	1.000	.792			
Pleasant taste	1.000	<mark>.792</mark>			
Extraction Method: Principal Component Analysis.					

Table 6
Total Variance Explained

	Initial values			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.583	79.153	79.153	1.583	79.153	79.153
2	.417	20.847	100.000			

Extraction Method: Principal Component Analysis.

Table 7 shows an acceptable internal consistency (alpha = 0.734). It is no longer possible to improve the Cronbach Alpha coefficient by eliminating another item. Thus the two elements, the quality of the ingredients and the pleasant taste are maintained.

Table 7

Reliability Statistics					
Cronbach's Alpha	N of Items				
.734	2				

Hypothesis 3 is partially verified. The main reasons for buying food products under the trademark of big suppliers are: the quality of ingredients and the pleasant taste.

CONCLUSIONS

The results of the study show young peoples openness towards buying products that are under the trademark of large areas of distribution. The most frequently purchased food products (basic food, cold meat, canned food, soft drinks, sweets) by young people are the following trademarks: Real and Kaufland. Young people that buy cold meat which is under the trademark of large suppliers, also buy canned food and soft drinks that are under the same trademark. A possible explanation

would be the intense promotion policy carried out by these suppliers with respect to these categories of food.

The main reasons for buying food products that are under the trademark of big suppliers are: the quality of the ingredients and the pleasant taste. Even if these food products are seen as having a lower price than other products from the same food category, however, the low price is not among the main reasons that influence young peoples purchasing behaviour. The same can be said about the promotional offers and the package of these products.

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