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SELECTED CHARACTERISTICS OF SLOVAK CONSUMERS PURCHASING BEHAVIOUR

Ľ. Nagyová, J. Stávková, Z. Tonkovičová

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Abstract

NAGYOVÁ, Ľ., STÁVKOVÁ, J., TONKOVIČOVÁ, Z.: *Selected characteristics of Slovak consumers purchasing behaviour.* Acta univ. agric. et silvic. Mendel. Brun., 2008, LVI, No. 6, pp. 69–76

Objective of the paper is to point out selected patterns of Slovak consumers based on analysis of buying behaviour. Results of presented survey of consumer buying patterns and preferences have pointed out key characteristics of buying behaviour of Slovak consumers. We're able to confirm that new business companies as hypermarket and supermarket became main place for food shopping. Totally 72% of respondents indicated them as the type of store where they spend largest share of food expenses. The self-service shop, traditional business units, is still the shopping place for 14% of respondents. The most important factors influencing selection of the type of store are closeness and location of the store, assortment and product quality, store personnel and price level. More than half of the respondents consider opening times the key service for choosing the place for shopping. 49.6% of respondents is using car to do shopping, 35.5% of respondents walk. 32.5% of respondents is using advertising leaflets to plan what to buy. 14.6% of respondents answered that even though receiving leaflets, they don't read them. 31.3% of respondents are holders of loyalty cards. Most visited retail chain is Tesco.
Currently building of large-scale business formats slowed down and retail chains try to get closer towards customer not only by reducing floor space but above all by locating the stores in the centre of cities with lower population.

consumer, purchasing behaviour, marketing research, trade, consumer decision factors

Current situation within environment in which retail chains realize their activities is changing constantly under influence of competitive forces and varying customer buying behaviour. Buying behaviour and customer decision making comes from the needs he feels and his shopping opportunities. These are further influenced by offer representing whole marketing mix. Therefore when analysing buying behaviour and decision making it is important to pay attention what product is customer buying, the amount and the price and where, when and how is the product offered (Stávková., 2006; Kretter; 2007, Kotler; 2001, Solomon; 2004). Planning and implementation of marketing strategies in the trade result from solid understanding of target market for purpose of optimizing trade assortment at maximum rate as well as sale techniques and shop ambience for customer demands. Retail chains should understand customer motives for shopping goods, what goods they buy frequently, favourite shopping time and style of shopping. Success and prosperity of retail chains depend on comprehending factors influencing customer buying behaviour and fulfilling customer needs and demands in rapidly changing market environment.

Lesáková (2003) brings attention to the new patterns in customer behaviour, to which may be included ambiguity and unpredictability, criticality and fastidiousness of customers, increasing demands on environment, maintaining the health and comfort, return to the nature, originality, meaning of life quest, insufficieny of time and with it related preference for products and services providing comfort, heavy increse of demand after all kinds of services, growing emotionalism, creativity demands, product designs and business partners.

Objective of the article is upon analysis to point out selected patterns of buying behaviour of Slovak consumers on the food market.

MATERIAL AND METHODS

Objective of the paper is to point out selected patterns of Slovak consumers based on analysis of buying behaviour. Considering that defined objective requires detailed information about consumer preferences and habits, marketing survey was performed. Primary survey was carried out in term February 2007–May 2007 by personal inquiries using prepared structured questionnaire.

The task of anonymous questionnaire was to analyse selected patterns of buying behaviour of Slovak consumers, detect factors influencing consumer behaviour during shopping and reasons for selecting shopping place. Questions at 1st part of questionnaire were divided to three task groups:

a) first part was oriented at respondent answers relating to shopping frequency and shopping place (types of the stores Slovak consumers prefer for buying food, how often and for how long they go shopping, forms of payment);
b) second part contained analysis of buying behaviour of Slovak consumers oriented at factors for selection of shopping place and styles of decision making process used while shopping (planned shopping, in advance prepared list of goods, spontaneous purchase and the like);
c) third part was directed to marketing communication of retail chains and consumer relations to communication activities of retail chains (advertising leaflets about bargains, sales promotion directly at stores, loyalty clubs).

2nd part of questionnaire consisted of classifying (demographic) questions.

Selection of respondents was carried out by random sampling method without repetition. Total of 425 respondents created sampling database. Data were processed and evaluated by Microsoft Excel. In order to test statistical hypotheses, program Statistics 6.0 had been used.

Beforehand of primary research following hypotheses were formulated:

Hypothesis 1 (H1): Slovak consumers prefer Friday or weekend shopping.

Hypothesis 2 (H2): Women spend more time shopping than men. There is existing dependency between time spent shopping and gender of customers.

Hypothesis 3 (H3): Slovak consumers spend greater part of food expenses shopping at hypermarkets and supermarkets than smaller grocery stores.

Hypothesis 4 (H4): Preference for shopping place relates to income and residence of customers.

Hypothesis 5 (H5): Greatest influence on choice of shopping place has vicinity of store, assortment and quality, price level and store opening hours.

Hypothesis 6 (H6): There is an existing dependency between the style of shopping (with or without in advance prepared list of goods) and age and gender of respondents.

Hypothesis 7 (H7): There is an existing dependency between the influence of advertising leaflets on buying decision making and age, gender, education, net monthly income and residence of consumers.

Verification of dependency between research results and characteristics of respondents was realized by χ^2 – test (chi-square test). Dependency between qualitative signs was analysed through association and contingency. Association explores relation between alternative indexes with two variables. Contingency deals with relation between multiple indexes with larger number of variables. Existence of dependency between indexes had been verified by

χ^2 – test (chi-squared test), which is based on comparing observed and theoretical frequency for each category of monitored indexes (Foret, M., Stávková, J.; 2003). Test criterion for verification of a null hypothesis H_o presuming independence between given qualitative signs is calculated from equation:

$$\chi^2 = \sum_{i=1}^{r}\sum_{j=1}^{c}\frac{(O_{ij} - E_{ij})^2}{E_{ij}} \tag{1}$$

Where: O_{ij} – an observed frequency in cell at i- row and j- column,
E_{ij} – theoretical frequency in cell at i- row and j- column,
r – number of categories of first (row) sign,
c – number of categories of second (column) sign.

Theoretical frequency Eij from equation:

$$E_{ij} = \frac{(R_i)*(C_j)}{n} \tag{2}$$

Where: R_i – frequency sum at i- row,
C_j – frequency sum at j-column,
n – total frequency.

Alternative hypothesis H_1 assumes that there is dependency (association) between given qualitative signs. If H_1 is true, then H_0 is rejected. In case the calculated value of tested criteria $\chi^2 < \chi^2_\alpha$, where is a tabular value for (c – 1)·(r – 1) degrees of freedom then $P(\chi^2 > \chi^2_\alpha) = \alpha$ (α is significance level at which test is realized) is true.

When $\chi^2 > \chi^2_\alpha$, H_1 hypothesis is accepted, hence for selected significance level the signs are dependant. Interdependencies are tested by P-value. Closer is the value to zero, higher is the degree of dependency. χ^2 – test had been applied with principles valid for using this method.

The strength of dependency between qualitative signs had been evaluated by calculating Pearson's contingency coefficient from equation:

$$C = \sqrt{\frac{\chi^2}{n + \chi^2}} \tag{3}$$

Where: χ^2 – degree of contingency,
n – frequency total.

This coefficient C gains values from 0 to1. Closer the value is to zero, lesser the dependency is between qualitative signs. Analogically the association is higher when C-value is nearing value 1.

RESULTS

Respondent characteristics

Sampling group of 425 respondents can be defined by demographic characteristics, such as gender, age, education, economical activity, number of household members, net monthly household income, residence and region.

The total of 425 respondents was formed by 28.2% men and 71.8% women.

The largest age category created respondents up to 25 years (40.2%) and age 26–35 years (20.7%).

The survey had been attended by 65.6% of high school graduates, 20.7% of university graduates and 13.2% of respondents with trade school education and two respondents (pensioners) with elementary education.

Structure of respondents by economical activity creates two categories – employed (68.5% of respondents) and unemployed. Unemployed group consists of students (79.9%), pensioners (6.7%), women with maternity leave (5.2%) and unemployed (8.2%).

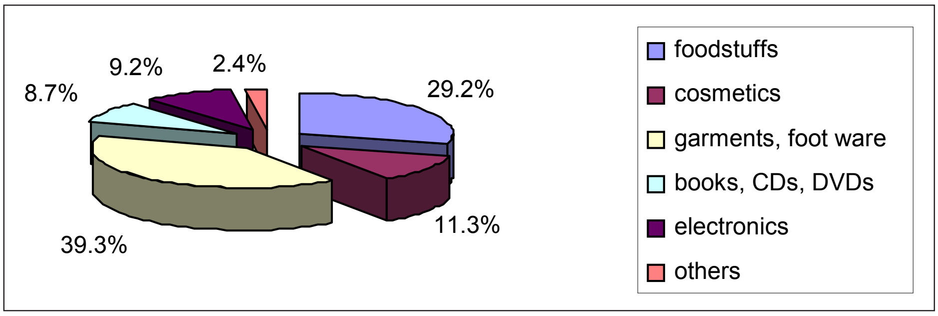
Most households are formed by 4-member (36.2%) and 3-member families (24.0%). Least of respondents belong to categories living alone (5.41%) or more than 6-member families (10.4%).

Net monthly household income divides groups into over 20,000 Sk (60.5%), almost one quarter of respondents belong to 20,001 Sk – 25,000 Sk group, 19.5% of respondents belong to group 25,001 Sk – 30,000 Sk and 7.76% is over 30,000 Sk.

Ratio of respondents living in the city (62.8%) exceeded number of the ones from country (37.2%) at all the Slovak regions.

Marketing survey of buying patterns of Slovak consumers

According to individual segments of products, the highest preferences from consumers received assortment of garments and foot ware (39.3%). Second place in terms of popularity belongs to foodstuffs (29.2%). Buying preferences of other categories are shown at fig. 1. At the group “other” respondents specified these – furniture, household equipment, cars.



Source: custom questionnaire survey, custom processing

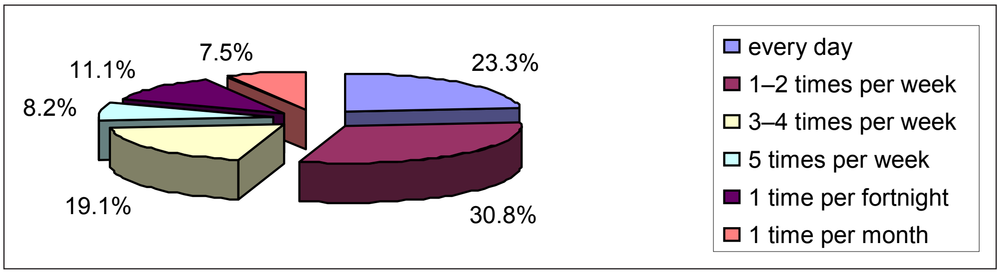
1: *What products do you like best to shop for? (% from total of respondents)*

Other important factor of consumer behaviour is frequency of shopping – almost one third of respondents are shopping 1 – 2 times per week (30.8% from the total). About one quarter stated that they are shopping everyday. The answers are shown in fig. 2.

Result of the consumer habits research is that respondents are mostly shopping on Friday (38.8% from the total) and during the weekend (35.1% from the total of respondents). According to frequency of response appearance we can confirm that *Hypothesis 1 (H1)* about Friday or weekend shopping preference of Slovak consumers is true. The results of positive responses for individual days are shown at table I.

I: *Frequency of response appearance for survey question – Validation of Hypothesis about Friday or weekend shopping preference*

Preferred shopping day	Number of positive responses (YES)	% from total number
Monday	38	8.94
Tuesday	29	6.82
Wednesday	33	7.76
Thursday	40	9.41
Friday	165	38.82
During the weekend	149	35.06



Source: custom questionnaire survey, custom processing

2: *How often do you go shopping? (% from total number of respondents)*

In terms of preferred time for shopping, most of the respondents (65.4%) go shopping in the afternoon from 12 pm to 6 pm, 19.3% of respondents prefer morning time from 6 am to noon and 15.3% likes to shop in the evening hours from 6 pm to midnight. None of the respondents go shopping between midnight and 6 am.

Divided by average time spent shopping, almost 90% from total number of respondents usually spend shopping more than 10 minutes – that is 32.5% around 30 minutes, 31.3% around 1 hour and 25.6% more than 1 hour. Less patient customers are men – 25% of male respondents are fast shoppers spending less than 10 minutes at the store and 30.8% of addressed men spend shopping maximum 30 minutes (Table II).

Based on *Hypothesis 2 (H2)* we investigated whether there is the dependence between the time spent shopping and gender of customers. This hypothesis was verified by χ^2 – test of association of qualitative signs. Strength of dependency had been calculated by Pearson's contingency coefficient.

II: *Frequency of response appearance for survey question*

Gender	What is the average time you spend shopping?				Total
	10 minutes)	30 minutes	1 hour	More than 1 hour	
Male	30	37	28	25	120
% from total number	7.06%	8.71%	6.59%	5.88%	28.24%
Female	15	101	105	84	305
% from total number	3.53%	23.76%	24.71%	19.76%	71.76%
Subtotal	45	138	133	109	425
% from total number	10.59%	32.47%	31.29%	25.65%	100.00%

Source: custom questionnaire survey, custom processing

Based on the results (Table III) we can assume that calculated value of test criteria χ^2 is higher than critical value χ^2_{tab}, therefore null hypothesis H_0 about independence of time spent shopping and gender of consumers is rejected and hypothesis H_1 about association between quoted quantitative signs is accepted. Value of Pearson's contingency coefficient (C = 0.2859) confirms weak dependency.

III: *Testing of independence between the time spent shopping and gender of the respondents*

Test name	Test	Statistics	df	P-Value
Independence test	Chi-square	37.8356	3	0.0000
Dependency strength	Contingency coefficient	0.2859		

Source: custom questionnaire survey, custom processing

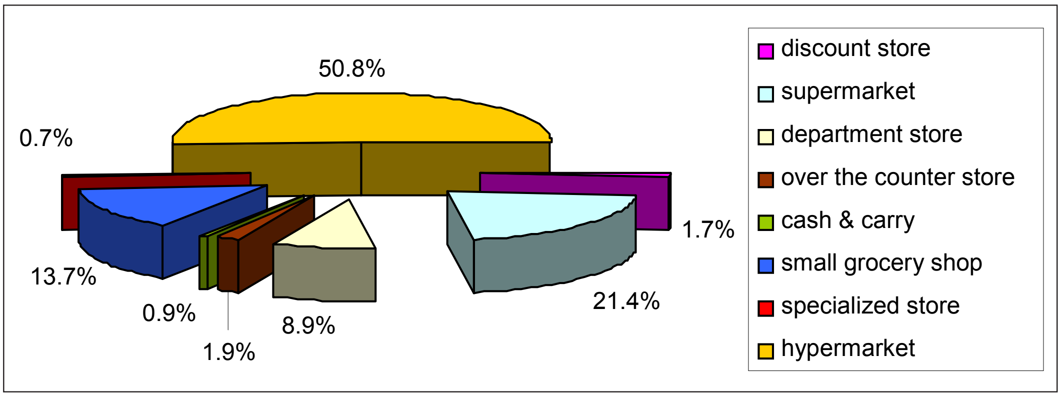
In terms of payment for the realized purchase, there are 3 categories of respondents:

a) 83.8 % pay cash
b) 14.8 % use bank card
c) 6 respondents pay by luncheon vouchers.

The opinions of respondents about stores being open on Sundays seem very interesting. 58.6% from the total number of respondents answered that stores should be open on Sundays. Based on that response it appears that consumers don't wish for stores opening times restriction and don't agree with closing the stores on Sundays.

In the following part of questionnaire, respondents should have selected the type of store in which they spend most of the food expenses. The results are shown at fig.3. The largest part of food expenses is spent at hypermarkets (50.8%), supermarkets (21.4%) and smaller grocery stores (13.6%).

Based on frequency of response appearance it's confirmed that specified *hypothesis 3 (H3)* rightly defines selecting place for shopping by amount of food expenses. Addressed consumers spend better part of food expanses at hypermarkets and supermarkets than at smaller grocery stores.



Source: custom questionnaire survey, custom processing

3: *What is the type of store you spend in the largest part of food expenses? (% from total number of respondents)*

When entering the store, the attention of 65% of respondents goes to store lay-out and amount of shoppers. Product arrangement is first to attract the attention of 16.2% of respondents. Background music and lighting is interesting right after entering the store for 14.8% of respondents, while at the option "Other" respondents specified store personnel, cleanness and number of customers at the cashiers.

Questionnaire survey was directed at specifying most important factors for respondents to select place for shopping (particular store). Respondents should express their attitude towards listed criteria for selecting place for shopping. From responses, these have strongest influence: store closeness, assortment and quality of products, price level and store personnel. Factors which have no influence for choosing shopping place: habit of shopping at particular store or sufficient parking volume (Table IV).

As the most important factor for selecting place of shopping respondents determined closeness of the store, assortment and quality of offered products, price level, politeness and helpfulness of the personnel, store appearance and promptness at cash registers. These results confirm correctness of *hypothesis 4 (H4)* about relevance of mentioned factors and their influence on respondents choice of shopping place.

Hypothesis 4 testing confirmed slight dependency between preference of shopping place and residence of respondents. Dependency between preference of shopping place and net monthly household income was not confirmed.

Store services which have really strong influence on selection of shopping place are these – store opening times, customer services (information, gift packaging, etc.), option for paying by bank card and face-to-face contact with the store personnel – *hypothesis 5 (H5)* – (Table V).

Divided by the means of transport, 49.6% of respondents is using car to go shopping, 35.5% of respondents walk and 9.7% is using public transportation. Bicycle or motorcycle work for 5.2% of respondents when going shopping.

Almost a fifth of respondents don't plan their shopping, buy food impulsively by the offer, 38.1% of respondents plan what to buy but don't use list of items and 36.9% of respondents plan the list of items. And using beforehand made list of products to buy is 6.6% of respondents.

We assumed there is an existing dependency between the style of shopping and identification criteria age and gender of respondents. This assumption was expressed as ***hypothesis 6 (H6)***: the style of shopping depends of gender of respondents. Used statistical methods confirmed dependency between referred quantitative signs. Pearson's contingency coefficient

(C = 0.2420) confirmed weak dependency. Likewise weak dependency exists between the style of shopping and age of respondents.

Less than 2% of respondents don't receive advertising leaflets and 32.5% of respondents is using leaflets to plan shopping. Current bargain products listed in the leaflets, but not further information about them are interesting for 51.8% of respondents. Up to 14.6% of respondents don't read the leaflets they receive.

IV: *Factors for selection of shopping place (% from total number of respondents)*

Factors for selection of shopping place	Very strong influence	Fairly strong influence	Strong influence	Slight influence	No influence
Closeness of store to residence or wok place	45.7%	26.4%	15.5%	8.2%	4.2%
Assortment and quality of products	41.2%	41.2%	15.7%	1.4%	0.5%
Price level	40.9%	36.0%	19.3%	2.1%	1.7%
Store appearance (cleanness, arrangement, design)	32.2%	36.0%	26.6%	4.0%	1.2%
Polite and helpful personnel	41.2%	32.2%	22.3%	3.8%	0.5%
Distinctly marked products	24.9%	30.6%	34.4%	8.7%	1.4%
Attractive advertisement	4.3%	12.9%	32.5%	36.9%	13.4%
Sufficient parking space	9.6%	17.2%	25.9%	21.6%	25.7%
Promptness of cashiers	35.3%	31.0%	24.0%	7.3%	2.4%
Supply of mostly Slovak range of products	9.7%	22.3%	24.9%	27.8%	15.3%
Shopping at this store is a habit, tradition	5.7%	14.6%	24.9%	27.5%	27.3%
Other: name/brand of store recommendation background music at store volume of shoppers	1.2%	1.7%	-	-	-

Source: custom questionnaire survey, custom processing

V: *Customer services influence on selection of the shopping place (% from total number of respondents)*

Store services	Very strong influence	Fairly strong influence	Strong influence	Slight influence	No influence
Opening times	28.5%	35.1%	23.3%	10.3%	2.8%
Customer services (information, gift packaging, gift vouchers, home delivery)	9.9%	29.4%	32.9%	22.1%	5.7%
Face-to-face contact with the store personnel	12.0%	22.6%	33.4%	25.9%	6. %
Restaurant/Cafe as part of the store	5.4%	10.8%	19.8%	40.0%	24.0%
Children's corner, children's cash register	4.5%	6.8%	12.7%	29.9%	46.0%
Option for paying by bank card	20.7%	21.2%	20.5%	22.6%	15.0%
Barrier-free access	9.2%	14.1%	19.5%	24.9%	32.0%
Store financial services (installment sale, credit)	6.3%	19.1%	20.0%	28.9%	25.0%
Price checking scanners	12.7%	19.1%	28.9%	25.2%	14.1%
Other: Complaints solving Cleanness and accessibility of toilets	1.4%	0.7%	0.2%	0.2%	-

Source: custom questionnaire survey, custom processing

Based on assumption that influence of advertising leaflets on buying behaviour depends on criteria of age, gender, education, income and residency of respondents, ***hypothesis* 7 *(H7)*** had been formulated. Correctness of this hypothesis had been tested by χ^2 test of independency of quantitative signs. Hypothesis H_1 is accepted about existing dependency of advertising leaflets and gender of respondents. Pearson's coefficient confirmed weak dependency. With age and education criteria the dependency had been rejected. Weak dependency between referred signs exists with residence criteria.

Communication tools of sales promotion directly at stores are accepted positively and influence buying decision making by 81.9% of respondents, on the other hand 18.1% of respondents are harassed by such communication activities while shopping. Some retail chains try to win over the customers and increase their loyalty by organising loyalty clubs. 31.3% of total number of respondents was holders of various loyalty cards. Mostly they were members of Billa Club, Metro customer card, COOP Jednota loyalty card and Nitrazdroj.

The largest number (61.4%) of respondents specified that from the store they expect firstly bargain purchase for low prices. Almost one third of respondents expect mainly saving time and increasing comfort while shopping. Entertainment, relax, communication and interesting benefits while shopping is interesting for 9.6% of respondents.

Most of respondents (58.4%) go shopping most frequently to Tesco retail chain, 14.4% to Kaufland, 11.8% to Billa chain of supermarkets and 3.8% of respondents go shopping to Metro wholesale chain.

CONCLUSION

Rapidly changing lifestyle of consumers, demographic and geographic changes significantly influence retail trade trends. Retail marketing strategy is closely connected with choice of business format, selecting a specific group of consumers and gaining a sustainable competitive advantage. Current situation at business webs is characterized by offer of the same or similar food assortment. Differences are wearing off at provided services and opening hours as well. Efforts of commercial companies to differentiate from the others are linked with emphasizing food freshness and quality, environmental protection and providing advantages for loyal customers. Communication with consumers through marketing mix tools, mainly advertising leaflets and brochures is of great importance also. Requirements for winning a loyal customer over are also positive image and store ambience and selection and quality of provided services. Quite so important is trouble free, fast and comfortable shopping connected with good buying experience.

SÚHRN

Vybrané charakteristiky nákupného správania slovenských spotrebiteľov

Cieľom príspevku bolo na základe analýzy poukázať na vybrané charakteristiky nákupného správania slovenských spotrebiteľov na trhu potravín. Výsledky realizovaného prieskumu spotrebiteľských zvyklostí a preferencií pri nákupe potravín poukázali na hlavné charakteristiky nákupného správania slovenských spotrebiteľov. Možno potvrdiť, že nové obchodné spoločnosti typu hypermarket a supermarket sa stali hlavným miestom nákupu potravín. Celkovo 72 % respondentov označilo tieto formáty ako typ predajne, kde minú najväčšiu časť výdavkov na potraviny. V tradičnej obchodnej prevádzke – v samoobsluhe, nakupuje 14 % respondentov. Za najdôležitejšie faktory, ktoré majú silný vplyv na rozhodnutie o výbere predajne, respondenti označili blízkosť a umiestnenie predajne, sortiment a kvalitu tovaru, obchodný personál a cenovú úroveň. Viac ako polovica respondentov považuje otváraciu dobu predajne za najdôležitejšiu službu pri výbere miesta nákupu. 49,6 % respondentov používa pri nákupe potravín osobný automobil, 35,5 % respondentov chodí pešo. 32,5 % respondentov využíva na plánovanie nákupu reklamné letáky. 14,6 % respondentov uviedlo, že reklamné letáky dostáva, ale ich nečíta. 31,3 % z opýtaných je držiteľom zákazníckej karty. Najnavštevovanejším obchodným reťazcom je Tesco.

V súčasnosti sa výstavba veľkoplošných obchodných formátov spomalila a obchodné reťazce sa snažia viac priblížiť k zákazníkovi, nielen zmenšovaním predajnej plochy, ale najmä lokalizáciou predajní do centier miest s menším počtom obyvateľov.

spotrebiteľ, nákupné správanie, marketingový výskum, obchod, faktory spotrebiteľského rozhodovania

REFERENCES

FORET, M., STÁVKOVÁ, J., 2003: *Marketingový výzkum – Jak poznávat své zákazník* [Marketing research – How to understand our consumers]. Praha: Grada, s. 160. ISBN 80-247-0385-8

HORSKÁ, E., 2007: European business and internationalization: challenges and obstacles for marketing strategies in the Europe of regions. In: *Proceedings of the International Conference on The path of internationalization and integration in the Europe of regions.* Bucuresti: Editura Ceres, s. 159–180. ISBN 978-973-709-322-6

KOTLER, P., 2007: *Marketing manažment*. Praha: Grada, 720 s. ISBN 8024700166

KRETTER, A. a.i., 2007: *Marketing.* Nitra: SPU, 287 s. ISBN 978-80-8069-849-2

LESÁKOVÁ, D., 2003: Marketingové stratégie pre európsky trh. In: *Marketingová panoráma,* 1, 2: 2–6. ISSN 1336-1864

SOLOMON, M. R., 2004: *Consumer Behaviour Buing, Having, and Being.* Saddle River: Pearson Prenctice Hall, 621 s. ISBN 0-13-123011-5

STÁVKOVÁ, J. a i., 2006: *Trendy spotřebitelského chování.* [Consumer behaviour trends]. 1. vyd. Brno: MSD, 115 s. ISBN 80-86633-59-4

ŠIMO, D., 2006: *Agrárny marketing* [Agrarian marketing]. Nitra: SPU, 322 s. ISBN 80-8069-726-4

VICEN, M., 2005: Solution of marketing problems with regard to the distribution of goods. In. *Acta economica et informatica,* 8, 2: 45–49. ISBN 1335-2571

Address

prof. Ing. Ľudmila Nagyová, PhD., Ing. Zuzana Tonkovičová, Katedra manažmentu a marketingu, Fakulta ekonomiky a manažmentu, Slovenská poľnohospodárska univerzita, Tr. A. Hlinku 2, 949 76 Nitra, Slovenská republika, e-mail: ludmila.nagyova@uniag.sk, sedmikraska@post.sk, prof. Ing. Jana Stávková, Ústav marketingu a obchodu, Mendelova zemědělská a lesnická univerzita v Brně, Zemědělská 1, 613 00 Brno, Česká republika, e-mail: stavkovaova@mendelu.cz