Consumer Satisfaction with City Markets in Croatia

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SUMMARY

The purpose of this study was to investigate consumer satisfaction with city markets in Croatia. Empirical research was conducted on a multiple stratified sample of 475 buyers at city markets in Zagreb, Split, Rijeka and Osijek. The consumer satisfaction was explained by means of Conformation/Disconformation-Paradigm (C/D Paradigm). The regression analysis was used to test the hypothesis about positive relationship between overall and partial satisfactions. The ANOVA analysis was used to test other hypotheses. Regression analysis indicates positive relationship between consumers overall satisfaction and their partial satisfactions ($R^2=0.504$). Quality ($\beta=0.297$), choice ($\beta=0.231$) and freshness of products ($\beta=0.175$) were the most important drivers of overall consumer satisfaction, with crowding at city markets ($\beta=0.112$) and information obtained at markets ($\beta=0.078$) significant but less important. Statistical analyses indicate that there are no significant relationship between consumers sociodemographic characteristics and their satisfaction with city markets. The results of the research show straightness and weaknesses of the city markets in Croatia. Information obtained from this research could be used to keep and increase strategic advantages of this selling.

KEY WORDS

city markets, consumers, regression analysis, satisfaction

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Zadovoljstvo potrošača tržnicama na malo u Hrvatskoj

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SAŽETAK

Predmet ovog rada je zadovoljstvo potrošača kupovinom na tržnicama na malo u Hrvatskoj. Empirijsko istraživanje je provedeno na strukturiranom uzorku od 475 kupaca na tržnicama na malo u Zagreb, Splitu, Rijeci i Osijeku. Zadovoljstvo potrošača objašnjeno je pomoću Conformation/Disconformation-Paradigm (C/D paradigme). Za testiranje hipoteze o pozitivnoj vezi između ukupnog i parcijalnih zadovoljstava potrošača korištena je regresijska analiza. Ostale hipoteze testirane su jednovarijantnom analizom varijance (ANOVA). Utvrđena je pozitivna veza između ukupnog i parcijalnih zadovoljstava potrošača (R^2 = 0,504). Na ukupno zadovoljstvo potrošača najviše utječu kvaliteta (β = 0,297), izbor (β = 0,231) i svježina proizvoda (β = 0,175). Manji, ali statistički signifikantan utjecaj na ukupno zadovoljstvo ima i (ne)zadovoljstvo gužvama na tržnicama (β = 0,112) kao i zadovoljstvo informacijama dobivenim na tržnicama (β = 0,078). Nisu utvrđene statistički značajne razlike između ukupnog zadovoljstva i sociodemografskih obilježja ispitanika. Istraživanje ukazuje na prednosti i nedostatke tržnica na malo u odnosu na konkurentska prodajna mjesta. Prodavači na tržnicama na malo i management tržnica mogu koristiti dobivene informacije da bi zadržali i povećali strateške prednosti ovog prodajnog puta.

KLJUČNE RIJEČI

potrošači, regresijska analiza, tržnice na malo, zadovoljstvo

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INTRODUCTION

Consumers buying behaviour is influenced by their satisfaction. Consumers satisfaction with the bought product as well as with the selling channel creates a presumption of repeated purchase (Kovačić, Kolega, Radman, 2000). Therefor, for a successful marketing it is necessary to find out is consumer satisfied or not, what are the reasons for his dissatisfaction and how does that influence his buying behaviour (Meixner, 1998). "Considerable empirical evidence indicates a positive link between customer satisfaction and business performance" (Matanda et al., 2000). Many companies recognise customers' satisfaction as a critical success factor for the company (Töpfer and China, 1997, Adebanjo, 2001, Meixner, 1998).

The purpose of this study was to investigate consumer satisfaction with city markets in Croatia. In the section that follows the theoretical background of consumer satisfaction is discussed. Research hypotheses are given at the end of the chapter. Next are described the methods used in the study. The paper concludes with the results of the research and discussion.

Consumer satisfaction

Consumers satisfaction is becoming more and more important in marketing theory and practice (Marušić & Vranešević, 2001; Stauss, 1999; Bailom et al., 1999; Simintiras et al., 1997; Haas,1998). There are numerous constructs for describing consumer satisfaction but the most important are the Disconformation-Paradigm (C/D paradigm), Equity Theory and Attributes Theory (Stauss, 1999, p. 6; Meixner, 1998, Homburg & Rudolph, 1998) with the C/D paradigm as the most popular in the literature (McQuitty et al., 2000, Homburg & Rudolph, 1998, Haas, 1998). According to the C/D paradigm, consumer satisfaction is a result of the comparative judgement of perceptions of performance during and after the consumption experience and pre-purchase expectations (Stauss, 1999; Meixner,1998). Buyers compare the perceived product or service (the "is state") with their expectations (the "should state"), which results in satisfaction ("is">"should") or dissatisfaction ("is"<"shoud"). (McQuitty et al., 2000; Stauss, 1999; Töpfer & China, 1997; Bailom et al., 1996). Some authors note that there is also a neutral state when perceived performance is equal to expectations (Bailom et al., 1996, Matanda et al., 2000).

As a theoretical construct consumer satisfaction could be measured only indirectly. The C/D paradigm of consumer satisfaction is carried on by means of the multi-dimensional measuring approach that presumes that satisfaction with a product or service could be derived from partial satisfaction with product/service attributes (cf. Stauss, 1999; Meixner, 1999). Haas (1998) noted that overall satisfaction depends on partial satisfaction with single attributes as well as on the relative importance of those attributes:

$$SD_{overall} = \sum \beta_i SD_i$$

with

$SD_{overall}$ – overall (dis)satisfaction of the object being judged
β_i - importance of the attribute i for the overall satisfaction
SD_i – satisfaction of the attribute i of the object being judged

The key part of this approach is the determination of the relative importance of the individual attributes of performance in the context of overall satisfaction. Using regression analyses it is possible to calculate from empirical date how great impact each partial satisfaction has on overall satisfaction. (Marušić & Vranešević, 2001; Meixner, 1999; Haas,1998). The importance of each partial satisfaction is shown as regression coefficient (Meixner, 1999; Strauss, 1999).

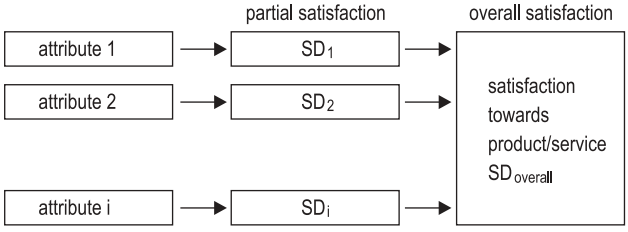

Figure 1. Relationship between overall satisfaction and partial satisfactions with product attributes (Meixner, 1998)

Research hypothesis

H1: There is a positive relationship between overall satisfaction $SD_{overall}$ with city markets and satisfactions with individual attributes of the market and attributes of fruit and vegetables sold at those markets. The individual attributes are: quality, freshness, choice and price/quality ratio of fruit and vegetables sold at city markets, contacts with salespersons and information about fruit and vegetables obtained at city markets, working hours and crowd at city markets.

H2: There is a relationship between sociodemographic characteristics of consumers and their overall and partial satisfactions with city markets. The sociodemographic characteristics that were tested are: age, sex, education, number of family members and family income, place of residence and consumers' origin (rural or urban).

H3: The greater the overall and partial satisfactions the more frequently consumers purchase at city markets.

METHODOLOGY AND RESEARCH PROCESS

Survey

The mail survey was carried out in June 2000 on a sample of 1000 respondents in order to obtain empirical data. The target population for this research included all Croatian citizens who buy at city markets or consume fruit and vegetables bought at these markets in Croatia. This means a population of about 2 million consumers, according to expert estimates (Kovačić et al., 2000).

A random stratified sampling procedure was used to select customers at city markets in four Croatian cities (Zagreb, Split, Rijeka and Osijek). The stratums were defined on the base of the number of the inhabitants in four mentioned cities (Census 1991, the last data available at the time of the research). These customers were handed the questionnaire and requested to return the questionnaires by mail after filling them in. Since the return rate was expected to be low, 1000 questionnaires were distributed to reach the objective of 400 completed questionnaires.

The questionnaire was organised into several groups of questions: demographics, buying behaviour characteristics, importance of information on purchased fruit and vegetables and consumer satisfaction/dissatisfaction.

The scale used to measure overall and partial consumer satisfaction/dissatisfaction was a five-point itemised rating scale anchored at 1 = "completely dissatisfied" and 5 = "very satisfied".

Data analyses

The data obtained from the survey were analysed with univariate analysis in order to check distributions of frequencies and to detect possible errors occurring during the research and/or data entering.

Multiple regression analysis is a method used to analyse a relationship between one dependent variable and one or more independent variables (cf. SPSS Base 8.0 Applications Guide, 1998; Backhause, 1996; Meixner, 1998). Therefore we used this analysis to test the hypothesis that the relationship between partial consumer satisfactions with city markets in general and attributes of fruit and vegetables sold at these markets and their overall satisfaction is positive. The stepwise selection method, the most commonly used method (SPSS Base 8.0 Applications Guide, 1998), was applied to calculate regression coefficients, that is weightings for each partial satisfaction.

Univariate analysis of variance (ANOVA) was used to test the hypothesis about relationship between satisfaction and respondents' characteristics.

RESULTS AND DISCUSSION

Sample characteristics

Three quarters of all respondents were women. Respondents were aged between 16 and 87, with an average of 47 years. The majority of the respondents had finished secondary school (53%), a further 42% have higher education and 5% of respondents had completed only primary school. The majority of respondents have a four-member family and a monthly income over 3000 kunas.

A large majority of respondents (90%) buy fruit and vegetables, and 93% of them usually buy them at city markets. More than half of respondents buy at just one city market. Most of them visit city markets a few times a week, usually on Saturday and Friday. More than four fifths of respondent visits city markets in the morning hours.

The variety of fruit and vegetables choice, acceptable prices, quality and freshness of products are the main motives for purchase at city markets. The choice of the market mainly depends on the product assortment, the distance of a market from living or working place, as well as the quality of supplied products. The main criterion for a product choice is freshness, followed by quality, bio and home production. Less important for buyers are information about purchased products and purchasing convenience.

Figure 2. Consumer satisfaction with city markets

The customers are relatively satisfied with city markets. The average overall satisfaction is 3.8 as rated on a scale from 1 (completely unsatisfied) to 5 (completely satisfied). Respondents are mainly satisfied with product range (3.91), quality (3.87) and freshness (3.85) of the fruits and vegetables. They are less satisfied with the price/quality ratio (3.12).

Relationship between overall satisfaction and partial satisfaction

Using the stepwise selection method five variables were entered in the regression model: satisfaction with quality, choice and freshness of fruit and vegetables, (dis)satisfaction with crowd at city

Table 1 Regression model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603	.364	.362	,53
2	.663	.440	.437	.50
3	.690	.476	.471	,49
4	.704	.495	.489	.48
5	.710	.504	.497	.47

markets and satisfaction with information obtained at markets. Satisfaction with price/quality ration of fruit and vegetables, satisfaction with contacts with salespersons and satisfaction with the markets' working hours are found to have no influence on overall satisfaction.

As shown in table 1, the model obtained explains 50.4% of variability in overall satisfaction. Using regression coefficients we could formulate the model as follows:

$$SD_{overall} = 0.515 + 0.297*SD_{quality} + 0.231*SD_{choice} + 0.112*SD_{crowd} + 0.175*SD_{freshness} + 0.078*SD_{information}$$

As expected the relationship between overall satisfaction and partial satisfaction was positive. Satisfaction with product quality had the greatest influence on overall satisfaction. The second most important attribute was fruit and vegetables choice.

Using a 95 per cent confidence interval, the model of overall satisfaction for the whole population could be written as follows:

Relationship between sociodemographic characteristics of consumers and their overall and partial satisfactions

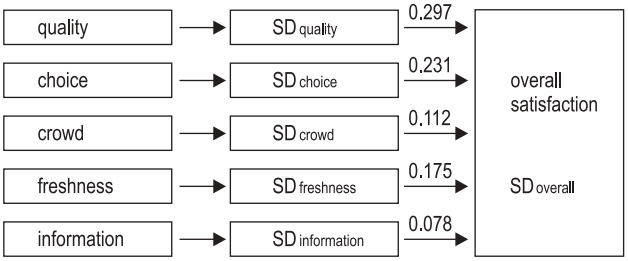

Figure 3. Empirical model of overall satisfaction

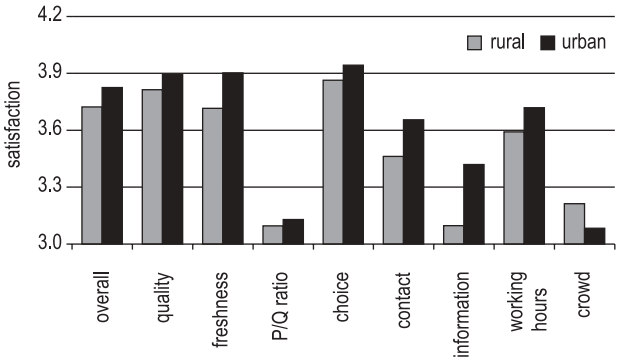

Figure 4. Differences between "rural" and urban population according to their satisfaction

(cf. Perreault & McCarthy, 1996). This poses a question: is a mail survey the appropriate method for gathering data about consumer satisfaction? Another reason for the low level of variance could be that dissatisfied consumers never or rarely purchase at city markets and therefore they were not included in the sample.

ANOVA analysis was also used to test the relationship between consumers satisfaction and their origin (rural or urban) and place of residence. The overall

$$SD_{overall} = \begin{pmatrix} 0.166 \\ \beta_0 \\ 0.864 \end{pmatrix} + \begin{pmatrix} 0.188 \\ \beta \\ 0.407 \end{pmatrix} SD_{quality} + \begin{pmatrix} 0.150 \\ \beta \\ 0.312 \end{pmatrix} SD_{choice} + \begin{pmatrix} 0.055 \\ \beta \\ 0.168 \end{pmatrix} SD_{crowd} + \begin{pmatrix} 0.067 \\ \beta \\ 0.282 \end{pmatrix} SD_{freshness} + \begin{pmatrix} 0.017 \\ \beta \\ 0.139 \end{pmatrix} SD_{information}$$

Relationship between consumers' satisfaction and their age, sex, education, number of family members and family income were tested. No significant relationship (sig.<0.05) between these sociodemographic characteristic of consumers and their satisfaction was found.

One reason could be small level of variation in the data on satisfaction. We found some evidence in the literature of the same problem (Haas, 1998). The proportion of dissatisfied or completely dissatisfied respondents in this research was about 5%. It could be possible that respondents dissatisfied with city markets did not fill in and return the questionnaire they got from the researcher at the city market

satisfaction and all partial satisfactions except dissatisfaction with crowd at city markets of people grown up in cities were higher than the satisfaction of those respondents grown up in rural areas (Fig. 4).

However, using ANOVA analysis we found out that significant differences (sig.<0.05) between "rural" and urban population exist only according to their satisfaction with freshness of fruit and vegetables sold at city markets. The average evaluation of satisfaction with product freshness of people grown up in cities was 3.90 and those grown up in rural areas 3.71. The reason for it could be the fact that the "rural population" has had the opportunity to use fresh products daily and is able to compare these products with those sold at city markets.

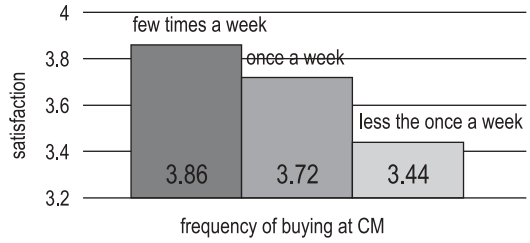

Figure 5. Relationship between overall satisfaction and frequency of baying at city markets

Differences between the two populations according to overall satisfaction and all other partial satisfactions have not been found as significant.

Additionally, analysis showed that place of residence also significantly (sig. <0.05) influences consumer satisfaction with product freshness. Consumers from Osijek (which more likely have connection with rural area) are less satisfied with freshness of fruit and vegetables sold at city markets (average satisfaction 3.60). They are followed by respondents from Zagreb (3.82) and Split (3.94). Most satisfied with freshness of fruit and vegetables are respondents from Rijeka (3.97).

Relationship between consumer satisfaction and frequency of purchasing

In order to test the relationship between consumer satisfaction and frequency of purchase at city markets we used a closed-type question "How often do you purchase fruit and vegetables?". Respondents could use one of three answers: "a few times a week", "once a week" and "less than once a week". Univariate analysis of variance showed that there exists a significant difference (sig.<0.01) between overall satisfaction and consumers' frequency of purchase at city markets. As expected, consumers who purchase at city markets more often are more satisfied and vice versa. (Figure 5)

ANOVA analysis was also used to test the relationship between consumers partial satisfactions and frequency of purchase at city markets. Significant relationship was found between frequency of purchase and consumers satisfaction with fruit and vegetables freshness and choice, as well as with crowd at markets. Again, more satisfied consumers purchase more often and vice versa (Table 2). Satisfaction with quality and information obtained at city markets don't have significant influence on frequency of purchase.

Table 2. Consumer satisfaction and frequency of purchasing at city markets

Satisfaction	Frequency of purchasing	$\bar{x}$ *	Sig.
Freshness	few times a week	3.9048	0.006
	once a week	3.7682	
	less than once a week	3.4737	
Choice	few times a week	3.9728	0.008
	once a week	3.8533	
	less than once a week	3.4737	
Crowd	few times a week	2.9821	0.080
	once a week	2.8971	
	less than once a week	2.2778	

* 5 – very satisfied; 1 – very dissatisfied

CONCLUSIONS

There is a relationship between consumer overall satisfaction and their partial satisfactions with fruit and vegetables and city market attributes and this relationship is positive (R^2 = 0.504). A significant influence on overall satisfaction is exercised by product quality, choice and freshness, crowd at city markets and the information obtained at city markets. The highest influence on overall satisfaction is exercised by quality of products (β = 0.297) and choice of products (β = 0.231).

The results of the analyses showed that partial satisfactions with the highest influence on overall satisfaction (choice and quality) are the best evaluated of all partial satisfactions. These product attributes are also considered by customers as the most important when buying fruit and vegetables. This means that city markets should keep and further increase these strategic advantages they have compared with other selling channels.

Additionally, producers and salespersons should give more information about the products they sell, introducing product origin and the method of production in order to increase consumer satisfaction as a means to repurchase.

No significant relationship between the sociodemographic characteristics of respondents and their overall satisfaction with city markets was proved.

Significant differences were found between overall satisfaction and frequency of purchase at city markets. More satisfied consumers purchase at city markets more often than those less satisfied.

The result of the research show straightness and weaknesses of the fruit and vegetable supply at city markets in Croatia. The future competitiveness of the city market will depend mainly on the quality of the supply and services provided, that is on consumer satisfaction.

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