

CONSUMER ATTITUDE AND PERCEPTION OF ECOLOGICAL FOOD CONSUMPTION

Morna Anamaria Aurelia*

*University of Oradea, Faculty of Environmental Protection, 26 Gen. Magheru St., 410048 Oradea, Romania, e-mail: amorna@uoradea.ro

Abstract

The objectives we started from to achieve the purpose of the paper were: identifying the profile of the consumer of organic products (obtaining information on age, income, education and occupation), the intention to buy and consume organic products.

The analysis of respondents' responses indicates a positive awareness of consumers about the intention to buy and consume organic products.

It is noticeable that we have a profile of a potential buyer of organic products, young with an above average income and with an intellectual training that allows him to differentiate between an organic product and a conventional product.

The biggest influence on the purchase of green products is the price and taste, while the logo and their safety have a smaller influence.

Key words: attitude, perception, Likert scale.

INTRODUCTION

The term "organic" refers to a method of production.

Organic production is a general system of farm management and food production that aims at sustainable agriculture, high quality products and the use of processes that are not harmful to the environment, or to humans, plants or animal health and welfare (Kotler Ph, Armstrong G, 2008; Ajzen, I., 2005; Manole, V et all, 2003).

Various terms such as 'bio', 'organic', 'eco' are used to refer to organic products. However, organically grown foods should not be confused with foods sold as 'natural' (Roman Gheorghe Valentin, et all., 2008; Oprea Lucian, 2010; Stoian Mirela, 2011; Saunders, M., et all., 2009; Ajzen, I., 2005).

This term widely used in food marketing has a variety of definitions, most of which are vague, and is supposed to involve foods that are minimally processed and whose ingredients are all natural products. The term "bio/biological" prevails in Latin and Germanic languages.

English-speaking countries mostly use the term "organic". In the United States (US), the term "organic" can be used for certified organic products, while the label "natural" is legally an unregulated expression

(Kent, R., 2007; Kotler P. & Armstrong, G. 2010; Kotler Philip, 2004; Hîlma Elena, 2019).

Ecologically processed products should be obtained by processing methods ensuring that, throughout all stages of the production chain, the ecological integrity and essential qualities of the product are maintained (Kotler Philip, Keller Kevin Lane, 2006; Rîndașu Venera-Cristina, 2005; Stanciu Sică, 2003; 3. Hîlma Elena, 2016).

An organic food product is considered to be an agri-food product included in the group of organic products that has been obtained as a result of clean agricultural practices (or technologies) that comply with the conditions regarding:

- ✚ banning the use of synthetic chemicals (in this way eco-marketing also promotes the offer of non-polluting alternative products in the fight against diseases and pests in agriculture);
- ✚ using technologies to obtain the product so the environment and animals are protected;
- ✚ acceptance of control forms for non-polluting production conditions;
- ✚ compliance with the rules imposed by regulations and standards in the production and distribution of these products.

We may conclude that in this concept of organic food, both the producer and the distributor and consumer are involved, as these products have influences on the strategy of the economic agent and the balance within the agricultural/agri-food chain (Stanciu Sică, 2006; Kotler Philip, et al., 1998; Kotler P. Et al., 2010; Kotler P.et ll., 2009).

MATERIAL AND METHOD

We chose this research topic because consumers prefer to buy and use organic products that are not harmful to human health and the environment.

The purpose of the quantitative study is to understand the attitude and perception of consumers regarding the consumption of organic food and was conducted between April 25 and May 24, 2020.

The study was conducted by completing a questionnaire by consumers on the attitude and perception of consumers on the consumption of organic food in Bihor County.

The specific objectives of this research are:

Identifying the consumer profile of organic products (obtaining information on age, income, education and occupation).

Intention to buy and consume organic products.

The hypotheses from which this research topic was based are:

- H1: The "EA" logo ("Ecological Agriculture") influences me to buy a green or organic product.

- H2: The price influences me to buy a green or ecological product.
- H3: Taste influences me to buy a green or organic product.
- H4: Safety influences me to buy a green or ecological product.

This research aims to obtain information about the motivational factors and the intention of consumers to buy and consume organic products.

For quantification and statistical analysis, we surveyed 540 respondents, based on a questionnaire developed and distributed, as a study sample.

The questionnaire includes 19 closed and open questions.

To achieve the research objective, the quantitative method was used.

The questionnaire was constructed using the Likert scale.

The Likert scale is a scale used in psychometry for measurements performed using questionnaires.

RESULTS AND DISCUSSION

The analysis section describes the analytical position of the research.

The analysis of respondents' responses indicates a positive awareness of consumers about the intention to buy and consume organic products.

Respondents aged 18-25 are more likely to consume organic products daily compared to other age groups.

The profile of the consumer of ecological products is represented by consumers, women and men, with higher education (44.4%), students (59.3%), with incomes over 2,000 lei (46.3%) and with an age between 18 - 25 years (64.81%).

If we carefully analyze the data in Figure 1, we can see that we have a category of respondents who responded with "I do not know" which influences us quite a lot in the accuracy of the results.

These respondents are in the age category between 18 and 25 years, students with an income of over 2,000 lei.

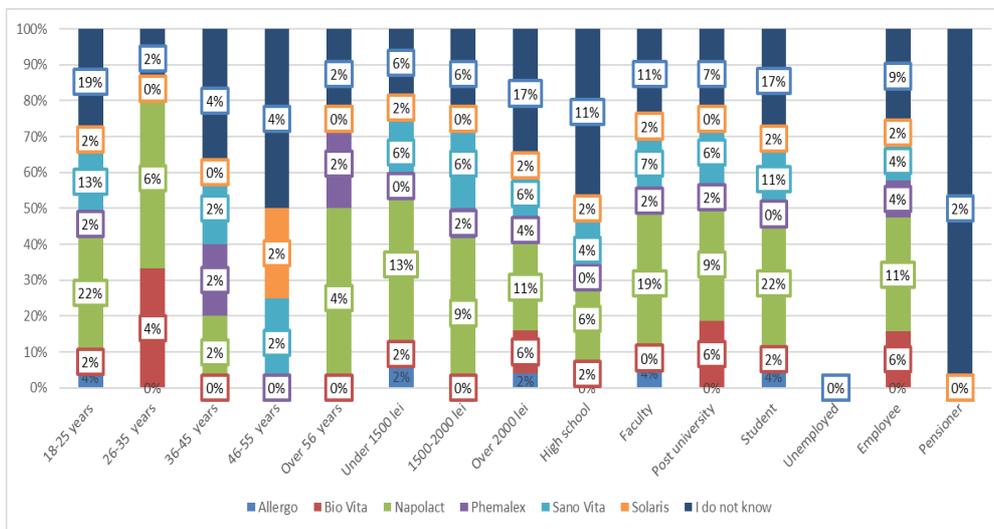


Fig. 1. Consumer profile according to the brand preferred by consumers

Table 1 shows that all variables are important and can influence the consumer when he intends to buy organic products.

Table 1

Variables that influence the intention to buy and consume

	1	2	3	4	5
The "ea" logo influences me to buy a green or organic product	20	90	160	130	140
The price influences me to buy a green or ecological product	40	10	40	100	350
Taste influences me to buy a green or organic product	60	30	100	110	240
Safety influences me to buy a green or organic product	30	60	140	200	110
Intention to buy and consume organic products.	20	60	200	70	190

1. total disagreement; 2. disagree; 3. neither nor; 4. agree; 5. totally agree

The correlation analysis was performed between independent and dependent variables, using the Excel - Data Analysis program (Pallant, J., 2007).

Intentions to buy and consume organic products are the dependent variable (y) and the price, taste, safety and the "ea" logo are the independent variables (x).

The correlation between the price of organic products and the intention to buy and consume presents a linear and direct connection between the two variables ($r = 0.541$, $r = \sqrt{0.2923}$)

The correlation between the safety of organic products and the intention to buy and consume shows a linear and direct link between the two variables ($r = 0.402$, $r = \sqrt{0.1616}$)

The correlation between the logo "ea" and the intention to buy and consume (Figure 2) has the largest linear, strong and direct link between the two variables ($r = 0.838$, $r = \sqrt{0.7033}$)

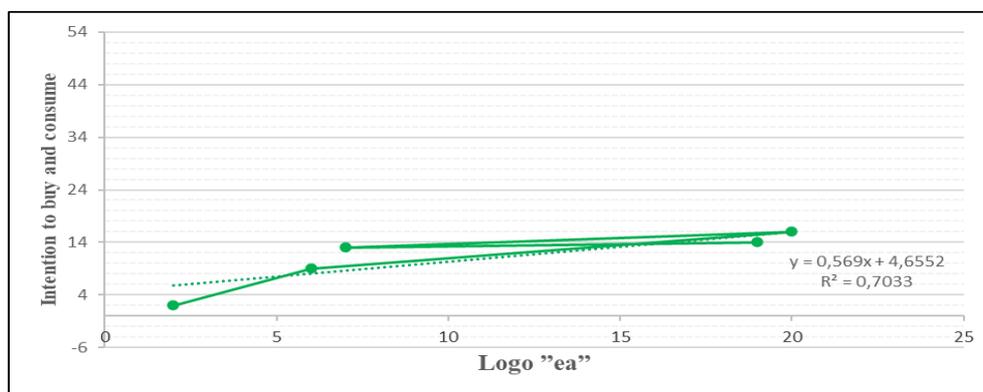


Fig. 2. Intention to buy and consume

The correlation between the taste of organic products and the intention to buy and consume presents a linear, strong and direct connection between the two variables ($r = 0.684$, $r = \sqrt{0.4686}$)

If we analyze the correlations between variables, we notice that the strongest direct correlation is the logo "ea" and the intention to buy and consume, correlation coefficient 0.838, and the weakest correlation exists between the safety of organic products and the intention to buy and consume, correlation coefficient 0.402.

The correlation analysis, performed between the purchase and consumption intentions of organic products (dependent variable) and the logo "ea" (independent variables) indicates a strong positive linear correlation (value of r close to +1), and verifies the two necessary conditions to linear regression analysis, respectively, the link between the purchase and consumption intentions of organic products and the logo "ea" is linear, and the effects of each variable are independent of the others.

We will describe the linear regression between the logo "ea" and the intention to buy and consume, because the correlation analysis shows it is the strongest direct correlation, $r = 0.838$, and $p = 0.017$, the significance level p is the lowest.

Table 2

Regression Statistics

Multiple R	0,827278152
R Square	0,68438914
Adjusted R Square	0,52658371
Standard Error	5,179471312

Table 3

ANOVA

	df	SS	MS	F	Significance F
Regression	1	116,3461538	116,346154	4,33691756	0,017272185
Residual	2	53,65384615	26,8269231		
Total	3	170			

The correlation ratio $R = 0.827278152$, shows us that between the logo "ea" and the intention to buy and consume there is a strong link.

R Square = 0.68438914 indicates that 68% of the variation in purchase and consumption intention is explained by the fact that the logo "ea" guarantees that the product, thus labeled, comes from organic farming and is certified by a control body.

The F test is calculated to validate the regression model.

Since $F = 4,336917563$, Significance F is 0.017272185, a value less than 0.05, indicates the regression model constructed valid for a probability of 95%, the correlation ratio has the value $r = 0.838$ (close to the maximum limit 1), therefore this variable largely influences the intention to buy and consume.

CONCLUSIONS

The logo "ea" and taste have the greatest influence on consumers in the purchase and consumption decision, an aspect confirmed both by the calculation of the Likert scale score and by the statistical analysis of the results.

The correlation between the logo "ea" and the intention to buy and consume shows the highest positive correlation ($r = 0.838$). The correlation result and multiple regression analysis demonstrated a positive relationship between these two variables. Therefore, the result supports the H1 hypothesis.

The correlation between the price and safety of organic products and the intention to buy and consume is positive ($r = 0.541$; $r = 0.402$).

The price and safety of organic products have proven to be less influential on consumers in terms of the intention to buy organic. The result of the analysis supports the hypotheses H2 and H4.

The correlation between the taste of organic products and the intention to buy ($r = 0.684$) describes a strong relationship between these two variables. Therefore, the strong relationship between attitude and intention indicates that the H3 hypothesis is accepted.

Analyzing the above data, all hypotheses were accepted, but the biggest influence on the purchase and consumption intention has the logo "ea" which guarantees that the product, thus labeled, comes from organic farming and is certified by a control body.

REFERENCES

1. Ajzen, I., 2005, Attitudes, Personality And Behaviour .Second Edition.Open Unievrnsity Press, McGraw-Hill Education.
2. Ajzen, I., 2005, Attitudes, Personality and Behaviour.Berkshire England:Open Unievrnsity Press, McGraw-Hill Education.E-book
3. Hîlma Elena, 2016, The threshold embedding essential fatty acids in yogurt, International Symposium "Risk Factors for Environment and Food Safety", Oradea 2016 p. 169-176, Analele Universităţii din Oradea, Fascicula: Ecotoxicologie, Zootehnie si Tehnologii de Industrie Alimentară, VOL XV/A, I.S.S.N. 1583-4301
4. Hîlma Elena, 2019, Comparison between the maximum degree of incorporation of essential fatty acids in yogurt compared to fresh spun paste cheese International Symposium "Risk Factors for Environment and Food Safety", Oradea 2019, p. 69-75, Analele Universităţii din Oradea, Fascicula: Ecotoxicologie, Zootehnie si Tehnologii de Industrie Alimentară, VOL XVIII/A, I.S.S.N. 1583-4301
5. Kent, R., 2007, Marketing Research. Approaches, Methods and Applications in Europe ,Thomson.
6. Kotler, P., & Keller, K., L. 2009, Marketing Management. Thirteenth Edition, Pearson Prentice Hall,Pearson Education Inc.
7. Kotler,P. & Armstrong, G. 2010, Principles of Marketing .Thirteenth Edition, Pearson Prentice Hall,Pearson Education Inc.
8. Kotler Ph, Armstrong G, 2008, Principiile marketingului, Ed. Teora, Bucureşti
9. Kotler Philip, 1997, Managementul marketingului, Editura Teora, Bucureşti
10. Kotler Philip, 2004, Marketing de la A la Z. 80 de concepte pe care trebuie să le cunoască orice manager, Editura Codecs, Bucureşti
11. Kotler Philip, Armstrong Gary, Saunders John, Wong Veronica, 1998, Principiile marketingului, Editura Teora, Bucuresti
12. Kotler Philip, Keller Kevin Lane, 2006, Managementul marketingului, ediția a 12-a, Prentice Hall
13. Manole, V. Stoian, M. Ion, R.A., 2003, Agromarketing, Editura Academia de Studii Economice, Bucureşti
14. Pallant, J., 2007. SPSS Survival Manual: A step by step guide to data analysis using SPSS version 15. 1st publication. Open University Press, Berkshire: McGraw-Hill Education

15. Rîndașu Venera-Cristina, 2005, Consumul și consumatorul în era globalizării, Editura Mirton, Timișoara
16. Roman Gheorghe Valentin, Viorel Ion ș.a, 2008, Principii și practici de bază în agricultura ecologică Editura Alpha MDN, pag 44-46
17. Saunders, M., Lewis, P., & Thornhill, A., 2009, Research Methods for Business Students. Fifth Edition. FT Prentice Hall. Pearson Education Limited,UK.
18. Stanciu Sică, 2003, Bazele generale ale marketingului, Editura Universității din București, București
19. Stanciu Sică, 2006, Marketing, Editura Cartea Universitară, București
20. Stoian Mirela, Ecomarketing, Biblioteca ASE, suport de curs, cap.8
21. Oprea Lucian, 2010, Principii ecologice în alimentație publică, Facultatea de Știința Și Ingineria Alimentelor Galați 2010, pag.26, 32.