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Ecologically-Conscious Consumer Purchases in Lithuania

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ABSTRACT

This study analyses the relationship between the ecologically conscious consumer behavior and ecological products purchase. Recent literature defines the ecologically conscious consumer behavior as a multidimensional construct and outputs of the ecologically conscious consumer behavior are attitudinal dimension as intent to purchase ecological products or behavioral dimension as actual purchasing of ecological products. Authors of this study investigate outputs of the ecologically conscious consumer behavior in Lithuania. The purpose of this study – to investigate the relations between the ecologically conscious consumer behavior and ecological products purchase in Lithuania. The results of quantitative survey with 185 retail store customers prove the existence of both consumer behavior outputs: attitudinal and behavioral of the ecologically conscious consumer behavior. The study found that environmentally conscious consumer behaviors are expressed by attitudinal and behavioral dimensions. Results of the study revealed that strong actual purchase of ecological products are related to the energy saving and storage, and medium strength intent to purchase ecological products are related to products recycling, sorting, environmental friendliness and social responsibility among lithuanian.

INTRODUCTION

For several decades ecological problems are issues in the world. In 1990, also known as the Earth or environmental decade "particular emphasis on ecological and social responsibility, because started to rise and consumer environmental awareness by acquiring products (Tilikidou et al., 2002, p. 47).

This environmental awareness growth remains to this day. The important roles of eco-consciousness formation have had the media, public organizations, rapid technological devel-

opment, statutory regulation. It is in recent decades, the importance of ecology is so strongly emphasized, noticeable changes in consumer behavior - consumers began to realize that their shopping habits can have a direct impact on the living environment (Akehurst et al., 2012, p. 973).

There are authors who have analyzed the *ecologically* conscious consumer behavior as a multidimensional construct (Roberts, 1996; Roberts and Bacon, 1997; Tilikidou and Zotos, 1999; Tilikidou et al., 2002; Tilikidou and Delistavrou, 2007, Hamilton, 2010, etc.) or psychological and ethical factors in the ecologically conscious consumer behavior (for example, Biel and Dahlstrand, 2005; Wheale and Hinton, 2007; Masouleh *et al*, 2013) as well as the relationship between the construct, ecologically conscious consumer behavior, and this construct affect actual ecological product purchase or intent to purchase ecological product (Akehurst et al., 2012; Masouleh et al., 2013).

Most lithuanian authors dealing with ecological products and consumer behavior have analyzed its impact on: consumer shopping habits, consumer environmental awareness by acquiring goods and consumers' loyalty. The lithuanian scientist Skulskis et al., 2011, investigated the direct sales of ecological products, as well as information and knowledge of the influence of ecological products for sale. Lynikaite and Liesionis, 2010 are analyzed the factors affecting the ecological product purchase process. Waginger and Ruževičius, 2007 are analyzed the ecolabelling in Lithuania as a factor of gaining public recognition and powerful marketing tools, influencing customers behavior. This study is analyzed and generalized the practice of products and services ecocertification and eco-labelling in the world as well as to identify their better possibilities of usage in the Lithuania. Virvilaite et al., 2015 have also dealt with the problem of consumer behavior and loyalty. They have investigated consumer behavior and relations between perceived value dimensions and attitudinal and behavioral loyalty. This study is basically oriented to loyalty of consumer behavior evaluation while the problem of the ecologically conscious consumer behavior is not considered.

Although global interest in the ecologically conscious consumer behavior is increasing, none of this research has been conducted in Lithuania. An empirical study of the ecologically conscious consumer behavior is not developed in Lithuania.

The purpose of this study – to investigate the relations between the ecologically conscious consumer behavior and ecological products purchase in Lithuania.

The hypotheses are as follows:

H1: There is a direct significant influence between the ecologically conscious consumers' behavior and actual ecological product purchases.
H2: There is a direct significant influence between the ecologically conscious consumers' behavior and intent to buy ecological products.

Research methodology. A quantitative, questionnaire-survey method for the research of the empirical research purpose has been chosen. To evaluate the ecologically conscious behaviour Roberts (1996) developed the scale, also used in Straughan and Roberts (1999), which considered a wide variety of behaviours. We were adopted this ecologically conscious consumer behavior scale from Straughan and Roberts, 1999 and was measured by 30-items in a Likert-format, anchored by "Always True" (5) and "Never True" (1) and calculated as a sum of the responses to the 30-items scale (with appropriate items reverse scored). The scope of the research sample is 185: retail store customers. The first step in the research was to answer the question: is a statistically significant relation between the ecologically conscious consumer behavior (later ECCB) and the actual purchasing of ecological products (later APEP). There were ECCB as independent variable and APEP was the dependent variable. In addition, according to foreign researchers, were investigated relations between ECCB as independent variable and intent to purchase ecological products (later IPEP) as the dependent variable. The data were

analyzed and administrated under a statistical package for social sciences (SPSS Statistic 17.0 version). Cronbach's alpha coefficient for the assessment of data credibility was applied. Correlative (Spearman's rank correlation coefficient) and regression analyses were also performed.

1. THE ECOLOGICALLY CONSCIOUS CONSUMER BEHAVIOR

The term of the ecologically conscious consumer behavior (ECCB), was first mentioned by Roberts (1996), Tilikidou (2002). According to Roberts and Bacon (1997), an ecologically conscious consumer is recognized due to the fact that he/she is trying to purchase products, which do not have negative impact on environment. Although many people describe themselves being ecologically conscious; however, in reality, their actions do no reveal much ecology.

The term *ecological consciousness* or *awareness* defines the individual's more respectful approach towards the set of questions, related to ecology (da Silva Tamashiro et al., 2013). Ecological consciousness – it is environmentally friendly and specific individual behavior. Ecologically conscious behavior outlines individual efforts in terms of limiting the activities, which may negatively (hazardously) impact environment. The ecologically conscious individual behavior may be impacted by the ecological knowledge extent, possessed by an individual (da Silva Tamashiro et al., 2013).

The examples of the ecologically conscious behavior can be: saving of power energy and resources, selection of non-toxic materials and reduction of waste/exhaust materials. One of the ecologically conscious behavior examples is also ecological purchase that can assert through thoroughly purchasers' analyzed product labels, selection of ecological packages and bags, selection of environmentally-friendly cleansers and body care (Tahir et al., 2011, p. 189).

Thus, the ecologically conscious consumer may be defined as a person, who seeks for the consumption of production that the least negatively impacts environment or has no negative impact on it at all (da Silva Tamashiro et al., 2013; Akehurst, et al. 2012).

According to Hailes (2007), a green consumer is one who associates the act of purchasing or consuming products with the possibility of acting in accordance with environmental preservation. The green consumer knows that by refusing to purchase products that are harmful to the environment, she/he is contributing to environmental preservation. Therefore, according to this author, green consumers avoid purchasing products that they perceive as risky to health, harm the environment during production, use or final disposal, consume much energy, have excessive packaging, and contain ingredients coming from threatened habitats or species. Schlegelmilch et al. (1996), state that green consumers are individuals that understand the consequences of their actions and their environmental knowledge can explain their green buying behavior.

In general, the ecologically conscious consumers avoid the consumption of products, which: 1) hazardous to their health; 2) in general, noxious to environment, throughout the whole product lifecycle or in the certain stage of it (production, consumption or recycling); 3) have an unnecessary (extra) package; 4) in the constitution of these products there are present elements, which invoke threat for some species of for their locations of living.

The consumers, who are most strongly motivated by such factors as worry in animal welfare, striving for the maintenance of sustainable and clean environment and other moral values directed towards the sustainability of environment and social welfare, are called the ecologically conscious consumers of ecological products. Besides, such consumer behavior is called ecological consumption. The ecological product purchase for the ecologically conscious consumers is a part of their lifestyle and manifestation of values (Pino et al., 2012 p. 159).

Such consumers most frequently purchase the ecological productions of other kinds (hygiene means and household goods), and they also sort out waste/rubbish and save electric power. It was notices that such consumers are likely to take personal responsibility for social and environmental changes; in other words, they consciously comprehend personal moral obligations to the society, environments and its sustainability. Consequently, they are often called idealists. So greatly expressed sense of responsibility is a part of those consumers' personal identity (Pino et al., 2012 p. 159).

According to Akehurst et al., (2012) whenever there is a purchase decision, there is the potential that the final resolution can contribute to a more or less sustainable pattern of consumption. All purchasing actions have ethical, resource, waste and community impact consequences. According to Young *et al.* (2010), when consumers choose to adopt a sustainable lifestyle, their decision-making process becomes increasingly complex. The author mentions that there is an "attitude-behavior gap" or "values-action gap", because although 30 per cent of consumers report that they are very concerned about environmental issues, it is not necessarily translated to their purchase habits.

The ecologically conscious consumers – are such consumers, who are worried about the product friendliness to the environment (in the whole process of its production and consumption), and they emphasize this worry under their behavior: i.e. through the purchase of ecological products. However, not necessarily all ecologically conscious people turn into the ecologically conscious product consumers. First of all, as a result of the fact that different consumers have the ecological consciousness of different strength. Second, the ecological production consumer may be affected by different factors in a weakening way.

2. THE ECOLOGICALLY CONSCIOUS CONSUMER BEHAVIOR AND ECOLOGICAL PRODUCT PURCHASE

According to Nassani et al., (2013) the ecologically conscious behavior reflects consumers' decisions during a purchase and at the same time determinacy to pay more for ecological products. It is thought that the ecological consciousness is an indicator, capable of describing the consumer behavior during the purchasing of ecological production.

Mahesh, (2013) indicated that the consumers, who define themselves as ecologically conscious ones, are more likely to purchase ecological production than ones, who do not describe themselves as ecologically conscious ones. There was also noted correlation between consumer approach towards environment and their approach towards ecological products – the more manifested worry about environment is, the more positive approach towards ecological products is too.

According to Akehurst et al., (2012) the consumers, distinguished by the ecologically conscious behavior at a higher level, are also distinguished by a stronger intent to purchase an ecological product, i.e. the intent of the ecologically conscious consumer to purchase an ecological product, describes the manifested consumer readiness to behave positively in terms of ecology (Akehurst et al., 2012 p. 978). Besides, the revealed intent to purchase an ecological product means that consumers have a greater tendency to purchase an ecological product actually (Akehurst et al., 2012, p. 983). As a result, the intermediate's role falls on the factor "intent to purchase an ecological product" between a construct ECCB and an actual purchase of an ecological product. In case the ecological consciousness is high, the gap, present between the intent to purchase ecological production and actual its purchase is less. However, not necessarily, all ecologically conscious people turn into the ecologically conscious consumers of an ecological product. First of all, due to the fact that different consumers have the ecological consciousness of a different strength. Second, different factors may affect the consumer of ecological food production in a weakening manner, which are related to the very consumer approach

and external circumstances. Nevertheless, an intent to purchase an ecological product is related to *ecological decision, when* an individual decides to take actual means in order to contribute to the preservation of environment. An actual purchase of an ecological product is *the completion of actions, when* a person takes means, under the aid of which, he can behave ecologically responsibly – in the following case – to purchase ecological production.

In the research, there is followed the approach by Akehurst et al. (2012) that the ecologically conscious consumer behavior may reveal either in the purchase of an ecological product or at least an intent to purchase it that may also turn into the product purchase.

Research limitations. The ecologically conscious consumer behavior is related to the higher ecological consumer consciousness, when there is faced a series of suppressing factors as the brand, culture, demographic characteristics, finance, habits, lack of information, lifestyles and personalities (see more Biel and Dahlstrand (2005), Sener and Hazer (2008), which may stop/block the initiative of the developing ecological consciousness form the manifestation in ecological behavior. In the research, there have not been investigated factors, which suppress the developing decision to behave usefully in terms of ecology and the suppressing factors, which suppress the very purchase action of ecological production.

3. RESEARCH ANALYSE AND FINDINGS

Reliability of questionnaire questions. *Cronbach's alpha* coefficient that is based on separate questions, those complete the questionnaire, correlation and assessed if all scale questions reflect the researched measurement sufficiently and enables the specification of the requested questions in the scale. Consequently for the assessment of variables reliability in questions related to the ecologically conscious consumer behavior, intent to purchase ecological products and actual purchasing of ecological products, there was selected Cronbach's alfa coefficient as shown in Table 1.

Table 1. Cronbach's Alpha test results

Provided statements/ questions	*Quantity of questions*	*Cronbach's Alpha*
Statements related to the ecologically conscious consumer behavior (ECCB)	30	0,937
Statements related to intent to purchase ecological products (IPEP)	3	0,769
Statements related to actual purchasing of ecological products (APEP)	5	0,891

Source: own work.

Pukenas (2009) suggested that minimum alpha of 0,7 is sufficed for research. As the Cronbach's alpha in this research were all higher than 0,7, the constructs were assessed as adequately reliable.

Correlation analysis. In order to identify connection among variables there was carried out the computing of variables and question statements were divided into three blocks 'the ecologically conscious consumer behavior' or ECCB, 'intent to purchase ecological products relationship quality' or IPEP and 'actual purchasing of ecological products' or APEP. The estimated coefficients are provided in Table 2.

The results of the correlation analysis reveal that all correlations are statistically significant (p=0,000). Due to the fact that all coefficients are positive, thus the correlation among variables

is positive too. Correlation coefficients among variables vary from 0,598 to 0,816, i.e. there is mean or strong relationship. In the following case the strongest correlation (r = 0,816) is between 'the ecologically conscious consumer behavior' and 'actual purchasing of ecological products'.

Table 2. Correlations coefficient between variables

			ECCB	IPEP	APEP
Spearman's rho	ECCB	Correlation Coefficient	1,000	,602**	,816**
		Sig. (2-tailed)		,000	,000
		N	185	185	185
	IPEP	Correlation Coefficient	,602**	1,000	,598**
		Sig. (2-tailed)	,000	.	,000
		N	185	185	185
	APEP	Correlation Coefficient	,816**	,598**	1,000
		Sig. (2-tailed)	,000	,000	.
		N	185	185	185

**Correlation is significant at the 0.01 level (2-tailed).
Source: own work.

Following correlation coefficients it can be seen there is present quite strong correlation between 'the ecologically conscious consumer behavior' and 'intent to purchase ecological products' (r = 0,602), There is also medium strength inter-correlation between 'actual purchasing of ecological products' and 'intent to purchase ecological products relationship quality' (r = 0,598). Consequently, it can be stated that there exists positive and statistically significant linear relationship among the factors and the analysis of correlation showed that there is present positive, meaningful connection between excluded variables. Thus there was carried out an analysis of regression.

Results of linear regression analysis. There was carried out a simple linear regressive analysis (one independent variable) due to which there was done testing of hypotheses. As it is stated in the literature, during the performance of the linear regressive analysis attention is paid to three key indexes: coefficient of determination (R^2), coefficient of impact (Non-standard β) and relevance of the model (p). Thus the key data, enabling the solution related to impact and its meaningfulness are provided in Table 3.

Table 3. Main influence on variable

Independent variable	R^2	β	p	Dependent variable
The ecologically conscious consumer behavior	0,697	0,835	0,000	Actual purchasing of ecological products
The ecologically conscious consumer behavior	0,373	0,511	0,000	Intent to purchase ecological products

Source: own work.

As it can be seen under the data provided in Table 3, all coefficient signs are positive as well as correlation coefficients are, thus regression analysis is relevant. The determination coefficient is

quite high in all cases (R^2 > 0,20), consequently that means that the model describes the data quite well the simple linear regression model can't be rejected as one not relevant for data. In all cases p meaning of the criterion of ANOVA is less than 0,05 (p = 0,000), and as a result it can be stated that there is present dependence among variables, i.e. in case of the customer satisfaction increase their respectively increases relationship quality, switching costs, customer retention, etc. The very estimates of coefficients: unstandardized Coefficients β are presented in the column. It is also seen that the signs of all coefficients are positive as it had to be under the correlative connection analysis. Besides, coefficients are statistically meaningful, i.e. have some independent impact on the level of dependent variable.

Testing of hypotheses. H1: There is a direct significant influence between the ecologically conscious consumers' behavior and actual ecological product purchases. As it can be seen in *Table* 3, during the testing of the hypothesis: with reference to H1 it has been found out that during improvement of the ecologically conscious consumer behavior increases the actual ecological product purchases (accepted Ha, p<α), i.e. there is present linear regression. Besides, regression is statistically meaningful, the coefficient of determination is be to, R^2 = 0.697>0.20. The ecologically conscious consumer behavior impact of the actual ecological product purchases is equal 0.835. *Thus, the first hypothesis is tested and approved:* the ecologically conscious consumer behavior has impact on the actual consumers' ecological product purchases*.*

H2: There is a direct significant influence between the ecologically conscious consumers' behavior and intent to buy ecological products. The regressive analyses revealed that there is present linear regression between the ecologically conscious consumer behavior and intent to purchase ecological products (p<0.05), regression – statistically meaningful, (R^2 = 0,373 > 0,20). The impact of the ecologically conscious consumer behavior on intent to purchase ecological products is 0,511. *Thus it is stated that the hypothesis is tested and approved and t*he ecologically conscious consumer behavior *impact*s the intent to purchase ecological products*.*

The ecologically conscious consumer behavior. The ecologically conscious consumer behavior was researched in accordance with Straughan and Roberts, (1999) who developed a scale for the ecologically conscious consumer behavior in 1999. In the following research instrumentarium there are provided statements, related to the factors of product purchase and consumption, and energy saving and storage, recycling of products, sorting of products, product friendliness to the environment and to social responsibility. The data, gained during the research are presented in Table 5.

Table 5. Distribution of actions influencing the ecologically conscious consumer behavior by purchasing and using products

Statement of the ecologically conscious consumer behavior	Mean *	Std. Deviation**
To save energy, I drive my car as little as possible.	3,41	1,199
I normally make a conscious effort to limit my use of products that are made of or use scarce resources.	3,05	1,219
I try to purchase energy efficient household appliances.	3,57	1,006
I always try to use electric appliances (e.g. dishwasher, washer and dryer) before 10 a.m. and after 10 p.m.	3,1	1,447
I will not purchase products which have excessive packaging.	2,44	1,366
When there is a choice, I always choose that product, which contributes to the least amount of pollution.	3,6	1,445
I have tried very hard to reduce the amount of electricity I use.	3,74	0,873

If I understand the potential damage to the environment that some products can cause, I do not purchase these products.	3,25	1,372
I have switched products for ecological reasons.	3,06	1,296
I use a recycling center or in some way recycle some of my household trash.	3,5	1,256
I make every effort to purchase paper products made from recycled paper.	2,59	1,144
I have purchased a household appliance because it uses less electricity than other brands.	3,88	0,921
I use a low-phosphate detergent (or soap) for my laundry.	2,66	1,249
I have convinced members of my family or friends not to buy some products which are harmful to the environment.	3,59	1,333
I have replaced light bulbs in my home with those of smaller wattage so that I will conserve on the electricity I use.	3,01	1,304
I have purchased products because they cause less pollution.	3,16	1,392
I do not purchase products in aerosol containers	2,9	1,467
Whenever possible, I purchase products packaged in reusable containers.	2,92	1,421
When I purchase products, I always make a conscious effort to purchase those products that are low in pollutants.	3,37	1,349
When I have a choice between two equal products, I always purchase the one which is less harmful to other people and the environment.	3,84	1,282
I purchase toilet paper made from recycled paper.	3,02	1,128
I purchase Kleenex made from recycled paper.	3,48	1,277
I purchase paper towels made from recycled paper.	3,35	1,103
I will not purchase a product if the company that sells it is ecologically irresponsible.	4,08	1,145
I have purchased light bulbs that were more expensive but saved energy.	4,48	1,002
I try only to purchase products that can be recycled.	3,76	1,197
To reduce our reliance on foreign oil, I drive my car as little as possible.	3,89	1,288
I usually purchase the lowest priced product, regardless of its impact on society.	3,49	1,239
I do not purchase household products that harm the environment.	3,83	1,113
I purchase high efficiency light bulbs to save energy.	3,73	0,803

*Mean –reveals average significance assessment of every aspect;
**Std. Deviation – standard deviation. The smaller it was, the more unanimously respondents assessed the factor.
Source: own estimation based on Straughan and Roberts, (1999) a scale.

After having carried out a deeper significance analysis of the assessment related to actions influencing the ecologically conscious consumer behavior (see Table 5), it was noticed that the respondents' opinions were *very unequal* (standard deviation of the motivator assessment >1). Only three actions influencing the ecologically conscious consumer behavior coincided: I have tried very hard to reduce the amount of electricity I use, I have purchased a household appliance because it uses less electricity than other brands and I buy high efficiency light bulbs to save energy (standard deviation of the action assessment 0,873< 1, 0,921< 1, 0,803 < 1). The respondents' actions influencing the ecologically conscious consumer behavior were very scattered. Consequently, the purchases made by the ecologically conscious consumers are related to the saving and storage of electric power/electricity.

CONCLUSION

In accordance with the empirical research it was defined that the ecologically conscious consumer behavior manifests in two dimensions: behavioral and attitudinal. In the ecological consumer purchases, the behavioral dimension is defined as an ecological product purchase and the attitudinal dimension is defined as intent to purchase an ecological product. In the study the ecological product is comprehended as a product that saves energy and/or consumes less energy that can be recycled, that is environmentally-friendly, pollutes environment less and that is produced using less natural resources and in preservation of environment. In purchases, the ecologically conscious consumer behavior reveals as consumer actions, while giving preference to the purchase and consumption of an ecological product.

The empirical research found that the environmentally conscious consumer behavior is expressed by attitudinal and behavioral dimensions. It was identified that there is statistically significant linear regression, which shows strong relation between the ecologically conscious consumer behavior and ecological products purchase.

The results of the study revealed that strong actual purchase of ecological products as behavioral dimension are related to the energy saving and storage, and medium strength intent to purchase ecological products as an attitudinal dimension are related to products recycling, sorting, environmental friendliness and social responsibility among Lithuanians.

REFERENCES

Akehurst, G., Afonso, C., Goncalves, H.M. (2012), "Re-examining Green Purchase Behaviour and the Green Consumer Profile: New Evidences", *Management Decision* Vol. 50, No. 5, pp. 972-988.

Biel, A., Dahlstrand, U. (2005), "Values and habits: a dual-process model", in Krarup, S. and Russell, C.S. (Eds), *Environment, Information and Consumer Behaviour*, Edward Elgar, Cheltenham, pp. 33-50.

Hamilton, C. (2010). "Consumerism, self-creation and prospects for a new ecological consciousness". *Journal of Cleaner Production*, Vol. 18, No 6, pp. 571-575.

Hailes, J. (2007), *The New Green Consumer Guide*, Simon and Schuster, London.

Lynikaitė, R., Liesionis, V. (2010), "Žaliųjų produktų pirkimo procesui įtaką darančių veiksnių tyrimas", *Management theory and studies for rural business and infrastructure development* Vol. 22 No 3, pp. 105-113.

Mahesh, N. (2013), "Consumer's Perceived Value, Attitude and Purchase Intention of Green Products", *SMS Varanasi*, Vol. 9, No. 1, pp. 36-43.

Masouleh, S.A., Koochaksaraei, H.M., Saeedi, N., Mousavian, S.I. (2013), "Investigation on Selected Factors (Demographic And Psychological) on Ecological Conscious Consumer behavior". *Journal of Basic and Applied Scientific Research*, Vol. 3, No. 5, pp. 622-630.

Nassani, A.M., Khader, J.A., Moemenb, M.A., Ali, I. (2013), "Ecological Consciousness and Ecological Buying Behavior: An Empirical Study in Saudi Arabia", *Life Science Journal*, Vol. 10, No. 2, pp. 995-999.

Pino, G., Peluso, A. M., Guido, G. (2012), "Determinants of Regular and Occasional Consumers' Intentions to Buy Organic Food", *The Journal of Consumer Affairs*, Vol. 46, No. 1, pp. 157-169.

Pukenas, K. (2009), Kokybinių duomenų analizė SPSS programa. Lietuvos kūno kultūros akademija. Kaunas.

Roberts, J.A. (1996), "Green consumers in the 1990s: Profile and implications for advertising", *Journal of Business Research* Vol. 36, No. 3, pp. 217-231.

Roberts, J.A., Bacon, D.R. (1997), "Exploring the Subtle Relationships between Environmental Concern and Ecologically Consciuos Consumer Behavior", *Journal of Business Research*, Vol. 40, pp. 79-89.

Sener, A., Hazer, O. (2008), "Values and sustainable consumption behaviour of women: a Turkish sample", *Sustainable Development*, Vol. 16, No. 5, pp. 291-300.

da Silva Tamashiro, H.R., da Silveira, J.A.G., Merlo, E.M., Ghisi, M. (2013), "The relationship between ecological knowledge, ecological concern, ecological affection, subjective norms and the green purchase behavior in Brazil", *African Journal of Business Management*, Vol. 7, No. 34, pp. 3297-3314.

Skulskis, V., Girgždienė, V., Melnikienė, R. (2011), "Direct marketing of organic products", *Management theory and studies for rural business and infrastructure development*, Vol. 25, No. 1, pp. 208-215.

Schlegelmilch, B., Bohlen, G.M., Diamantopoulos, A. (1996), "The link between green purchasing decisions and measures of environmental consciousness", *European Journal of Marketing*, Vol. 30, pp. 35-55.

Straughan, R.D., Roberts, J.A. (1999), "Environmental segmentation alternatives: a look at green consumer behavior in the new millennium", *Journal of Consumer Marketing*, Vol. 16, No. 6, pp. 558-575.

Tahir, A., Caber, M., Moutinho, L., Herstein, R. (2011), „The Influence of Skepticism on Green Purchase Behavior, *International Journal of Business and Social Science*, Vol. 2, No. 13, pp. 189-197.

Tilikidou, I., Adamson, I., Sarmantiotis, C. (2002), „The measurement instrument of ecologically-conscious consumer behaviour", *New Medit,* No. 4, pp. 46-53.

Tilikidou, I., Delistavrou, A. (2007), "The Ecological Consumer Behaviours in Greece: Ten Years of Research", http://www.mkt.teithe.gr/wp-content/uploads/personnel/papers_tilikidou/11%20Tilikidou,%20I.,%20and%20Delistavrou,%20A.%20(2007)..pdf.

Tilikidou, I., Zotos, Y. (1999), "Ecological Consumer Behaviour: Review and Suggestions for Future Research" *New Medit,* No. 1, pp. 14-21.

Virvilaite, R., Piligrimiene, Z., Kliukaite, A. (2015), „The relations between consumer perceived value and loyalty", *Transformation in Business & Economics* Vol. 14 No 1, pp. 76-91.

Waginger, E., Ruževičius J. (2007), "Eco-labelling in Austria and Lithuania: a comparative study." *Engineering Economic*, Vol. 54, No 4 (54), pp. 96-102.

Wheale, P., Hinton, D. (2007), "Ethical consumers in search of markets", Business Strategy and the Environment, Vol. 16, pp. 302-15.

Young, W., Hwang, K., McDonald, S., Oates, C. (2010), "Sustainable consumption: green consumer behaviour when purchasing products", *Sustainable Development*, Vol. 18, pp. 20-31.