Values of Sustainable Development in Consumer Behavior: Case of Russia

Valores del desarrollo sostenible en el comportamiento del consumidor: caso de Rusia

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Content
1. Introduction
2. Literature Review
3. Materials and Methods: Quantitative Research
4. Results: Quantitative Research
5. Materials and Methods: Qualitative Research
6. Results: Qualitative Research
7. Discussion
8. Conclusion
References

ABSTRACT:

Relevance of the research is determined by the increasing influence of the sustainable development values on the consumer behavior and the lack of research based features and models of sustainable consumer behavior in different countries. The purpose of the study is to determine customer segments in Russia based on sustainability values and barriers that can prevent Russians from choosing sustainable modes of behavior. The main methods to investigate this problem are questionnaire (for quantitative research) and focus-group (for qualitative research). Results of the study are presented by segmenting Russian respondents by the sustainable development factor, determining the influence of sustainability values on consumer behavior and identifying barriers that prevent transformation of values into actions. The research proved the specific features of sustainable behavior of Russians, compared to the sustainable consumption patterns described in the previous researches of European respondents. These results can be used while planning sustainable consumption policies for Russian society.

RESUMEN:

La relevancia de la investigación está determinada por la creciente influencia de los valores de desarrollo sustentable en el comportamiento del consumidor y la falta de características basadas en la investigación y modelos de comportamiento sostenible de los consumidores en diferentes países. El propósito del estudio es determinar los segmentos de clientes en Rusia basados en los valores de sostenibilidad y las barreras que pueden impedir que los rusos elijan modos de comportamiento sustentables. Los principales métodos para investigar este problema son el cuestionario (para la investigación cuantitativa) y el grupo focal (para la investigación cualitativa). Los resultados del estudio se presentan segmentando a los encuestados rusos por el factor de desarrollo sustentable, determinando la influencia de los valores de sostenibilidad en el comportamiento del consumidor y identificando barreras que impiden la transformación de los valores en acciones. La investigación probó las características específicas del comportamiento sustentable de los rusos, comparados con los patrones de consumo sostenible descritos en los estudios previos de los consumidores europeos. Estos resultados pueden ser utilizados mientras se planifican políticas de consumo sustentable para la sociedad rusa.
1. Introduction

Humanity started to think about its impact on the environment not so long ago. In the 1970s, United Nations Conference on the Human Environment and some other significant events were held. But the ecological way of thinking and education, the importance of social welfare for individual well-being still have not reached the same level of development in all countries due to historic and economic reasons.

To ensure the sustainable development, it is also important to accelerate progress in the individual actions. By consuming goods and services, by living his everyday life, the person exerts direct and indirect influence on the environment. The long-term trends in the individual behavior have recently experienced quite significant changes. Smoking, driving in a state of intoxication, refusal to fasten the seat belts, irresponsible attitude to garbage, over-consumption of water, electricity or plastic bags - all these actions are the examples of the individual behavior that has changed for the better relatively rapidly, at least in some countries. Ideas of sustainable development are able to influence consumer behavior in different ways. For example, Euromonitor International's "Top 10 Global Consumer Trends in 2016" mentions consumer eagerness to make more considered purchasing decisions, buying from “responsible” brands that sell them quality products with real value. The experts observe the perceived fit between the personal consumption choices and world improvement.

Nowadays a critical approach to the choice of goods is one of the megatrends in consumer behavior: people began to pay much more attention to health, environmental friendliness and naturalness of products. People show a more responsible approach to their consumer choices due to the combination of two factors: the breadth of choice and consumer awareness. Active propaganda of a healthy lifestyle and environmental protection imposes its imprint on consumer behavior.

In turn, companies are reflecting the changes in customer attitudes towards safety and recycling and shifts in consumer behavior in their business strategies by introducing principles of corporate social responsibility and moving towards the concept of sustainable marketing (Tabekina and Fedotova, 2013; Malysheva, 2013).

Thus, the factor of sustainable development, combining environmental, economic and social aspects, will be one of the factors affecting the consumer behavior of a modern man. However there is a huge difference between developing and developed countries regarding the question of sustainable development. For instance, Russia as an emerging market has all the advantages for the further expansion of sustainable development values and behavior: state support programs, development of the industry structure, and investments into the necessary infrastructure.

The main aims of this paper are to:

- compare sustainability values in Russia and in Europe and to track their influence on consumer behavior,
- suggest segmentation of consumers by their attitude to sustainable development,
- define barriers preventing the transition of sustainability values into actions.

Companies entering different markets need to study carefully consumer behavior, highlight the driving values, motivations and behavioral characteristics affecting the choice of products and
services. Tools of sustainable marketing have a global positive effect for the whole world. However, their application should be adapted in the interaction with the specific customer segments.

2. Literature Review

Previous studies of sustainable development and its impact on consumer behavior are focused on several specific topics. Some authors focused on environmental sustainability (Biermann et al., 2017). S.M. Neo, W.W. Choong & R.B. Ahamad (2017) defined the environmental psychological factors (low carbon awareness, low carbon knowledge, environmental concern, and environmental attitude) which can influence the low carbon and responsible behavior, while only the impact of low carbon awareness on low carbon behavior is significantly different across urban and suburban residents. The questions of achieving sustainability through working with human nature are raised in the work by H. Kopnina (2017), where the author claimed that cross-cultural and historically consistent psychological traits, when combined with specific cultural conditions, result in unsustainable behaviors. E. Fraj-Andrés & E. Martínez-Salinas (2007) proved the impact of environmental knowledge on ecological consumer behavior in their empirical analysis. O. Pogrebova & O. Yuldasheva (2015) claimed that consumer sustainable motives originate from the consumer values.

Some authors focused on the sustainability on specific markets of goods and services. J. Thøgersen (2017) in the multi-level study describes sustainable food consumption including the food related lifestyle and identified that 5 lifestyle segments in 10 European countries have significantly different food consumption patterns. Key indicators and sustainability values in the field of higher education defined by V. Volchik and E. Maslyukova (2017) justify the importance of integrating institutions, values and self-governance mechanisms that promote long-term sustainable development. P. Nardi and others (2017) clarify the issues of soft drinks sustainable production presenting the methodology of monitoring the sustainability and contributing to the adaptation of sustainability practices in the corporate strategy. Implications of sustainability in business-to-business marketing, green supply chains, manufacturing and operations were described by A. Sharma and others (2017), whose research proved the crucial role of marketing in environmental sustainability as a competitive advantage and financial performance. A lot of studies were conducted in the field of sustainable tourism, presenting the comparative analysis of different countries and destinations, for example Austria, Slovenia and Switzerland mountain destinations (Kuščer et al., 2017). I. Schäufele and U. Hamm (2017) described the issue of sustainable ingredient additional costs and consumer’s willingness to pay for it in the wine market. In this paper, sustainable marketing and production were identified as a promising strategy for quality differentiation; however the study of real market transactions to fill the attitude-behavior gap is still required.

C. Leonidou, C. Katsikeas and N. Morgan (2013) revealed the efficiency of using the tools of sustainable marketing in the marketing-mix. O.A. Kozlova (2011) described the ecological marketing as a strategic potential of the producers. A.V. Lukina (2015) revealed the ecological marketing as a way to sustainability of the region. The new approach to managing marketing strategy (Mitchell et al., 2010) is a sustainable market orientation – the broader conceptualization of market orientation.

Thus, existing studies suggest the segmentation of consumers by sustainable development factors only on some specific markets (food consumption, eco tourism) (Thøgersen, 2017; Zografos, 2007), not covering the whole market. Consequently, there is a lack of studies, which could be used in sustainable marketing activities on other markets of goods and services. Moreover, the majority of studies has been conducted in the USA and Western Europe and do not cover the emerging markets. Consequently, the question of the applicability of the results of foreign researches in this field on the Russian market remains unexplored. This study is going to fill these gaps.
3. Materials and Methods: Quantitative Research

Based on the literature review, a conceptual research model was developed as shown in Figure 1 and the following hypotheses were formulated:

Hypothesis 1: the factors that describe individual values and attitudes towards sustainable development among Russian respondents differ from the factors for Finnish respondents.

Hypothesis 2: segmentation of Russian customers by their values of sustainable development differs from the segments identified by the previous researchers for European countries.

Hypothesis 3: people who share social values behave more sustainable than those who share individual values.

Hypothesis 4: sustainable consumer behavior in Russia and Finland differs significantly.

Hypothesis 5: different external barriers can influence the transition of the declared sustainability values into concrete actions.

Quantitative research of 700 respondents was carried out (500 Finns and 200 Russians, men and women 18-30 years old). The Finnish respondents were selected to represent the behavior models typical for the West European market. The young consumers were chosen due to the fact that they are more sensitive to the new trends as well as they are the foundation for the future market development.

The questionnaire developed for this research is based on the following statements from the previous studies:

- The difference between the stated values and real actions can be caused by lack of knowledge (Leiserowitz, 2006).
- The reason to reject the desired behavior is the need for additional costs (Dickinson, 2006).
- The correspondence of human thoughts and sustainable behavior is determined by psychological factors (Thøgersen, 2004).
- There is a difference between consumption of ecological products and the lifestyle related to sustainable consumption (Gilg, 2005).
- There is a relationship between sustainable consumption and the daily rhythm of human life and its established habits (Dolnicar, 2008).
Universal values are benevolence, universalism, power, achievements and ecology (Schwartz, 1994; Dunlap, 2000).

Gender, age, educational level, professional activity of parents and the level of their education influence the formation of sustainable behavior (Zografos, 2007).

The questionnaire included questions on the importance of sustainability values to the respondent, frequency of his/her sustainable actions, attitudes to some ecologic issues, barriers for sustainable behavior as well as a socio-demographic block. Due to the lower availability of “Fairtrade” and “Organic” products in Russia compared to Western Europe, questions were added about buying products straight from farmers, paying attention to the country of origin, fat contents and ingredients, trying to cook from low-processed products.

4. Results: Quantitative Research

4.1. Factor Analysis and Segmentation

First, the clusters pre-defined in earlier studies (Zogfaros, 2007) were applied to the data collected. Factors that were used in this study:

- criticism of people's relationship to nature;
- confidence in their abilities;
- belief in equality;
- conviction of limited resources.

Almost all Russian respondents were attributed to the "Skeptics" segment, which criticize the present state of things, are unsure of the abilities of people, but support equality and believe that the earth has enough resources. At the same time, all Finnish respondents were defined as the "Don’t approve" segment - a set of respondents who criticize the relationship of man to nature, support the principles of equality, are convinced that resources are limited and not very confident in human abilities. These views are very close to the traditional "green" ideology.

Due to the large cross-country difference in the respondents' answers, it was concluded that the clusters, which had been defined by the previous studies based on the European market data, were not fully applicable to the Russian respondents. Therefore, factor analysis was conducted followed by another segmentation procedure. For the Finnish respondents, the factors remained the same as described earlier by Zografos (2007), while for the Russian respondents the new factors were defined with principal component analysis as an extraction method and Varimax with Kaiser normalization as the rotation method:

- fragility of the environment and the need of support from people;
- situation in the world close to critical;
- man as the king of nature;
- world stability and the absence of cause for concerns;
- nature not controlled by people.

Thus, comparing the results of the factor analysis for Russian and Finnish data, a significant difference can be noted. Hypothesis 1 is approved.

As factors for the Russian respondents have changed, their segmentation became different as well. They were divided into 4 segments by K-means cluster analysis (Table 1):

- The power of nature 2%;
- Battle for power 51.5%;
- Equality and stability 22.5%;
- Human is a dictator 24%.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clusters of Russian respondents by sustainability values</td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>The power of nature</td>
</tr>
<tr>
<td>Battle for power</td>
</tr>
<tr>
<td>Equality and stability</td>
</tr>
<tr>
<td>Human is a dictator</td>
</tr>
</tbody>
</table>
As these segments differ from the segments defined in the previous studies, hypothesis 2 is approved. Such segmentation provides a relevant reflection of the actual state of mind of the Russian consumers and helps to find individual approach to consumers through effective marketing strategies.

### 4.2. The Influence of Values on Behavior

In the analysis, the structure of human values was used, which divides them into two groups: individual (power, achievement) and social (kindness, equality) (Schwartz, 1994). Previous studies have shown that people who share social values more often behave more sustainably than people whose values are mostly in the group of individual ones (Thøgersen, 2004). It is interesting that the Russian respondents who have mostly individual values more often recycle (newspapers, glass, cardboard), compost food waste, turn off the light when they leave the room. Respondents who share social values more often buy products directly from farmers, pay attention to fat content and food ingredients, try to take bags with them while shopping, prefer to cook at home with low processed food, use public transport, bicycle or walking instead of using a car as it is shown in Table 2 (1 – «always», 5 – «never»).

#### Table 2. Relationship between values and behavior (excerpt)

<table>
<thead>
<tr>
<th>Behavior / Values</th>
<th>Average, Individual values</th>
<th>Average, Social values</th>
<th>Average, Individual values</th>
<th>Average, Social values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Russia</td>
<td>Russia</td>
<td>Finland</td>
<td>Finland</td>
</tr>
<tr>
<td>Recycling</td>
<td>2.90</td>
<td>3.43</td>
<td>1.78</td>
<td>1.40</td>
</tr>
<tr>
<td>Compost kitchen waste</td>
<td>2.46</td>
<td>2.73</td>
<td>2.74</td>
<td>2.09</td>
</tr>
<tr>
<td>Buy products straight from farmers</td>
<td>3.45</td>
<td>3.00</td>
<td>4.25</td>
<td>3.86</td>
</tr>
</tbody>
</table>
According to the results of the study, the differences in the behavior of groups of people with different values are not dramatic. It is explained by the fact that not only value orientations but many other factors affect consumer behavior. For example, the possibility of recycling (newspapers, glass and cardboard) depends on the infrastructure. Composting food waste also requires the special conditions. Turning the light off can be caused not by the environmental friendliness but by the considerations of economy. The rejection of using the car in favor of public transport, bicycle or walking can be caused not by the desire to support the environment, but simply by its absence.

The situation is different for the Finnish respondents - the majority of presented sustainable behavioral strategies are common among the people sharing social values, which confirms the results of the previous study (Thøgersen, 2004).

The insignificant difference between the behavior of people with social and individual values, which Russian respondents have shown, is usually explained in the literature by the existence of external barriers in the country that influence the transition of the declared values into specific behavior. The barriers include a lack of infrastructure and knowledge, requirements for additional resources, established life habits and moral standards of the society (Brunsø et al., 2004). The most common barriers were described in the literature - the lack of knowledge (Leiserowitz, 2006) as well as the need for additional costs (Dickinson, 2006).

At the same time, in Finland the negative impact of external factors is minimized. People who want to build their lives in accordance with the concepts of sustainable development have the opportunity to choose this behavioral strategy. Hypothesis 3 is approved for the Finnish respondents and rejected for the Russian respondents.

### 4.3. Identifying the Barriers for Sustainable Behavior

As noted above, there are barriers that can prevent the transfer of values into actions. Some of the actions are prevented by the external barriers: additional costs, special infrastructure etc. Such actions are:

- Recycle (newspapers, glass, cardboard);
- Compost food waste;
- Keep the room temperature in winter below 21°C;
- Purchase fairtrade products.
Internal barriers affect the actions in which a person's desire is a fundamental factor:
- Purchase natural products;
- Turn off the light when leaving the room;
- Purchase products directly from farmers (on the market);
- Pay attention to the country of origin (vegetables, fruits, cheese);
- Pay attention to the fat content;
- Pay attention to the composition (lack of GMOs, taste modifiers);
- Take bags from home while shopping;
- Use public transport instead of using a car;
- Walk or cycle instead of using a car.

One more group is constituted by actions leading to savings:
- Turn off the light when leaving the room;
- Take bags from home while shopping;
- Walk or cycle instead of using a car.

After analyzing the respondents’ answers about these groups of actions, it can be concluded that the Russian respondents tend to behave sustainably less often than the Finnish respondents within the actions that are influenced by the external factors. When the influence of the external factors is minimized and such behavior is based only on desire or contributes to savings, the Russian respondents choose a sustainable behavioral strategy more often than the Finnish respondents. Thus, hypothesis 4 is approved.

As for the barriers that can prevent transferring values into actions for the Russian respondents, the relationships between the actual behavior, the knowledge of the term "sustainable development" and the willingness to spend additional time and money were analyzed with the help of correlation analysis. All correlation coefficients are insignificant (less than 0.3), so this analysis did not shed any light on the behavior of the Russian respondents.

But the absence of influence of these barriers (lack of knowledge and unwillingness to spend additional funds) on the behavior of the Russian respondents does not deny the influence of infrastructure factors and other factors of the external environment that can prevent the direct transfer of the declared values into the specific behavior. So Hypothesis 5 needs to be further researched. In order to find out the barriers, the qualitative research was conducted.

5. Materials and Methods: Qualitative Research

In order to identify the barriers that can prevent the direct transfer of the declared values into concrete actions, a qualitative study in the format of a focus group was conducted.

Two focus groups were consistently studied. Each sample included six Russian respondents living in St. Petersburg, men and women aged 25 to 30 who were not familiar with each other and did not participate in market research over the last year, not working in the fields of advertising and marketing, production or sales of Organic products / wellness industry as these factors could affect the impartiality of the respondents' answers.

The focus group script included screening questionnaire and four main points:
- First associations and acquaintance with the question (collecting the first associations, asking clarifying questions, projecting the questions not straight to the respondent, but to his relatives (which makes possible to answer questions more freely));
- Decision making process and barriers (different questions for those whose behavior is sustainable and unsustainable, clarifying why a person behaves this way, how long, etc.);
- Personal perception (suggesting explaining sustainable consumption and sustainable development to a person who has never heard about it as well as to describe people who behave sustainable and, on
6. Results: Qualitative Research

Open, axial and selective coding of the Grounded Theory (Strauss and Corbin, 1990) helped identifying the barriers that can prevent the direct transfer of the declared values into concrete actions (Table 3):

- lack of adequate infrastructure, which makes actions either impossible or uncomfortable (in this case preference will be given to the less sustainable behavior);
- need for additional time and money (in this case the sustainable behavior is not completely rejected but is applied less frequently);
- lack of knowledge.

Table 3. Identifying barriers and motives for the sustainable behavior (excerpt)

<table>
<thead>
<tr>
<th>Action</th>
<th>Motive / Barrier</th>
<th>Citation of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td>Lack of knowledge</td>
<td>Civilized countries, Europe</td>
</tr>
<tr>
<td></td>
<td>Lack of infrastructure</td>
<td>Different garbage in different tanks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In St. Petersburg containers are only at the airport</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I always give out batteries, because there is a container near the house</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I will advise this to friends</td>
</tr>
<tr>
<td>Compost kitchen waste</td>
<td></td>
<td>Life in the countryside</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My grandmother does so in the cottage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the city I do not use food waste in any way</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the city it is impossible</td>
</tr>
<tr>
<td>Use public transport instead of using a car</td>
<td>Lack of infrastructure</td>
<td>No, it's about comfort</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I do not like when people push, cuddle, violate the personal space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I would do it if not for traffic jams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I will use if there are not too many people</td>
</tr>
<tr>
<td>Walking or cycling instead of using a car</td>
<td></td>
<td>Not suitable distances</td>
</tr>
<tr>
<td></td>
<td></td>
<td>So in Europe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It's useful and good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You cannot park a bicycle - it will be stolen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On foot it's hard to carry load</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If there was an infrastructure, I would ride a bicycle</td>
</tr>
<tr>
<td>Use public transport instead of using a car</td>
<td></td>
<td>Products in hypermarkets are cheaper, you can buy everything in one place</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There is no market near my home</td>
</tr>
</tbody>
</table>
| **Buy products straight from farmers** | **Additional time and cost** | **There is no time to go to different sellers in the market and each time to pay for the goods**  
If the market is next to home, I would buy products there  
If the price in the market is not higher than in hypermarkets, I would buy there  
In markets, goods are usually fresher and more qualitative |
| **Pay attention to ingredients** | **Health** | **I always pay attention to this, because my health depends on the quality of the products**  
I try to eat right  
I watch what I eat and I want to eat quality foods |
| **Take bags from home while shopping** | **Lack of knowledge** | **I do not advise anyone**  
This is silly  
It is impossible to predict the amount of purchases. The package is inexpensive  
I do not plan to go shopping  
Sometimes I want to take it, but I forget |


In the quantitative part of the research described above, the correlation between the knowledge of the term “sustainable development” and the actual behavior was weak. It can be explained by the fact that knowledge of only one term might be not enough. People do not realize that a certain type of behavior may refer to the sustainability and do not associate it with the benefit to themselves and / or others. For instance, maintaining temperature in the room below 21°C in winter and taking bags from home for shopping are associated only with economy and comfort. Members of the focus groups did not know about the existence of "Fairtrade" and methods of recycling, which led to the stereotypes that it is "expensive and impossible".

When people described the sustainable development, they associated it with income that allows buying quality products, environmental consciousness and time for caring for nature and people.

### 7. Discussion

Marketing is an important component of the company's sustainable development strategy. Sustainable development reports have become a tool for the reputational marketing long ago. Companies need to consider the different levels of environmental culture in different countries as well as the range of environmental and/or social problems that affect population of different countries to make their sustainable marketing activities effective. Companies, through marketing communications, can increase consumer awareness of sustainable consumer behavior and create conditions for such behavior through their goods and services.

### 8. Conclusion

The comparative research of the Finnish and Russian consumers showed that sustainable consumer behavior has its specific features in different countries. International companies should apply intra-national segmentation because different segments can be identified in Europe and in Russia based on the values of sustainability. Barriers associated with the lack of
knowledge, lack of adequate infrastructure as well as the need for additional time and money prevent Russians from choosing sustainable modes of behavior with the same frequency as Europeans.

In the further research, the sample should be extended by age and by countries. Typology of the sustainable consumption models needs to be identified. Recommendations for marketing activities adaptation for particular customer segments should be elaborated.

References


Neo, S.M., Choong, W.W., Ahamad, R.B. (2017). Differential environmental psychological factors in determining low carbon behaviour among urban and suburban residents through responsible


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