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Creativity as a Stimulus for Trade in Ecological Products on the Territory of Former Yugoslavia

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Abstract: Conservation of the environment has become one of the priorities today. As one of the ways of conserving the environment is trade in ecological products, this paper aims to examine creativity as a stimulus for trade in ecological products on the territory of former Yugoslavia. As far as the authors know, there have not been any cross-cultural studies conducted on the territory of former Yugoslavia dealing with creativity in the domain of trade in ecological products. Our cross-cultural research was carried out on a sample of 900 subjects using questionnaires. The statistical data used was descriptive statistics, ANOVA, and Tukey HSD test. The results of the research show that there are differences between countries from the territory of former Yugoslavia in terms of creativity as a stimulus trade in ecological products. The results can be applied in practice, namely, the market subjects involved in the trade of ecological products can create more adequate and more efficient strategies in which creativity is to be seen as a tool for increasing ecological responsibility, which varies in significance from country to country. Theoretical application is seen in the possibility of using the results as a basis for future studies.

Keywords: *Creativity; trade; ecological products; former Yugoslavia.*

1. Introduction

Today trade in ecological products is a priority globally, as it is one of the tools used to protect the environment. The analysis of the literature yields the conclusion that a basic marketing mix is no longer sufficient for trade in ecological products [1-6]. It is believed that trade in ecological products should involve a more open approach and wider use of other marketing tools, keeping in mind its purpose. Taking all of this into account, the paper centers on creativity as a stimulus for trade in ecological products, the reason being that creativity is a basis for new ideas that may result in great positive change.

This paper aims to analyze creativity as a stimulus for trade in ecological products on the territory of former Yugoslavia as we believe, there have been no such studies so far. The countries of former Yugoslavia are: The Republic of Serbia (Serbia), The Republic of Croatia (Croatia), The Republic of Slovenia (Slovenia), The Federation of Bosnia and Herzegovina (Bosnia and Herzegovina), Montenegro and The Republic of North Macedonia (Macedonia). Cross-cultural research was conducted on a sample of 900 subjects from all six countries from the territory of former Yugoslavia through questionnaires. The statistical methods used are descriptive statistics for establishing the frequency of creativity as a stimulus for trade in ecological products in these countries and ANOVA and Tukey HSD tests for determining the difference between the countries in creativity as a stimulus for trade in ecological products.

The paper consists of five parts. The first part contains a definition of creativity as a stimulus for trade in ecological products. The second part points to the reasons why the research aimed at determining the price as a stimulus for trade in ecological products was conducted on the territory of former Yugoslavia. The third part deals with the methodology of the research. The fourth part presents the results of the research and its limitations. The last part of the paper is the conclusion with a summary of the results of the research, then leads to the application of the results of the research and suggests how future research should be conducted.

At the end of the 20th century, the World Commission on Culture and Development of the United Nations recognized and in its documents officially adopted creativity as an attribute for better tackling of problems in all areas: ecology, social sphere, economy, and culture [7]. It is believed that a creative way of thinking results in new, unusual solutions in the form of “humane products”, which contribute to the inclusion of a sustainable environment, and social, economic, and cultural development, that is, sustainable development [7, 8].

How significant creativity is today can be seen in the widely accepted term “creative economy”. The term “creative economy” was popularized by John Howkins, a British media manager, in 2001 [7]. Creative economy comprises a range from the economy of science and technology to the economy of arts. Human ingenuity and creativity are the primary factors of the creative economy, and also the transformative processes of change [7]. It is necessary to challenge and reorganize the knowledge and experience we have gained so far, as well as our emotions and widely accepted social values. To be creative means to think differently from others and not be afraid to express it freely. Creative economy generates the advantages of economic and non-economic (non-monetary) approaches, which is why it is considered to be one of the basic instruments of freedom, which are integral parts of human development [7].

Creative economy grows rapidly, especially in developing countries, and contributes to economic growth and the opening of new positions. A UNCTAD survey indicates that the creative economy is responsible for between 0.5 and 7.3 percent of GNP and employs between 0.5 and 12.5 percent of the workforce [9]. Besides this, the total export of creative services reached a record 1.4 trillion dollars in 2022, almost doubling the export of creative goods, which reached 713 billion American dollars, highlighting the sector’s significant contribution to international commerce [9].

The factors that frequently slow the growth of the creative economy are: a rigid outlook, level of development and enforcement of intellectual property laws, the absence of state support, insufficient capital investments and disposable income, high expenses, and trade barriers [7, 9].

Examples of successful application of creativity in the domain of trade in ecological products are:

- The packaging of mushrooms – “Dell” Company [10]. Foam of a special kind of mushrooms was created through a partnership of the companies “Dell” and “Ecovative”. The basic advantage of this kind of packaging is that it is made from plants, which makes it biodegradable and does not pollute the environment but fertilize the soil.
- Bottle caps as Lego pieces. A Brazilian company “Clever Pack”, which creates ideas and solutions for different problems, created bottle caps such as Lego cubes (Picture 1.) [11]. They aimed to reduce plastic waste. Plastic caps were made as Lego toys so they could be used to make something useful and creative instead of being thrown away. Saving money was also pointed out as children do not have to buy new “Lego” products, as these caps can be used to make different figures.



Picture 1. Bottle caps as Lego pieces of the “Clever Pack” company.

By analyzing some international and national studies, we conclude that there has been some cross-cultural research into the trade in ecological products: The United States of America-France [12], The United States of America-Germany [13], Sweden-Baltic states [14], Canada-France [15] and Belgium-Poland [16]. Also, we concluded that on the territory of former Yugoslavia, there have been some cross-cultural studies into the topic: ecologically responsible shopping [17], ecologically responsible disposal of waste [18], and partnership as a stimulus for ecologically responsible trade [19]. Based on all of these, we may conclude that there are no cross-culture studies on the topic of creativity as a stimulus of trade in ecological products on the territory of former Yugoslavia.

So far, the cross-cultural research carried out in the countries of former Yugoslavia shows that in most cases there is a difference between the countries analyzed, and that is why we start from the following hypothesis: there is a difference in using creativity as a stimulus of trade in ecological products between the countries of former Yugoslavia.

Today the countries from the territory of former Yugoslavia are independent countries with different macroeconomic and microeconomic characteristics. However, all of the countries from the territory of former Yugoslavia used to comprise one country, which influenced the formation of certain similarities between the countries today. It is also pointed out that there is still a strong connection between the countries from the territory of former Yugoslavia, and it is present in numerous spheres. It is also pointed out that the international trade between the majority of countries from the territory of former Yugoslavia is very intensive. Because of all this, the countries from the territory of former Yugoslavia were analyzed in this cross-cultural research.

2. Materials and Methods

The methodology of the research contains a detailed depiction of the research sample, instruments of the research, its course and procedure, and the statistical methods used in it.

2.1. The sample of the research

In the cross-cultural study of creativity as a stimulus for trade in ecological products on the territory of former Yugoslavia, 900 subjects took part (100% of the sample), 150 subjects from each country from the territory of former Yugoslavia. If we look at the structure of the sample concerning each country, one can conclude that a sample amounts to 16.67% of the subjects by country.

The methods used in collecting the sample are the method of a stratified sample and the method of a simple random sample. The subjects of the research have been divided into six strata that is, the six countries from the territory of former Yugoslavia: Serbia, Croatia, Bosnia and Herzegovina, Montenegro, North Macedonia, and Slovenia. The method of a simple random sample was used to randomly choose subjects from all strata.

2.2. The instrument

The questionnaire was designed to analyze creativity as a stimulus for trade in ecological products on the territory of former Yugoslavia.

The questionnaire was designed on paper, but also through a Google questionnaire.

The questionnaire was created using the previously conducted cross-cultural research on the territory of former Yugoslavia whose aim was to research different sorts of and different stimuli for ecologically responsible behavior [17-19] and national characteristics of the countries and the international environment in which the research was conducted.

The questionnaire was created in Serbian, and it was translated into Croatian, Slovenian, and Macedonian. The subjects from Serbia, Bosnia and Herzegovina, and Montenegro filled in the questionnaire in Serbian, while the others filled it in in their respective mother tongues.

The questionnaire consists of three parts. The first part contains consent about filling in the questionnaire. The second part is about the country as a demographic characteristic of the population. The third part deals with creativity in the domain of trade in ecological products.

2.3. The course and conduct of the research

The research was carried out in the course of four months. The questionnaires were sent to friends and acquaintances of the authors of the research in all six countries, after which they forwarded the questionnaires to their fellow citizens. The questionnaires were also sent through social networks, especially through networks of organizations in the field of environmental conservation.

2.4. Methods of data analysis

Descriptive statistics were used to determine the frequency of creativity as a stimulus for trade in ecological products by countries: Serbia, Croatia, Montenegro, Bosnia and Herzegovina, North Macedonia, and Slovenia.

To establish the difference between countries in terms of creativity as a stimulus for trade in ecological products, analyses of the variances for independent samples were carried out (ANOVA). An independent variable is a country (6 levels), while a dependent variable is creativity. Tukey HSD tests were done to determine a clear difference between the dependent and the independent variable.

3. Results and Discussion

3.1. Descriptive statistics

The highest percentage of subjects who opted for creativity as a stimulus for trade in ecological products is in Serbia's arithmetic mean (AM) (AM=11.3) (Figure 2). The second highest percentage of those opting for creativity as a stimulus for trade in ecological products is in Bosnia and Herzegovina (AM=11.4), then come the subjects from Macedonia (AM=11.0), followed by those from Montenegro (AM=10.96), and those from Croatia (AM=10.7) (Illustration 2). The lowest percentage of subjects who recognized creativity as a stimulus for trade in ecological products is from Slovenia (AM=10.4) (Illustration 2).

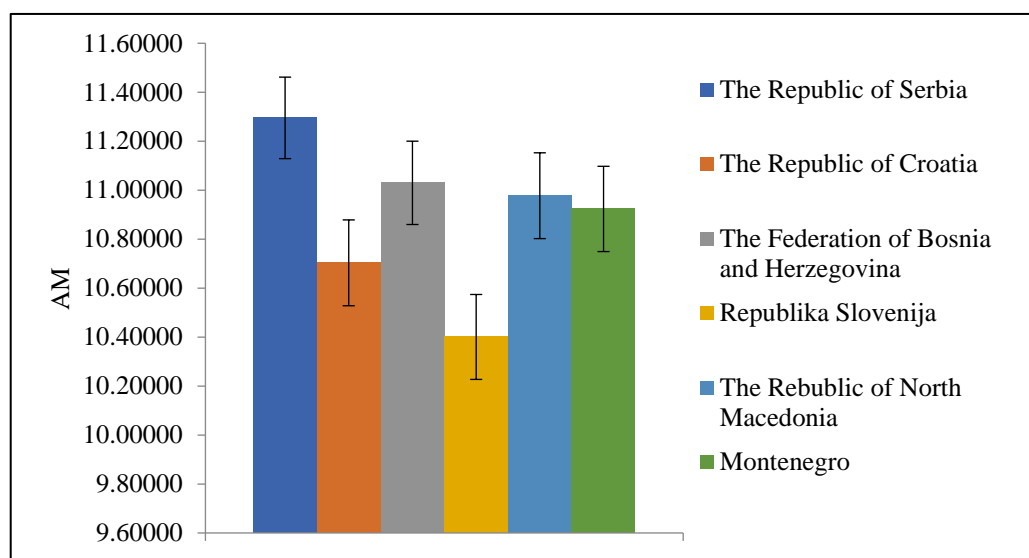


Figure 2. Descriptive statistics for creativity as a stimulus for trade in ecological products by country.

3.2. ANOVA – Differences in creativity by country

The results of the single-factor analysis of variance, with the factor being the country (6 levels), and the dependent variable of creativity as a stimulus for trade in ecological products, point to the fact that there is a statistically significant difference between subjects from different countries when it comes to creativity as a stimulus for trade in ecological products, $F(5, 1544) = 3.20$, $p < 0.01$, $\eta^2p = 0.01$. Post Hoc tests (Tukey HSD) showed that the subjects from Slovenia alter their behavior in terms of trade in ecological products to a lesser degree because of creativity ($AM = 10.40$, $SD = 2.64$) concerning subjects from Serbia ($AM = 11.29$, $SD = 2.6$, $p < 0.01$).

3.3. The limitations of the research

Cross-cultural research into creativity as a stimulus for trade in ecological products on the territory of former Yugoslavia was conducted very carefully, although it has its limitations:

- A new questionnaire – The questionnaire designed for this study is new and is not standardized.
- The size of the sample – The size of the sample – 900 subjects is relatively small because the total population amounts to 18 million people according to the latest known data from the census of 2023 [20-25].
- Socially desirable answers – Trade in ecological products is socially desirable behavior and that is why we presume that some subjects gave socially desirable answers, which do not reflect their actual behavior.

All the stated limitations have probably influenced the results of the research. However, the stated limitations of the research are acceptable, even more so when we take into account the following: the nature of the research, the number of the variables examined, the variability of the subject of the research, and the limited financial resources available to the researchers, so the results we have obtained are considered as relevant.

4. Conclusions

This study is in the first place research into creativity as a stimulus for trade in ecological products on the territory of former Yugoslavia, and as such it offers information of great relevance. The results include the following:

- Creativity as a stimulus for trade in ecological products was recognized by the highest number of subjects from Serbia, and by the lowest number of subjects from Slovenia;
- There are differences in creativity as a stimulus for trade in ecological products between the subjects from the territory of former Yugoslavia. Some differences were noticed between the

subjects from Slovenia, who altered their behavior in terms of trade in ecological products because of creativity to a small extent, concerning consumers in Serbia.

Based on all of these, it can be concluded that H1: There are differences in creativity as a stimulus for trade in ecological products between countries from the territory of former Yugoslavia, has been confirmed.

The results this research yielded can be applied in theory and practice. Practical application of the results is seen in the fact that different market subjects (international bodies, national bodies, companies, associations, etc.) may implement creativity as a stimulus for trade in ecological products in their strategies and do it in such a way that creativity has a different effect from one country to another. For example, strategies related to ecological responsibility in Serbia should place creativity as a tool for the promotion and realization of trade in ecological products in a higher position. While in the strategies related to ecological responsibility in Slovenia, creativity should not be a highly positioned stimulus for trade in ecological products, some other stimuli should be a priority when it comes to the increase of ecological responsibility through commerce. Theoretical application of the results is seen in the fact that the results may become secondary data in other studies and future longitudinal and comparative research.

Suggestions for future research: a) a wider approach to research by including other variables and qualitative methods, to gain a broader picture of trade in ecological products on the territory of former Yugoslavia; b) conducting a longitudinal research, for example, for ten years or so, to monitor the changes and the structure of changes in the trade in ecological products on the territory of former Yugoslavia, and c) conducting comparative research into the countries on the territory of former Yugoslavia and other countries and regions, to establish similarities, or rather differences in terms of trade in ecological products.

Conflicts of Interest: The authors declare no conflict of interest.

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