Factors influencing environmentally friendly behaviors. An exploratory study on Braşov residents

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Abstract

The present paper aims to investigate the factors which influence the adoption of environmentally friendly behaviors by the citizens of Braşov, as well as the means, resources and tools that local authority offers to residents in order to stimulate this behavior. In this sense, a qualitative research was conducted, using semidirective in-depth interviews, among 13 residents from the city of Braşov, Romania. The selection of the interviewed subjects was based on their involvement in environmentally friendly activities. The results outline several influence factors of the respondents' environmentally friendly behaviors, such as: the level of environmental education, the awareness concerning environmental problems, the time required for the adoption of environmentally friendly activities, the standard of living in Romania, development of specific local infrastructure, the institutional and legislative framework on environmental protection, the comfort and willingness to conform to group norms. Thus, the involvement of individuals in environmentally friendly activities should be based on the judicious combination of all factors that influence the adoption of such behavior.

Keywords

environmentally friendly behaviors, environmental education, specific infrastructure, indepth interview

JEL Classification

M31, Q56

Introduction

In the last decades, the international academic literature revealed an increased individual involvement in environmentally friendly activities. Numerous studies outlined the

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individuals' activities, aimed to protect the environment (Kinnear and Taylor, 1973; Ottoman, 1994; Martin and Simintiras, 1995). Other studies focused on the factors which stimulate, restrict or constitute significant predictors for individuals' involvement in environmentally friendly activities (Thøgersen, 2005; Steg, 2008). In addition, the specific literature includes a series of studies which outlined a classification of individuals in different categories, according to their level of involvement in eco-friendly activities (Stern, 2000; Ahmad, et al., 2012).

Review of the scientific literature

Individuals' awareness concerning environmental problems and its' reflection in the purchasing behavior were analyzed in the academic literature by several researchers (Dispoto, 1977; Hoch and Deighton, 1989; Park, Mothersbaugh and Feick, 1994; Schlegelmilch, Bohlen and Diamantopoulos, 1996). Some studies (Kinnear and Taylor, 1973; Ottoman, 1994; Martin and Simintiras, 1995) reported an increased public participation in eco-friendly activities, such as donating funds for environmental purposes, buying eco-friendly products, using clean fuels or organic food and recycling.

There are numerous citizens who strive to protect the environment and, at the same time, observe and perceive external constraints on the efficiency of individual consumers' actions (Thøgersen, 2005). For example, individuals may have limited ressources in terms of time, money, cognitive capacity and abilities, for a sustainable lifestyle. Actual consumers have limited access to information regarding the origin of products and their environmental impact. At the same time, consumers support the so-called "ignorance cost", explained by the extent to which they would make different choices if they knew sufficient details about the characteristics of the products they purchase (Chang and Lusk, 2009).

In order to explain individuals' involvement in environmentally responsible actions, most studies focused on the psychologic and contextual motives (Manzan and Zerom, 2006; Jakob, 2007; Rehdanz, 2007). In addition, several factors were identified, as significant predictors of environmental behaviors: knowledge and values, situational and economic barriers (Steg, 2008). The environmental behavior may be generated by factors such as the need to reduce costs (by minimizing energy and water consumption), but also by psychological factors (because the consumer thinks this is the best way). This indicates two types of environmentally friendly consumers (Ahmad, et al., 2012): (1) those who are constrained to adopt it (e.g. raising prices generates a reduced consumption) and (2) those who are willing to pay more for ecological products.

Stern (2000) observed three different types of pro-environmental behaviors:

- 1. Environmental activism (active involvement in environmental organizations);
- 2. Non-activist public behaviors (supporting public policies or the willingness to pay higher taxes)
- 3. Private environmentalism (buying "green" products, minimizing energy or recycling). Environmental behaviour was conceptualized in five behavioural categories as following (Asilsoy, 2012): energy saving, water conservation, waste management, green consumption and sustainable transportation.

Research methodology

In order to identify the factors which influence the adoption of an environmentally friendly behavior by Braşov residents, a qualitative research was conducted, using semidirective indepth interviews, among 13 subjects. The selection of the respondents was based on their

involvement in environmentally friendly activities. From the total of 13 interviewed subjects, 6 of them are members of environmental non-governmental organizations (NGOs). In this sense, the main objectives of the present research aim to:

- Identify the factors which influence Braşov residents' involvement in environmentally friendly activities;
- Identify the means, resources and tools that local authority offers to Braşov residents in order to stimulate an environmentally friendly behavior.

After conducting the interviews, the authors of the present paper transcribed them and performed a content analysis.

Results and discussion

According to the interviewed subjects, the adoption of an environmentally friendly behavior is determined by different types of factors: economic, social, psychologic, institutional, legislative etc., which support or discourage individuals. After grouping and analyzing the collected data, we identified several factors, which explain Braşov residents' low involvement in environmentally friendly activities, presented as follows.

a. Environmental education. According to the respondents, environmental education is a discipline which has not received sufficient attention in Romanian education institutions as the number of hours allocated for it in the school curricula has decreased considerably and the theoretical aspects do not include practical activities which pupils can do, in order to learn and apply the conceptual framework.

S13:"When I was a pupil, I learnt about it [the environment], (...) but I have never studied the significance of an ecosystem."

Individuals' increasing awareness concerning the importance and necessity of environmental conservation, as well as the adoption of environmentally friendly behaviors is based on the existence of certain environmental courses in the school curricula. Studying of such courses is a necessary condition, but insufficient, for the theoretical concepts to be transposed in real life. In this sense, according to the respondents, it is necessary to put the newly learnt information in practice, so that pupils/students can better understand the environmental effects of their positive or negative actions.

b. Individuals' little knowledge about environmental problems. The low importance given to individuals' environmental education in Romania resulted in a decrease of their awareness about environmental issues.

S10: "There are cases where people really do not care or are not informed or do not realize the effects of their behavior. (...) I think there's the problem, we do not see, do not really see how much we are wasting ... and it is difficult to inform. (...) we do not know, because if we knew and see (...), so individuals should seek information on this subject."

According to some respondents, the elder persons have a lower degree of awareness regarding environmental issues. The low level of knowledge of elder people on environmental issues could be determined by the peculiarities of the education institutions they attended and by the context they studied in, as environmental protection was not a priority area for the development decades ago because of a lower level of environmental pollution. On the other hand, there are a number of international studies showing that young people are more concerned to environmental issues compared to the elderly. According to the results of this study, there were opinions that the involvement of youth in ecological activities is higher compared to other individuals. However, one respondent - member of an environmental organization and engaged in pupils' / students' educational activities on

environmental issues - found that among young people, there is a low level of information about the activities of greening taking place locally.

- c. The indifference, people's carelessness towards real environmental problems. Putting environmental education on the second place in educational curricula may explain individuals' attitude of indifference / carelessness to environmental problems, but also to the less friendly implications which their behavior may have on the environment.
- S7: "It is clear that many young people do not realize that there is pollution and what effects it has on the environment. Everyone talks about global warming but do not actually realize what it is. Nobody is interested in that. (...) we are not aware of the benefits of selective waste collection (...) we are not aware of how much we pollute the environment when one person rides a car."
- d. The lack of sufficient time or the existence of other priorities that justify individuals' low involvement in environmentally friendly activities. According to one of the interviewed subjects, the adoption of environmentally responsible behavior requires allocation of additional time or submission of a larger effort in specific activities. In other words, environmental protection is not a part of their activities, but an "annex" to which they must devote more time and effort. Also, with the increasing number of individual responsibilities, the time devoted to protecting the environment decreases. This behavior may be determined by the place of environmental protection in Romania's development priorities, which does not encourage / involve individuals in environmentally friendly activities.

S6: "Other people find my attempt to protect the environment quite strange: "Do you have time for this? or do you think about that as well?" especially as, generally, we are all busy, in a hurry. I think they see this behavior as something you cannot do every day, constantly associated with any activity, but as something you have to deal specifically to protect the environment ... which, in their view, requires additional efforts."

Placing environmentally friendly activities on second place in individuals' behaviors is also demonstrated by other respondents' opinions. Reviews such as "as far as my daily program is not very busy" or "I am in a rush, I do not have time" demonstrate that environmental protection is not, at least in the city of Braşov, part of the normal activities carried out by the city's residents.

The adoption of an environmentally friendly behavior is considered by retailers or by respondents' friends to be an exception to individuals' normal behavior. Refusing to buy / receive bags for product packaging / storage / transport or attracting the attention of others when they behave less environmentally friendly, are some of the specific situations that highlight the place of environmental protection in Braşov residents' concerns.

S10: "[in the store]" Want bag? "," I do not! "(...) we try to protest, but people are strange ... yeah, we're freaks, what you mean you do not want a bag, it is free."

e. The standard of living in Romania. Another issue mentioned by the interviewed subjects concerns the low standard of living specific to their country. In their view, individuals'involvement in environmentally friendly activities is closely related to the existence of a higher level of socio-economic development. In other words, the higher the level of socio-economic development of a country, the bigger are the concerns of individuals regarding environmental protection as they have the necessary resources (time, money, effort, etc.) for the adoption of a specific behavior. These opinions confirm the results obtained by other authors in similar studies which highlight the close relationship between the two components (Kemmelmeier, Król and Kim, 2002; Franzen and Meyer, 2010; Givens and Jorgenson, 2011).

S10: "(...) we should not forget that Romania does not all have this level of welfare (...) it is also the problem of the rural population and poor people who do not have these thoughts (...) meaning they have basic needs, have nothing to eat, they do not have a place to sleep, or they are cold (...), and automatically link all to their standard of living (...) it's not anyone's fault that people generally have other priorities."

The standard of living in Romania, the low income per capita, coupled with high prices of organic products sold on the Romanian market, were mentioned by the interviewed subjects as other issues which have to be considered when evaluating citizens' involvement in environmentally friendly activities. In this respect, respondents referred to cleaning products, local food products, but also the necessary equipment they would need to adopt a more environmentally responsible behavior.

S11: "I do not use green cleaning products that are more expensive."

f. Developing ineffective and / or insufficient local infrastructure. An environmentally responsible behavior can not be achieved only through education, information or by increasing awareness of the importance of protecting the environment; it also needs the intervention of local public administration. Its role is to ensure adequate infrastructure to encourage citizens' adoption of such behavior.

The study results reveal the existence of an underdeveloped specific infrastructure in the city of Braşov. Thus, in terms of e means that local authorities have so far made available to citizens to become more involved in environmental protection, the following issues were mentioned: bicycle lanes, car traffic management - the number of roundabouts and parking places, specific infrastructure for disabled people or people who use wheelchairs for transporting children and special containers for selective waste collection.

According to the respondents, bike trails designed so far do not cover all the main roads of the city. The infrastructure created and made available to citizens is not continuous; it exists only in certain areas of the city and does not offer the possibility of safely transporting bikes from one side of the city to another. For this reason, the interviewed subjects considered that the use of bicycles (a clean alternative for transportation in the city) is discouraged and potentially interested citizens use other means of transport which are safer, but with a higher degree of pollution (e.g. bus, private car) to to move from one point to another of Braşov city.

Another problem that the interviewed subjects reported about the specific infrastructure is that in Brasov the number of cars has increased in recent years, causing a corresponding increase in the number of parking spaces. According to one of the respondents — who is a member of an environmental non-governmental organization — in order to protect the environment and, at the same time, to ease traffic congestion, fees charged for the use of cars in the city should be applied or increased, especially in crowded areas, in order to discourage such behavior. According to the same subject these fees should increase progressively, considering the degree of car agglomeration in the area.

Also, in the same context, the interviewed subjects raised the issue of specific infrastructure necessary for the movement of people with disabilities or those who use wheelchairs for transporting children. In this respect, it is considered that the currently existing infrastructure is not yet adequately developed for these individuals.

Concerning the selective waste collection bins, most respondents noted the existence of several problems that local authorities should solve in order to encourage citizens' environmentally responsible behavior, including: insufficient containers in the city, the fact that they do not exist in all city neighborhoods or the fact that wastes, once selected, are mixed in the same container to be then transported in special places for waste disposal.

S13: "I noticed that when they were taken from the house [wastes] they were put in the same place anyway, and it was one of the reasons I stopped recycle (...) in my neighborhood [from the city of Brasov] there are no bins for selective collection, frankly, will not transport the garbage in other neighbourhoods, given that I am not convinced that waste is processed correctly."

Respondents also discussed the involvement of retailers in environmentally friendly activities. In this respect, the remark of one of the subjects should be mentioned, referring to the specific infrastructure that some retailers put it at the disposal of their clients (e.g. returning plastic bottles). The mentioned subject considers that Braşov residents are less involved in such activities for two reasons: first, because the involvement effort in such activities is higher than the amount of money they would receive in exchange for the return of plastic bottles, and on the other hand, because the specific infrastructure is not organized in order to encourage such behavior.

g. The desire for comfort, familiarity to do the same every time, the effort implied by a lifestyle change or a desire to conform to a particular group is, according to the respondents, other reasons explaining the low involvement of Braşov residents in environmentally friendly activities. The comfort of using their private car, ease and speed of movement from one point to another of the city or to various other destinations in the country and abroad, and time savings resulting from the choice of means of transportation are grounds for which Braşov citizens are behaving less environmentally responsible.

S12: "It's convenient, it's my car, I get on it in front of my building, so it's all about convenience (...) I think I'll never give up the car to give due to the idea that it pollutes, we have not reached that level ecological consciousness, I only leave the car home when I need transportation in the city."

The services offered by retailers to attract and retain consumers such as availability / advantageous geographical position, close proximity to housing, indoor and outdoor facilities, how they organize their stands - to meet the needs of comfort, convenience and speed in terms of purchasing, are other reasons why Braşov residents are less involved in environment-friendly activities.

S9: "(...) it's easier to go to the supermarket and get ready packaged products than to go to the market with your own bag."

Respondents considered that the adoption of a less environmentally responsible behavior by Braşov residents should be determined by their willingness to comply with the rules of the groups they belong to. The general conception that the country's economic growth is more important than protecting the environment, coupled with the desire of individuals to comply to group pressure, would probably explain the low involvement of the citizens in environmentally friendly activities.

S10: "(...) it is more convenient to do what everybody does!"

h. The absence or inefficiency of the implementation of institutional and legislative framework on environmental protection. Regarding the activities which have a lower or higher impact on the environment, Brasov citizens' behavior neither is, sufficiently monitored, nor penalized when not complied with legislation. To be more environmentally friendly behavior, Braşov citizens should be obliged, constrained in various forms (through higher fines, through greater supervision of outdoor activities and charges for the use of green spaces).

S9: "I think people can not change unless they are pushed from behind (...) no one can be like that [behave environmentally friendly] on their own initiative. (...) I am not against those who do barbecues, but I think taxes should be put on such activities (...) you are not

allowed with loud music on the mountain (...) to monitor these areas, because there are many people who leave trash, and I think fines should be given for such behaviors."

Conclusions

The results of the qualitative research outline that individuals' adoption of environmentally friendly behaviors is the result of a series of economic, social, phychologic institutional and legislative factors. In addition, we outlined the necessity of a combination of all the factors that contribute to educating, informing and raising awareness of individuals about the importance of protecting the environment and their participation in environmentally friendly activities in order to stimulate such behaviors among citizens. Keeping a clean environment can be ensured only through the voluntary participation of a small percentage of individuals but it must be supported by the entire community. When encouraging the involvement of all members of society in activities which support environmental protection multiple perspectives must be taken into consideration: family and school based environmental education of children, raising citizens' awareness concerning environmental problems, promoting the advantages of having a clean environment, general and specific provision of infrastructure by local authorities to support the display of environmentally friendly behavior by individuals, but also providing a proper institutional and legislative framework.

The present paper has a series of limits, especially given by its exploratory character, as the results are not representative for the studied population. However, the resulted information may be valuable for the specific literature as they outline several weaknesses of the economic and administrative activity which limits citizens' possibilities to display environmentally friendly behaviors. Future qualitative studies may focus on the investigation of environmentally friendly behaviors of different consumer segments either with a local or national focus. Another future research direction may be the study of local authorities or tourism businesses representatives' attitudes towards consumers' environmentally friendly behavior. Other studies (based on multiple regression models) may identify and measure the factors which influence individuals' environmentally friendly behavior.

Acknowledgements

This paper is supported by the Sectoral Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and by the Romanian Government under the project number POSDRU/159/1.5/S/134378.

We also wish to thank the members of the Association of Ecotourism in Romania, Pro Park Organization and Natura 2000 Coalition Federation in Romania, for their support in collecting relevant information for the present study.

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