Abstract

The awareness of the environmental issues has made people to feel guilty about their past choices and to help minimize their negative impact they have decided to live a life based on sustainability. Living a sustainable life means, among other, to protect the environment. Therefore, people turned their usual consumption into a green way.

The purpose of this thesis was to illustrate how two type of vegetarianism, flexitarians which are those people who on rare occasions consume meat but in generally they follow a plant based diet and actual vegetarians, could be integrated into a bigger group called green consumers. Although these two concepts are completely different, some similarities between them exist.

Regarding their overall behavior, there is a connection between the choice of a vegetarian diet with the impact on the environment of personal overall consume and the perceived impact on the ecosystem of alimentary consume with the overall consume.

Key words: vegetarians, flexitarians, green behavior, green consumption, environment friendly choices

J.E.L. classification: F64, M30, M31, Q56, Q57.

1. Introduction

A person who is dedicated towards being a green consumer is the one that is thinking what negative consequences there will be to the environment when his actions are classified as harmful to the nature. And therefore, his concern starts to change the way he is acting and he will do everything in his power to avoid being a “threat” to its surroundings, like buying only organic or sustainable products.

According to Lye Heng and his colleagues, which had developed a model of ecological behavior, a pro-environmental behavior is influenced by psychological and social factors which generates five factors that contribute to this type of conduct: (1) the possibility to act pro environmental; (2) the attitudes and values towards the environment; (3) knowledge about environment; (4) consequences of the behavior perceived and (5) motivation for a behavior like this. All of these are frequently assumed to motivate a green consumption behavior. Bartkus and his colleagues did some research and found that there has there is a link that has led to positive effects on the green consumer’s behavior. The present relation was done between self-reported and objectively measured knowledge regarding the environment. Green consumers are concerned about environmental issues (Lye et al., 2015, pp. 432-433; Bartkus et al, 1999, pp.129-146)
2. Theoretical background

Environmental sustainability also represents one of the vegetarian’s concerns. It is not the main reason why they stopped consuming meat, as a study realized by Nick Fox and Katie Ward proves, but still there are some people who are taking into consideration the problems that arise from the meat consumption (Fox and Ward, 2007, p. 426). Simultaneously, once they started following a vegetarian diet some people begin to bike, walk and tried not to use their cars as before. Even if in the beginning the protection of environment is not the main reason for the abstinence of meat, people still expressed some environmental commitments and after a while environmental concerns are becoming a priority.

Even if some vegetarians do not consider the environment when taking the decision of living on a diet based solely on plants, indirectly they are still having a big and positive impact on it. As stated by the American Journal of Clinical Nutrition, to produce animal products like milk and eggs used in a lacto-ovum-vegetarian diet, the actual animals requires half of the quantity of food than the amount of grains used to grow animals for a meat based diet. In this case was used a lacto-ovum-vegetarian diet, because it is the most common one, to compare to a meat based one.

Growing plants and vegetables also requires major inputs of fossil energy, just like animal farming, but the quantity of energy inputs is significantly different. Essential foods in a vegetarian diet like grains and soybeans are produced more efficiently when it comes to the consumption of fossil energy. Vegetarians are motivate by ecological problems to stop eating meat (Fox and Ward, 2007, p. 426; Pimentel and Pimentel, 2003, p. 660).

Green consumers do not only think about the environment when they make a purchase, because in the end they are the ones that are going to utilize or eat that particular product. And so, the consideration for the environment incorporates their concern about their health. It is obvious that not all products are considered green and suitable for those who are dedicated green consumers, but there are some that are sustainable and at the same time healthier, when talking about food. Everything that is certified organic or eco-friendly are products that represent a good solution to the concerns of green consumer.

In recent years there has been a rapid growth in the market for all the products that can be classified as being organic and in more and more countries the consumption and production of these foods is spreading fast. And the reason behind this is the fact that organic products are much healthier than the usual ones and people will prefer to pay extra to be sure that they are eating well. Health is a concern of the green consumers (Thøgersen, 2010, p. 172; Woese et al., 1997, p. 281).

Many people are associating health with a balanced diet, because they believe that a poor dietary regime will bring down the levels of health and also it will increase the chances of some specific diseases to appear. An ideal diet nowadays, that can improve the life span and the quality of it, is considered to be the vegetarian one. There are enormous differences between how a vegetarian and a meat-based eater feel, because many people have confirmed that once they start abstaining from meat they already felt much healthier and alive. Most of the times, people are motivated by health reasons to start following a plant based diet and then this reason become a justification for carry on with such a diet.

Starting from 1980 and until 1984, 4 persons did a study on comparing the state of health and also the mortality rate between vegetarians and non-vegetarians. As expected, at the end of their study they reached the conclusion that the mortality rate from the major types of cancer had really low rate for the vegetarians, up to 50% lower than for those who are consuming meat. Also, they saw that meat eaters are more prone to heart diseases and emergency appendectomy. Thus, the health of non-vegetarians that participated in the study is generally weaker compared to the vegetarians, who turn out to be very healthy, with just a little insufficiency of iodine. The main motivation for a person to start a vegetarian diet is the desire for a healthier life (Fox and Ward, 2004, p. 426; Appleby et al., 1999, p. 525).
3. Methodology

The research objectives were:

O1: To identify the health consciousness of the flexitarians and vegetarians.
O2: To identify the motivation of being a flexitarian or a vegetarian.
O3: To identify the green behavior of the flexitarians and vegetarians.
O4: To identify the perception of flexitarians and vegetarians on the impact of their own consume on the environment.

The research method consists of an online survey, applied to the suggested people through the snowball techniques which also correspond to the population. In order to have enough respondents to finalize the research, an online questionnaire was used and made with Google Forms. It has a filter question, in order to eliminate those who cannot be classed as vegetarian of flexitarian and a question which separates them in order to be easy later to compare their answers. To see how they feel about their own health we used a Health Consciousness Scale from 1998, developed by Stephen Gould, contain 9 statements. One question was used to find out in what measure three different reason has influenced their decision to follow a plant based diet and another question was utilized to see how they perceive their own consume in 5 different categories.

In addition, a question was used to determine what is their recycling behavior and four more to see is they realize the fact that have an impact on the environment and to discover in what measure they believe that impact is a positive one. Furthermore, five questions were used to make a better profile of the respondent (e.g. age, income, education).

The population is formed by young people, with ages between 18 and 40, who are either vegetarians or flexitarians.

The sample size is formed by 90 persons selected based on the criteria described above. To understand the results better and to see if there is any difference between them, the sample is formed from 45 vegetarians and 45 people that are eating meat on rare occasions. For the purpose of reaching only vegetarians and those who have inclinations towards being one, we used the snowball method, which means we asked 10 persons of each category to give us another 2-3 persons that can give valid responses to the questionnaire in order to avoid null responses.

A single person represents the sample unit. The survey was completed online only by people who are currently living in Iasi. The survey was applied between 20th of May and 31st of the same month.

4. Findings

Hypothesis 1: There is a difference between flexitarians and vegetarians regarding the reasons for choosing a vegetarian diet. (Lye et al., 2015, pp. 432-433; Bartkus et al, 1999, pp.129-146)

To see if the hypothesis can be confirmed two variables were used. The first variable is a nominal. Respondents had to choose from two categories: a person who is eating meat rarely and a vegetarian. In what measure do you think the following reasons influenced your decision to be a vegetarian or to have vegetarian habits? Was the scale variable and there were 3 motives and people had to tell about each one how much influenced this decision.

It was used an Independent Samples T-test because this one was the most suitable in this case.

Null Hypothesis: There is no differences between a flexitarian and a vegetarian regarding the reasons for choosing a vegetarian diet.

To see if this particular hypothesis, the value that is taking into consideration is from the column Sig. (2-tailed) and if that value is over 0.05, which is the chosen level of significance then we would have to accept the null hypothesis.

According to the level of significance from the t-test for Equality of Means, in all three cases, we would have to accept the null hypothesis because all the values are bigger than 0.05 and this means that the variability in both conditions is almost the same and it is not significantly different. Therefore, in this case there are no differences between the flexitarians and vegetarians regarding the motives from which they eliminated meat from their diet.
Hypothesis 2: There is a difference between flexitarians and vegetarians that concerns the predisposition for a green life. (Fox and Ward, 2007, p. 426; Pimentel and Pimentel, 2003, p. 660)

To see if this proposed hypothesis can be confirmed it was decided to use the statements from the Health Consciousness Scale and to compare the means of each one between the flexitarians and vegetarians. It can be seen from the start that there are some differences between the means of each affirmation. Some of them are minor and others can be considered significant.

Regarding the first statement it can be said that vegetarians think a lot more about their health than flexitarians, because of a difference of 0.31. Which is not the case with the proposition about the self-consciousness, where because of a difference of only 0.02, flexitarians which responded are considered to be conscious about their health.

When asked about if they agree or disagree with the fact that they are generally attentive to their inner feeling about health, the answers from vegetarians generated a bigger mean, which results in the fact that they are more attentive, compared to those who still eat meat, but rarely. Again, the mean from the vegetarian regarding the statement about constantly examining their health is slightly smaller than the mean from the flexitarians. From this it can be concluded that those who eat meat rarely are examining their health a lot more than those who follow a plant-based diet.

In the next five affirmations, vegetarians have the bigger mean which suggests that they are more alert to different changes in their health, are more aware in general of their health state, the pay much more attention to how they feel during the day from a health point view and they are involved more in their health than the flexitarians. Excepting a statement where both means are equally and that is focused on noticing how they feel physically during the day.

In conclusion, the proposed hypothesis can be confirmed and difference between these two groups for the predisposition of green life can also be seen in the last row which illustrates the mean of means and there is a 0.10 difference. It is small, but there is one.

Hypothesis 3: There is a difference between flexitarians and vegetarians in their recycling behavior. (Fox and Ward, 2007, p. 426; Pimentel and Pimentel, 2003, p. 660).

In order to test this hypothesis, Independent Samples T-test was used and two variables were utilized. The first one is showing how many of the respondents were flexitarians and how many are vegetarians and the second one was a question that measured their recycling behavior.

Null hypothesis: There is no difference between the flexitarians and vegetarians in their recycling behavior.

From the mean, it can be said that vegetarians with a mean of 3.11 are more inclined to recycle than those who consumes meat rarely, who only have 2.84.

But the level of significance shows a different thing. 0.282 is higher than 0.05, which indicates that there are no differences in the recycling behavior between the flexitarians and vegetarians and therefore the null hypothesis must be accepted.

Hypothesis 4: There is a correlation between the recycling behavior and the perceived impact on the environment. (Thøgersen, 2010, p. 172; Woese et al., 1997, p. 281)

For this hypothesis we used two variables, one that is showing how the respondents appreciate their recycling behavior and the other one is presenting the perceived impact of their overall consume on the environment and to see if this hypnosis can be confirmed a Person Correlation test was made.

Null hypothesis: There is no correlation between the recycling behavior and the perceived impact on the environment.

The Pearson Correlation value is .105 and that is the actual correlation coefficient and it tells the strength of the linear relationship between the chosen variables. And in this case it is a weak correlation, but positive.

According to the level of statistical significance, it can be said that is bigger then the chosen one (.324 > 0.01) and the null hypothesis must be accepted invalidating the fact there is a correlation between the recycling behavior and impact of their own consume on the environment.

All the data are presenting a weak correlation between the recycle behavior and the perceived impact on the environment from 5 different categories: water, food, electricity, natural gas and petrol/diesel. In all the cases the correlation is a positive one.
In every table, the p-value is bigger than the chosen one of 0.01 and therefore again the null hypothesis is accepted, just like in the first correlation made to test the alternative hypothesis.

**Hypothesis 5:** There is a correlation between choosing a vegetarian diet and taking in account the personal impact on the environment. (Thøgersen, 2010, p. 172; Woese et al., 1997, p. 281)

It was used a Pearson Correlation to test this hypothesis and the variables are: “I believe that my consumption has an impact on the environment” and “I believe the fact that I am a vegetarian or I have vegetarian habits, my consumption has an impact on the environment”.

Null hypothesis: There is no correlation between the choosing a vegetarian diet and taking in account the personal impact on the environment.

The actual value of this correlation is .492, which results in a moderate correlation between these two variables.

The level of significance showed in this table is 0.000 which is less that the chosen one of 0.01 for this test, so in this case there is a statistically significant correlation between those two variables. Also, the null hypothesis will be rejected and the proposed one will be accepted.

**Hypothesis 6:** There is a correlation between the perceived impact of the alimentary consume and the perceived impact of the overall consume on the environment. (Fox and Ward, 2004, p. 426; Appleby et al., 1999, p. 525)

To test this hypothesis, we used two scale variables. One is measuring how positive is the perceived impact of the respondents of their own consume on the environment. The second variable is the same but was formulated after mentioning the fact that following a vegetarian diet might influence that impact.

Null hypothesis: There is no correlation between the perceived impacts of alimentary consume and the perceived impact of the overall consume on the environment.

In this case is presented the strongest correlation of all, with a correlation coefficient of 0.683. The relationship is also a perfectly positive linear one. The level of significance is 0.000, which means that the null hypothesis will be rejected and the alternative one can be confirmed. Because the p-values is smaller than the chosen one this correlation is statistically significant and it not occurred by chance.

5. Conclusions

All the objectives set before the practical research have been met and four out of six suggested hypotheses have been invalidated as a result from various tests.

First all the, as proposed, the number of respondents from both categories is equal, therefore a more exact comparison has been made and all the answers provided were valid ones. And after the interpretation of those answers from both groups, minor differences have been discovered between flexitarians and vegetarian’s behavior. In both cases females were the predominant category, which also has finished a faculty and is following a vegetarian diet or has some vegetarian inclinations for maximum 6 months.

Using the Health Conscious Scale made by Stephen Gould, it was discovered the fact that vegetarians are more conscious bout their health than flexitarians, but with a difference of only 0.10 resulted from the mean of means. The difference is not as significant as it was anticipated, but in the end there is one. Using this scale with its nine statements it has been determined the fact for almost 80% of those 90 respondents, health is very important and also they are very involved in it, by constantly examining it, observing any changes in their health or noticing their health state and how they feel physically during the day.

When asked about in what measure three different reasons has influenced their decision to eliminate meat from their diet or to reduce the quantity drastically, in both cases the principal motivation was the desire to save the animals which are raised in inhumane conditions and after that slaughtered without any mercy. Recently, advocates for animals rights have published films and videos with animals that are brutally killed and almost everyone has at least watch one, even for a few seconds and now that people are more aware of the real conditions for animals they changed their diet to save some innocent animals. The second most important reason is the health motivation, which is was expected, because the majority of vegetarians are influenced by the desire to live a healthier and longer life. And the motivation which is influencing people in a smaller
measure is the protection for the environments. Therefore, almost 85% of the respondents can be considered green consumers. Also, there is no difference between flexitarians and vegetarians regarding the motivation behind following a vegetarian diet.

The majority of those who participated in the research have characterized their consumption from five different categories mostly positive, except the consumption of natural gas and petrol or diesel, which they are fully aware that even a small consumption will have a negative impact on the environment. This question was tested against the one designed to find out about their recycling behavior and no correlation was found between them, meaning that people believe that the impact from their consumption is not the same as the impact from their recycling actions.

In proportion of 95%, the respondents are aware of the fact that they have an impact on the environment in general and it is a positive one in small to big measure. And after they eliminated meat from their regime, they came to realize that they have a bigger impact on the ecosystem and they considered being a more positive one. This is also supported by two hypotheses which have been confirmed (H5 and H6) and showed that in fact there is a connection between how they perceive their impact of the overall consume before and after going vegetarian and the perceived impact on the ecosystem becomes more positive.

6. References