

STUDYING THE BEHAVIOR OF USING FROM REUSABLE CONTAINERS OF POPULATION OF UZBEKISTAN

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Abstract. The purpose of the research was to determine the environmental behavior, knowledge and culture of the population in relation to single-use polyethylene terephthalate (PET)-based bottles, as well as to know anonymously the level of use of reusable containers through the questionnaire method. The research was conducted for three days using social networks, and 367 people from different sphere of the population, people of different ages and professions were directly acquainted with the questions of the questionnaire, but 167 (45 %) respondents answered the questions actively. According to the research results, it was found that 72% of 121 respondents do not carry reusable water containers with them regularly. It was found that 54% of 117 respondents bought reusable containers for their children and relatives, 82% of 117 respondents said that reusable containers are not a serious threat to nature, 74% of 113 respondents said that most people must use reusable containers. And 73% of 113 respondents said that the use of reusable containers is one of the main factors for solving the plastic problem in the world.

Key words: Single-use plastic bottle, reusable containers, plastic waste, rational using from plastic dishes, saving water, environment, ecological behavior, ecological culture.

1. Introduction

Single-use plastic water bottles have already taken a strong place in our life with a number of conveniences and cheapness [1] and their negative impact on nature is increasing so much that humanity should already think about seriously dealing with this problem, at least they should realize the wide use of alternative options (steel, aluminum) of single-use plastic containers [2]. 481.6 billion bottles were used worldwide in a single year. Euromonitor International cites that «as of 2015, approximately 6, 300 metric tons of plastic waste had been generated, around 9 % of which had been recycled, 12 % was incinerated, and 79 % was accumulated in landfills or the natural environment» [3]. Demand for plastic containers is predicted to rise 4, 9 percent annually [4]. The average person uses 150 plastic water bottles a year [5]. As the population grows, the irrational use of single-use plastic bottles is also increasing. Humanity does not realize that it is a very serious problem that is collecting such a large amount of waste for the next generation – the next owners of the Earth.

A million plastic bottles are purchased across the world every minute of the day, taking around 1,000 years to biodegrade. Plastic bottles don't end up in landfills end up polluting our oceans, killing environment, injuring and killing marine animals [6]. It's estimated that 56 % of the planet's whale, dolphin and porpoise species have consumed plastic. A plastic bag ballooned with water can look a lot like squid, or other pray, to the seals and marine mammals that hunt them [7]. By 2050, there will be more plastic in the oceans than there are fish according to environmental scientists and approximately 1 million sea birds also die from plastic annually [6, 8]. Humanity is the main cause of the brutal extinction of millions animals living on the planet Earth.

Having a reusable water bottle is one of the best ways to save plastic and water. The average reusable bottle holds about 32 oz water, whereas the average plastic water bottle can only hold 16 oz. One reusable bottle can hold twice as much water as an average plastic bottle, resulting in fewer refills and more water at lower price

[2, 9]. A person who uses reusable containers contributes both to the negative impact on nature and to saving money in his pocket.

Reusable water bottle is a bottle that can be reused, as in the case as by the original bottler or by end-use consumer. Reusable bottles have grown in popularity by consumers for both environmental and health safety reasons [10]. Reusable water bottle is environmentally friendly bottle. Disposable plastic water bottles have the potential to «leach» foul-tasting or even potentially harmful chemicals into the water they hold, especially if exposed to high temperatures for extended periods. This can be responsible for the nasty «bottled water» taste [9, 11]. Reusable containers are better for human health than single-use plastic bottles.

Most types of plastic bottles are safe to reuse at least a few times if properly washed with hot soapy water. However recent revelations about some of the toxic chemicals found in single use plastic water bottles are enough to prevent even the most committed environmentalists reusing them – or buying them in the first place [12]. And to produce one plastic water bottle uses up more water than it takes to fill the actual bottle [13]. Therefore, the use of reusable water bottles reduces water consumption in its production and save the environment.

The purpose of the research is to determine the culture of using reusable containers and plastic containers on the basis of a questionnaire. By determining the behavior of our people toward plastic products it is to check their ecological knowledge and ecological culture, to evaluate their attitude towards nature.

2. Method

The study was conducted using the Telegram social network in the form of a questionnaire. The use of social networks has a number of unique advantages, for example, for this, it is not necessary to gather the participants for one place at one time and it saves time; also, the participant can conveniently use the social network at any time and place. The electronic organization of the questionnaire saves the time of conducting the research, as well as the paper and pencil required in the traditional form; it helps to get results and percentages automatically. The questionnaire

consisted of the following questions: 1. When you leave the house, do you carry reusable container for drinking water with you? 2. Have you bought reusable containers for your children or closes relatives? 3. Did you know that reusable containers can reduce the use of plastic bottles and help the environment? 4. Do you think that many people should use reusable containers? 5. Did you know that this simple act of using reusable containers can help save the world from the polyethylene problems? Respondents answered almost all of these questions through their mobile devices.

3. Results

The research was conducted for 3 days, and 5 questions were answered in the form of a questionnaire from two or three different answers. 367 people got acquainted with the questionnaire directly, of which 45 % (167 people) actively answered the questions. 200 participants (55 %) were inactive without answering the questions at all (Figure 1).

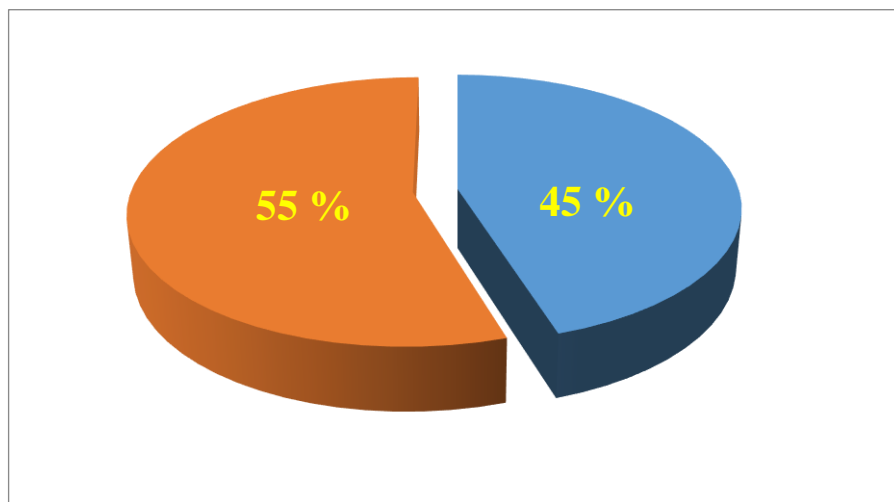


Figure 1. Inactive (55 %) and active (45 %)

The first question of the questionnaire that is, «When you leave the house, do you carry reusable container for drinking water with you?» 121 respondents answered the question, of which 28 % answered «Yes», 72 % answered «No» (Figure 2).

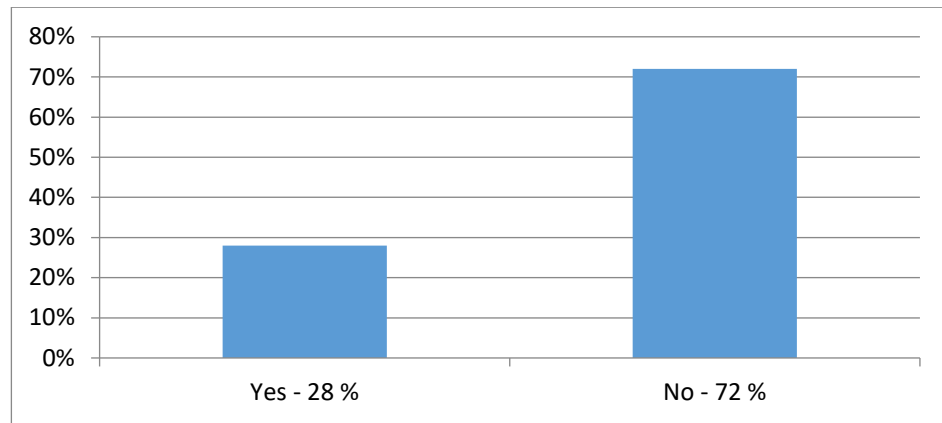


Figure 2.

The second question of the questionnaire, namely «Have you bought reusable containers for your children or closes relatives?» 117 respondents answered the question, of which 54 % answered «Yes», 32 % answered «No», and 14 % respondents answered with «There is a plan» (Figure 3).

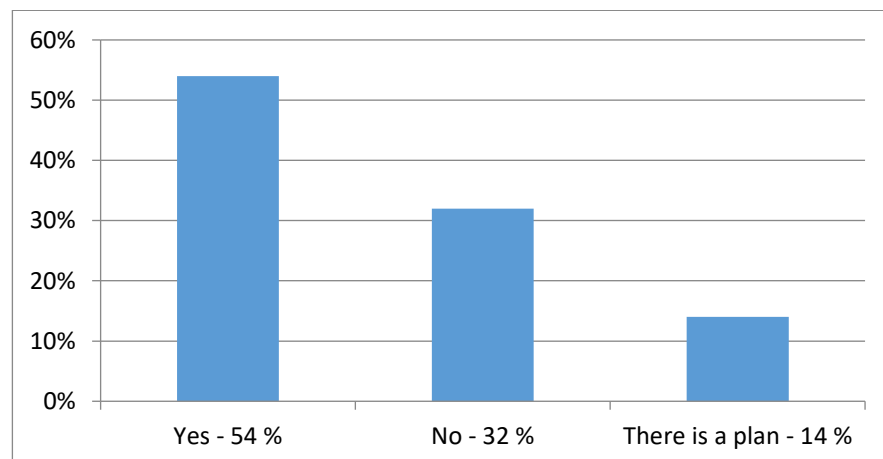


Figure 3.

The third question of the questionnaire, namely «Did you know that reusable containers can reduce the use of plastic bottles and help the environment?» 117 respondents answered the question, of which 82 % answered «Yes», 18 % answered «No» (Figure 4).

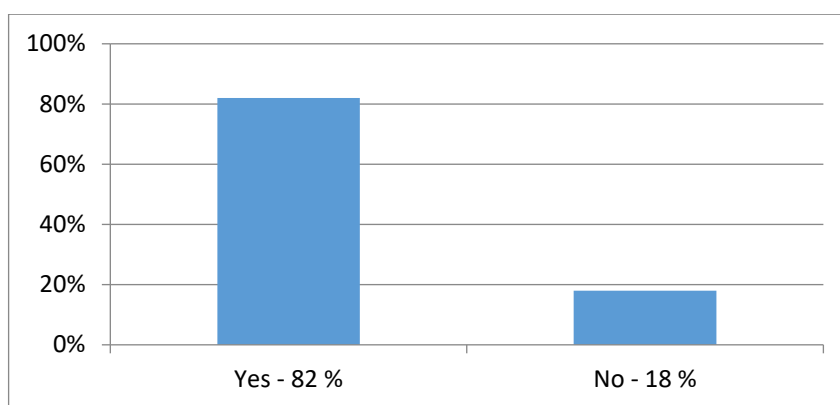


Figure 4.

The fourth question of the anonymous questionnaire, namely «Do you think that many people should use reusable containers?» 113 people answered the question, of which 74 % answered «Yes», 12 % answered «No», 14 % answered «It is not interesting to me» (Figure 5).

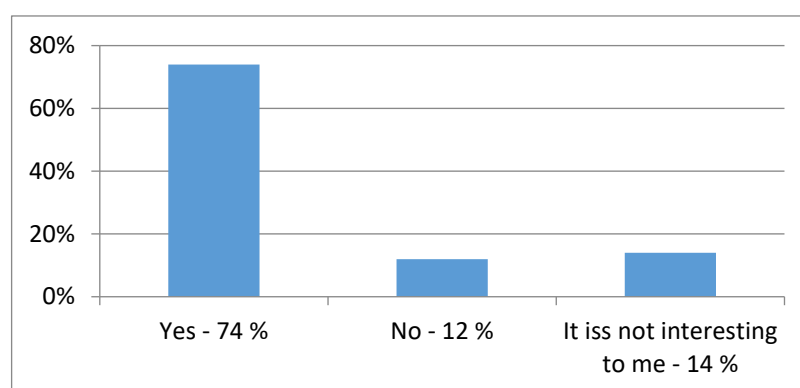


Figure 5.

The fifth question of the anonymous questionnaire, «Did you know that this simple act of using reusable containers can help save the world from the polyethylene problems?» 113 respondents answered the question, of which 73 % answered «Yes», 14 % respondents answered «No», and 13 % answered with «It is not interesting to me» (Figure 6).

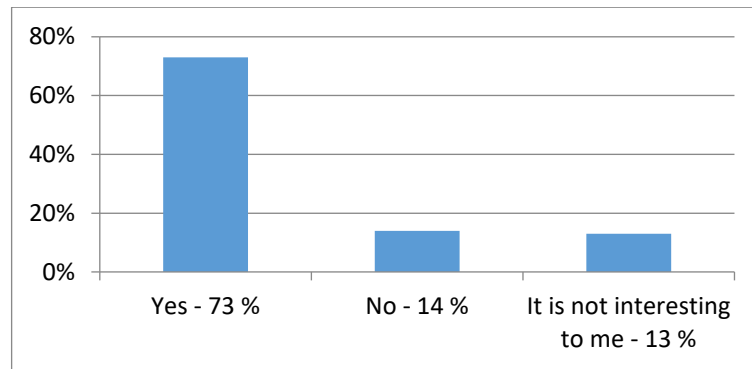


Figure 6.

4. Discussion

367 people read the questionnaire, 167 answered actively the questions and but 200 people looked at the topic indifferently and became inactive (Figure 1). This shows that a significant part of our people is not interested in ecological knowledge and does not want to show their opinions and views.

According to the first question of the questionnaire, only 28 % of 121 respondents said that they carry special reusable containers with them, and 72 % said that they do not carry such containers (Figure 2). It can be seen that a large part of the population did not find it acceptable to use their alternative instead of single-use plastic bottles, which is a very negative behavior. The reason for this is either they lack ecological culture or the lack of ecological knowledge creates indifference to the environment and nature.

117 respondents answered the second question of the questionnaire, 54 % of them said that they bought reusable containers for their children and siblings 32 % said that they did not buy them, and 14 % said that they had the intention to do (Figure 3). It can be concluded that adults themselves rarely use reusable containers, but it is very strange that they take them for children. When the child grows up, he or she, like his or her parents, refuses to use such containers, because the adults themselves must be an example for them.

According to the answers to the first question, it was found that 72 % of people do not carry reusable bottles with them, but according to the third question of the questionnaire (Figure 4), most (82 %) of the respondents believe that reusable bottles

are an alternative to single-use plastic bottles, because, they are ecofriendly containers for nature and environment. It can be seen that even though most of our people know the harm of single-use plastic containers, they do not prefer to use reusable containers instead.

According to the fourth question, 74 % of respondents believe that most people should use reusable containers 14 % of the respondents said that they are not interested in it all, and 12 % answered «No» (Figure 5). Therefore, most of the respondents support the use of reusable containers by others.

According to the fifth question of the questionnaire, 73 % of 113 respondents know that using reusable containers will help to save the Earth from the problem of polyethylene, while 14 % of people do not know this, and 13 % of respondents said that it is not interesting to them (Figure 6). Although most of the population understand, the importance of reusable containers, they use them very little (Figure 2). This shows that the ecological culture and behavior of our people is very low.

5. Conclusion

The general conclusion is that the majority of the population of our county knows that single-use plastic water bottles cause a lot of harm to nature and the environment, instead of reducing their use, on the contrary, they use less reusable containers, which are considered as their alternative. And this in turn, shows that the ecological behavior and culture of our population are at a low level. Knowing the negative impact of single-use plastic bottles on nature, instead of dealing with problems related to them, they show indifference to the use of plastic bottles in large quantities.

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