

WASTE MANAGEMENT IN THE MINDS OF YOUNG PEOPLE

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Abstract:

The aim of the paragraph was to study young people's awareness on waste management; their attitude towards the amendment of statute on cleanliness and order in municipalities which is coming into effect now; and people's attitude towards waste segregation. The analysis showed that young people do not have sufficient knowledge about waste segregation in their own area, neither about the waste processing machines. They have not acquired enough knowledge about current alteration in this topic as well. However, young people still try to protect environment and have positive attitude towards the issue of waste segregation.

Key words: waste management, segregation of waste, municipal infrastructure, environment

INTRODUCTION

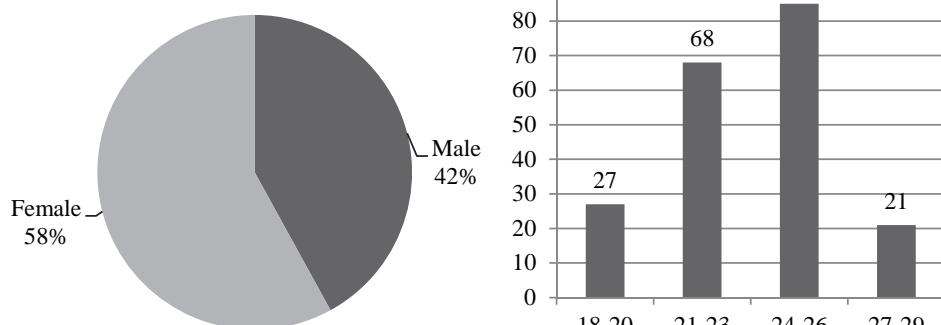
The topic of environmental protection is becoming more and more popular nowadays. People are starting to notice the side effects of their activity and to see opportunity to change their attitude. The Waste Management Clusters are being created, and the European Union informative programs and projects rise the awareness of both - businessmen and community. The debate in the media is also raised along with the changes in the waste management in our country.

The biggest change is the amendment of the statue on cleanliness and order in municipalities, which is soon coming into effect. Since the 1st of July 2013 there is a change in regulations on waste segregation, removal and utilization. In the special bidding, the municipalities will choose the companies that will be responsible for the waste management. The charges will depend on whether the waste is sorted or not. It will be the municipalities' duty to build the

new waste management system for process and utilization [1].

What those changes mean to us? The new regulations makes us choose between sorting waste and putting it into one container. First option requires having proper container for segregating waste which is additional cost. However, the waste sorting lowers the costs of removal. Thus, the second option means bigger costs of removal. Regardless of the option we choose, the costs will rise because of municipalities' investments to provide the waste segregation containers, and to build a basic infrastructure: sorting stations, incinerators and waste reception facilities [1].

These are not, however, all the effects of the amendment. As a matter of fact, what do we, young people, know about those changes anyway? To answer this question, we interviewed 201 people (117 women and 84 men) at the age of 18-29, from various regions of Poland (Łódź Province, Silesia Province, Małopolska Province, Mazovia Province and Podlasie Province) (Fig. 1).



**Fig. 1 Differentiation of respondents:
a) on grounds of sex, b) because of the age**

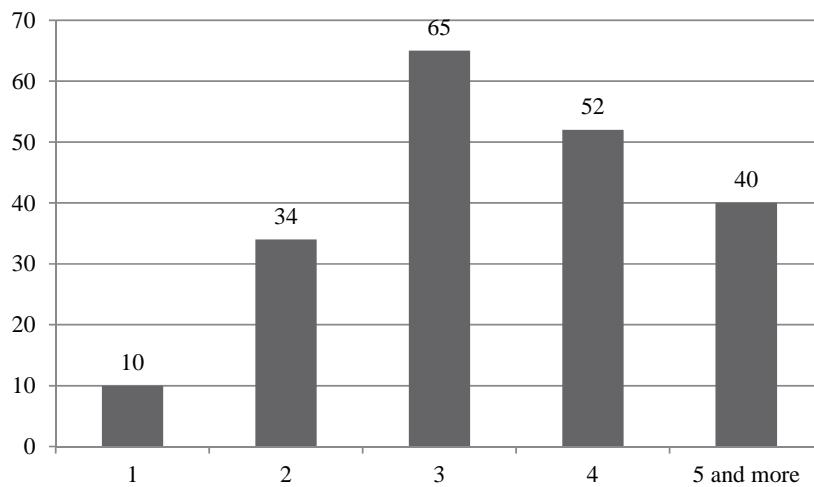


Fig. 2 Number of people in household

The respondents were people from small towns and villages, and also big cities; with various education and social and relationship status (Fig. 2). We asked them 17 questions about waste segregation, checking their knowledge about the infrastructure in their closest neighbourhood; and also their knowledge of the amendment of the statute [1] on cleanliness and order in municipalities, and its benefits to the environment.

STUDY ON WASTE MANAGEMENT AWARENESS AMONGST YOUNG PEOPLE

Researches show that 3 in 5 young people do waste segregation, however 2 of them do not (Fig. 3). Amongst people who do, the majority are women (64%); among those who do not, the number of men and women is the same. People from small towns and villages segregate waste more often (67%) than people in big cities (56%). People who live alone segregate waste the least often (only one in five of them); while those living in families do it the most often (68%).

The most common reason for not segregating waste (Fig. 4) is lack of motivation (40 people) and lack of condi-

tions at home (35 people). Also, the reasons are: lack of proper containers in the neighbourhood (26 people) or in town (18 people), and economy. The least given reasons are: combustion (1 person), lack of time (3 people) and big costs of waste segregation (5 people).



Fig. 3 Do young people segregate waste?

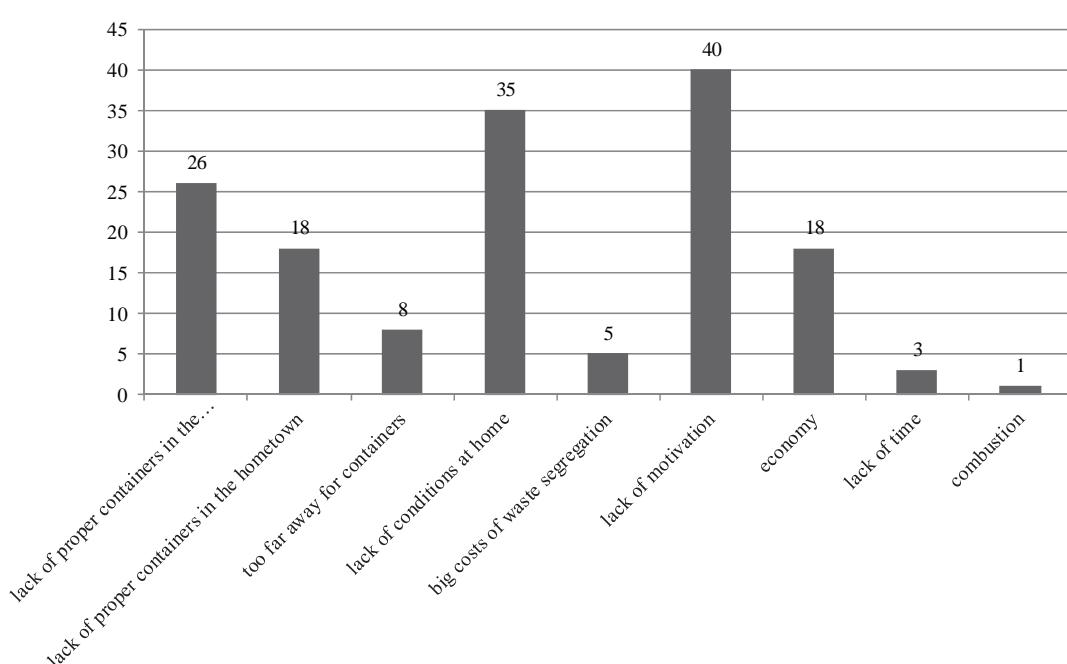
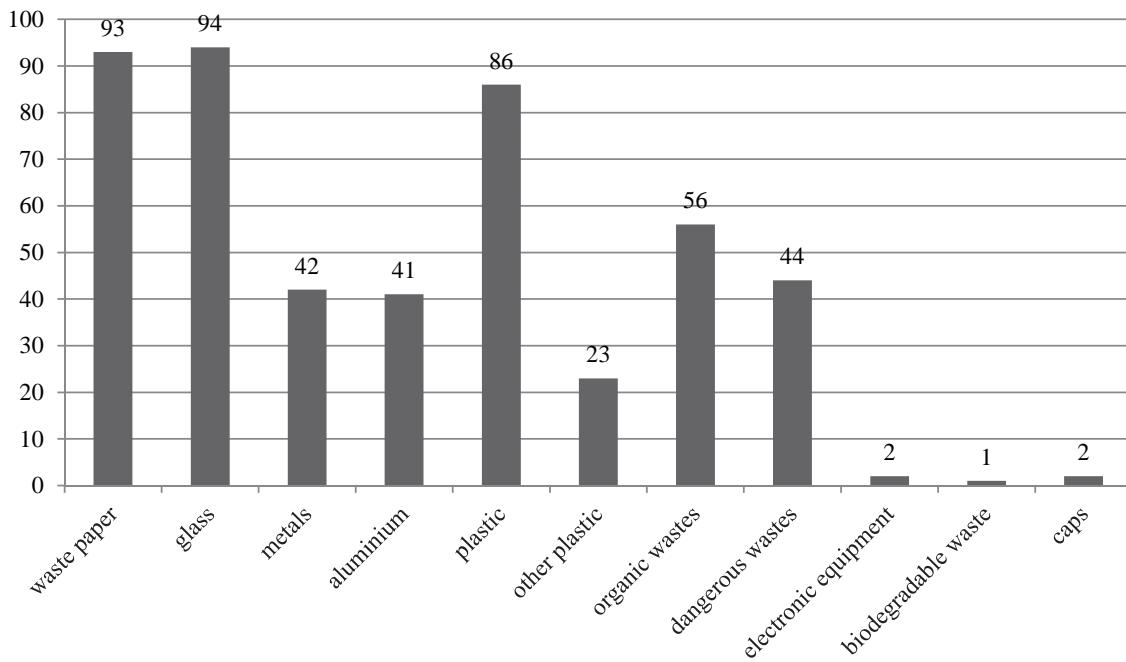
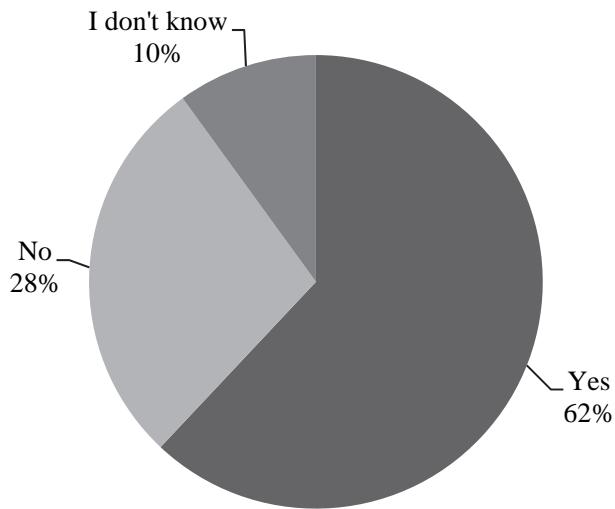


Fig. 4 The reasons for why young people do not segregate waste

**Fig. 5 What do we segregate ?**

If we actually sort waste, how often do we do it ? The survey shows that 85% of the people who segregate waste, do it every day or once in 2-3 days (Fig. 5). There are less people, who do it once a week (8%), every two weeks (3%), or once in a month (4%). Mostly, we segregate glass (94 people), waste paper (93 people), and plastic (83 people). Other plastics (23 people), electronic equipment (2 people), biodegradable waste (1 person) and caps (2 people) are least segregated.

**Fig. 6 Are there waste containers near our residents?**

Young people who segregate waste, keep their own waste containers, which need to be unloaded to proper containers in their neighborhood. Among the interviewees, there are people, who take their waste to utilization facilities, or give bottle caps for charity (it is very popular charity activity among parents). Almost everyone segregate waste

by themselves, but there are also people who gather them together in one village.

It may seem that the biggest problem would be a lack of proper containers, however 62% of interviewees claim that there are waste containers in their neighborhood. Only 10% of young people do not know where they are; however it does not mean that they do not exist (Fig. 6).

According to interviewees, the most popular waste containers (Fig. 7) are those for plastic (109 people), glass – without the division on colored and uncolored (83 people) and paper waste (63 people) which are the most often segregated. People mostly segregate the waste for which there is an easier access to containers. Interviewees rarely mentioned containers for outdated medications (5 people) and electronic utilization facilities (2 people).

In the further part of the survey, young people answered questions concerning waste management in their cities, towns and villages. Do we know what is the process of waste segregating and utilization in our neighbourhood ? As survey shows, most of the young people does not have any idea. Only 11% of interviewees could answer this question, however, did not exactly know how to explain it. All they know is that waste is put into the containers, which are later unloaded by waste service or „people who recycle bottles” who take them out from containers. They are not also aware who does the waste removal. Only 30% of young people could name the waste service in their neighbourhood.

Young people know very little about what happens after they put waste in container. All they know is how to segregate them and throw into the proper container. They do not know what tools are used for processing waste in their city or town (Fig. 8). Only 14% of interviewees (27 people) could tell if there is a dumping ground and sorting station (18 people), compost facility (8 people), incinerator (1 person), or sewage treatment plant (1 person) in their closest neighborhoods.

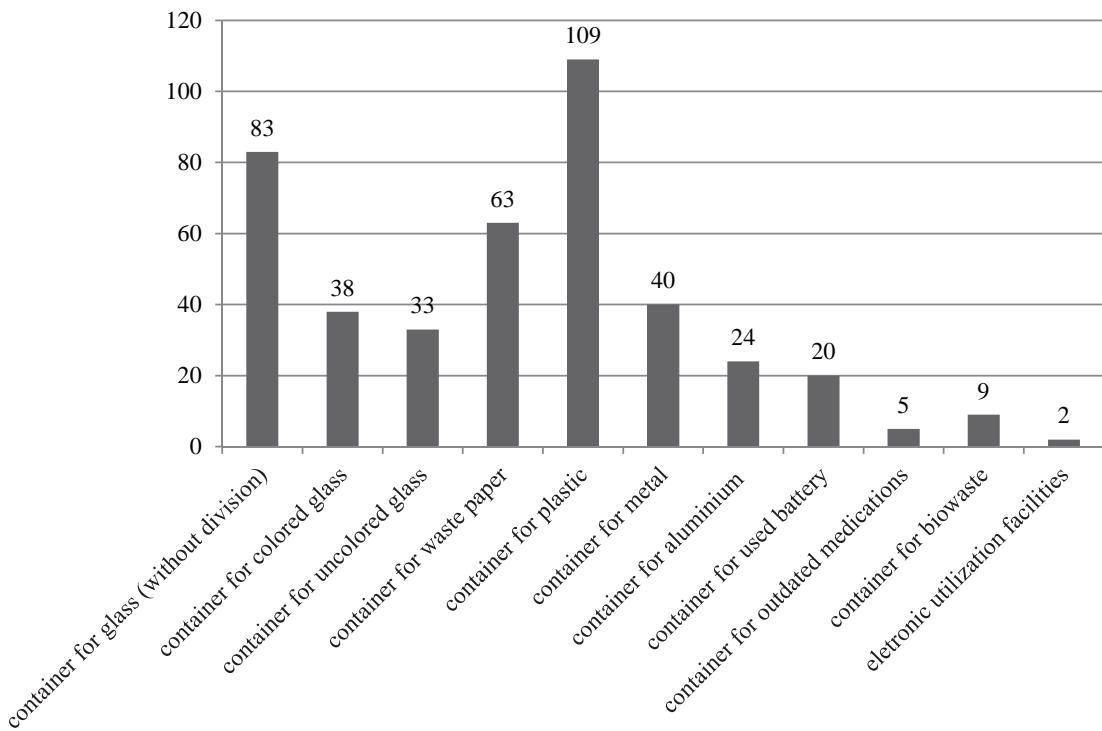


Fig. 7 Types of waste containers located near our residence

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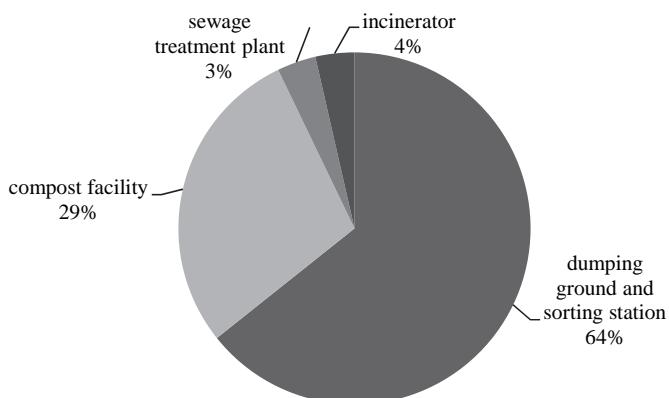


Fig. 8 Installations for the disposal of waste

The situation, however not as bad as it seems: half of the interviewees is aware of the amendment of the statute [1] (Fig. 9).

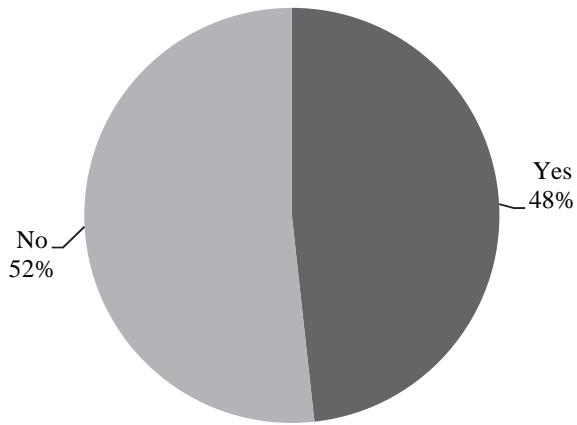


Fig. 9 Are we aware of the upcoming change?

53% of women is aware of what the amendment is concerned about, however 58% of men is not. It is not surprising that people who are aware of the amendment are also more likely to segregate waste (54%), and majority of those who are not aware of it, also do not segregate waste (60%). If the age would be the determinant of the knowledge, it would be true that we get the wisdom and experience as we are getting older. People at the age of 18-20 are the least aware of waste management changes coming into effect – only 33% of them. The older people get, the more are they aware of the waste management amendment.

Regardless of age and sex, people know what the coming changes are about. Young people know that soon the municipalities will take care of waste sorting and disposal. The municipalities will also charge for waste removal, picking the company which would collect waste, and providing people in tools for waste sorting and disposal. Interviewees realize that since July 2013, they will be able to choose one

from the above mentioned options. They will have to decide whether to sort waste or put it in one container. The costs will depend on the decision. Many respondents considered the costs bigger than contemporary; also they complained that the new regulations are too strict and force them to sign a waste disposal agreement. Until now, in some households, people did not have such agreement and did the combustion or disposal by throwing waste out on illegal waste dumping. As the interviewees noticed, with the new regulations coming into use, not having a waste disposal agreement will be a subject to a fine by municipalities or other authorities. It will probably lower the number of illegal procedures. This issue is taken into consideration in discussing the advantages of the new regulations (Fig. 10). According to young people (42%), among the advantages are also: lowering the amount of illegal waste dumpings, more recycling of materials, improvement of environment and encouraging people to waste sorting by keeping lower costs for waste disposal.

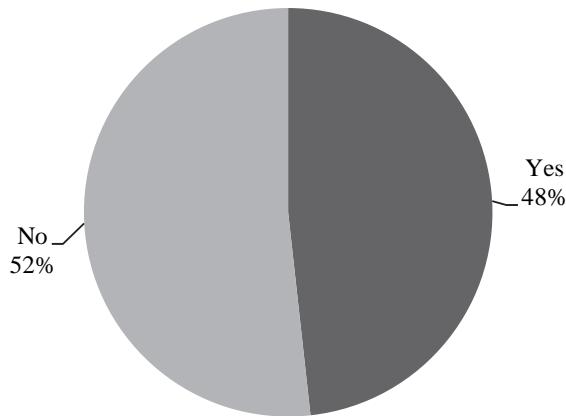


Fig. 10 Can we point out the benefits of the changes?

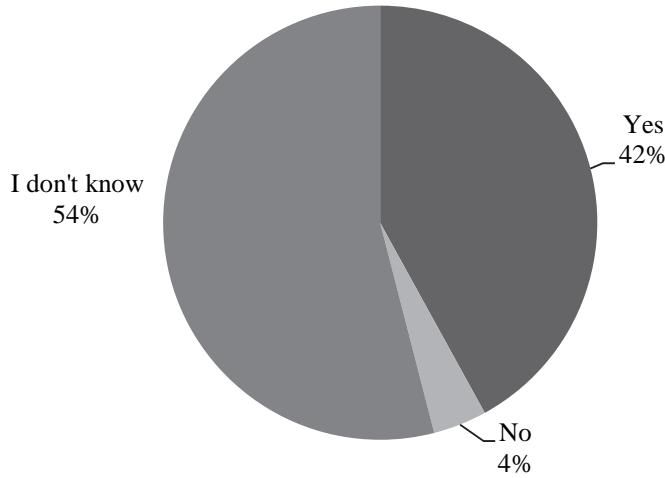


Fig. 11 Has the amendment to the law got any flaws?

Besides many advantages, which young people mentioned about the changes in waste management, they also pointed out some disadvantages (Fig. 11). They complained about bigger costs for waste disposal and unfair way of charging (one charge for everyone, regardless of waste amount, but depended on amount of people in a household – which is not always proportional). Other disadvantages

are problems with enforcement in bigger housing estates, and the fact that it is the municipalities' duty to set the frequency of waste disposal and do the utilization. Young people also mentioned the problem of collapse of small businesses, which took care of waste disposal until now. In bigger municipalities only the biggest companies have a chance to win the bidding.

Moreover, the survey studied whether young people think that the new regulations will have a good impact on environment (Fig. 12). Only 30% of them said that there will be some benefits, because of lowering the costs of waste disposal and at the same time rising its popularity. They said it would rise the use of natural resources and improve the awareness which will lower the bad impact on environment. The new regulation, forcing everyone to sign a waste disposal agreement, according to interviewees, will lower the amount of new waste dumping, also illegal ones, and there will be no throwing the waste out near the roads. 24% of respondents said that they do not expect benefits to environment and people will throw out the waste to forests anyway, and those who did not sort waste earlier will never do it, because they would rather pay more than change their attitude towards protecting the environment. Some of the respondents claim that changes are useful to environment but they think that it is just a drop in the ocean. It shows how much there is still to do to change the social awareness which is so important.

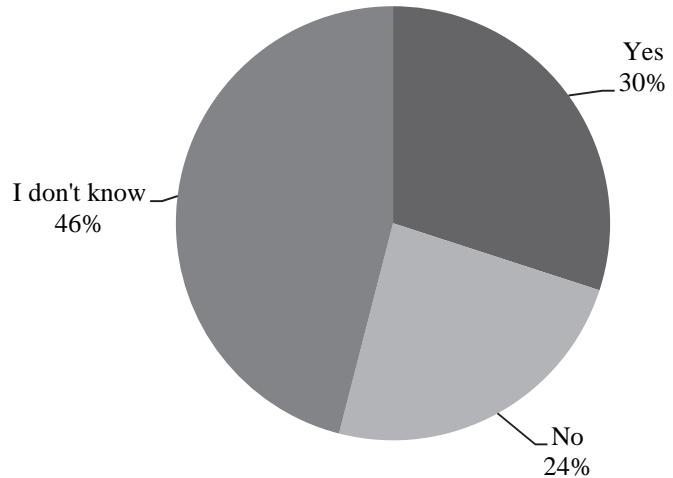


Fig. 12 Will the changes in amendment significantly improve environment?

Two last questions were concerned about changes in attitude towards waste sorting after the amendment in the statute [4]. In the first question, respondents expressed their opinion on changes in the society mentality (Fig. 13). 34% of young people say, that those who did not sort waste earlier, will change their attitudes and start doing it. 48% of respondents think otherwise – that those who did not sort waste will still not do it. Women are more sceptical at this issue – only 27% of them said that people will change their behavior; the rest of them could not answer this question (24%) or said that they will not sort waste (48%). 46% of men said that people will eventually start sorting waste.

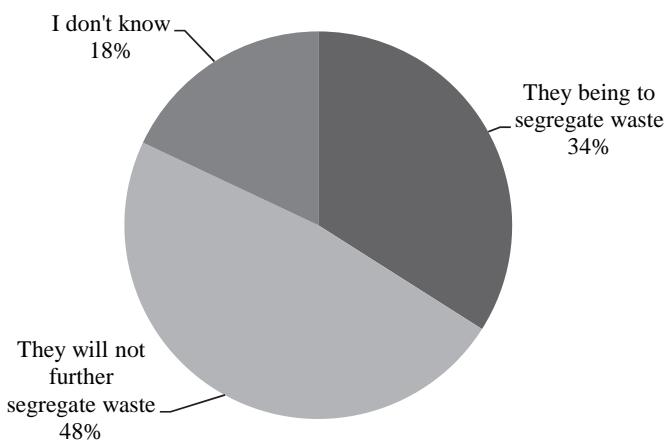


Fig. 13 How will the society approach into waste segregation change?

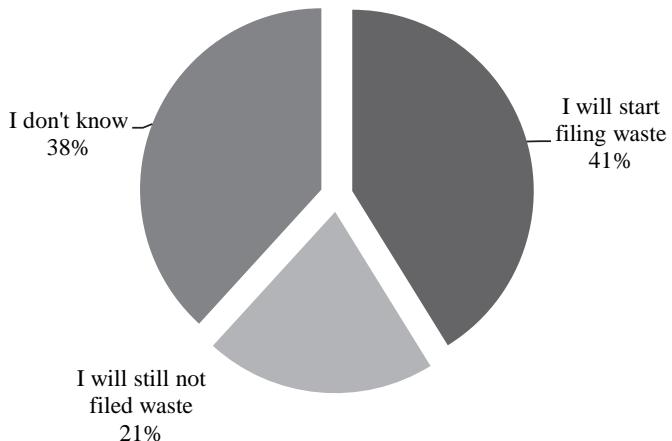


Fig. 14 How will people who previously have not segregated waste change their attitude?

The last question made us to think about our attitude towards waste segregation. How is it going to change after the new regulations? Only 14 of the respondents who did not sort waste, said that they want to change their behavior (Fig. 14). As the main reason for this, they gave lower costs for sorted waste, escaping fines for not obeying the regulations, and environment improvement. However, there are also those who do not want to change their attitude and do not want to sort waste (7 people). Among people who sort waste (Fig. 15), most of them will continue (53 people), or will do it better (5 people), some of them will not do it anymore (1 person), or are not sure (5 people),

whereas among those who do not sort waste, there are 13 people who are sure if they do it or not.

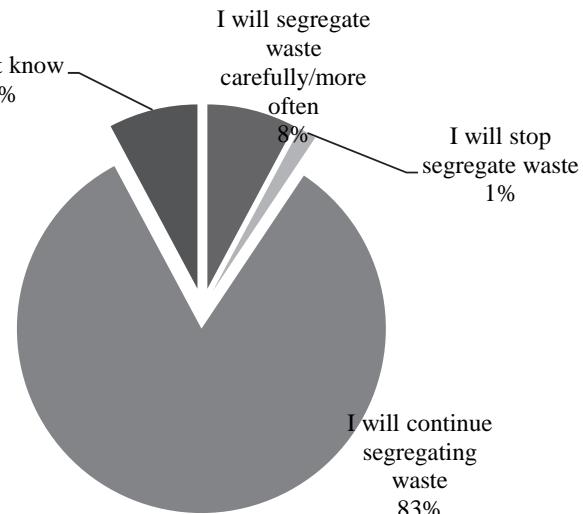


Fig. 15 How will people who previously have segregated them change their attitude?

SUMMARY

As the research shows, most of young people do not have any idea about the waste management in their region. Not many of them are aware of tools for waste disposal in their city or town, and a whole process of waste disposal. Two in five of respondents sorts waste, but only half of them knew about the changes connected with amendment of the statute [1]. Those who do not sort waste realize, that the changes will force them to make a decision on their behavior—whether to change their habits and start caring for environment or to just not change anything. They are also aware that they will pay more for waste removal, but still, some of them are not convinced about necessity to segregate it. It shows how difficult it is to change people's mentality, and how important it is to try changing society's awareness before any amendments. It is also significant to interact with each other and teach how to change the attitude, and most importantly, why it is worth and why we should sort waste.

REFERENCES

- [1] Ustawa z dnia 25 stycznia 2013 r. o zmianie ustawy o utrzymaniu czystości i porządku w gminach (Dz. U. z 2013 r. poz. 228)

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