

## YOUNG ADULTS IN POLAND – THE COMING OF AGE OF A GENERATION OF RESPONSIBLE FOOD CONSUMERS?<sup>1</sup>

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**Purpose:** The aim of the study was to diagnose attitudes and consumption behaviors among the young adults, regarding food consumption in Poland.

**Design/methodology/approach:** 483 respondents took a part in the research. They were students of three Cracovian universities, representing all voivodships in Poland. The research instrument consisted of two types of questions: traditional closed survey questions and a series of projection questions, based on fictional characters, which the respondents had to assess and determine the degree of identification with the attitudes and behaviors described.

**Findings:** The research revealed some akrasia. The relatively high level of awareness regarding the effects of unsustainable production and consumption of young adults did not translate into consumption behavior of a sustainable nature. The curiosity regarding origin of the product and its composition turned out to be low, as was the feeling of responsibility for their own decisions. There was a tendency to expect the transition of responsibility to food producers and the institutional environment. Young adults pay special attention to food prices and easy access to shopping. Local marketplaces are a niche shopping place. The majority of food is purchased in large-area stores, where consumers are not informed about the place of origin of food. The respondents group is characterized by high outside-diagonality, solutions forcing more sustainable behavior, for example, the payment for plastic bags, the need for recycling of waste meet with wide acceptance.

**Originality/value:** The research revealed enforcing proecological behaviors by institutions seems to be a more effective than building consumer awareness.

**Keywords:** consumption, food, behaviour, sustainability, sustainable development, young adults, Poland.

**Category of the paper:** research paper.

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## 1. Introduction

Food is a democratic commodity, one which satisfies a universal, basic need, and which has a significance which cannot be compared to that of other goods. At the same time, food production is one of those branches of the economy which have the biggest impact on the natural and social environment. The mass production of meat contributes to the greenhouse effect, excessive water consumption and the clearance of natural vegetation, which destroys biodiversity; and it poses a problem of a moral nature too. Crops grown in monocultures also have a negative impact on biodiversity, with the increasing use of chemicals in the cultivation of crops posing a major ecological problem which affects all species, and the cultivation of mass crops also poses a social problem in low-developed countries, where they are often grown instead of local forms of agriculture, which support natural, indigenous plant life. Mass food production requires suitable areas and conditions, often a considerable distance away from the places where end consumers live, which in turn contributes to a growth in the amount of "food miles". These negative effects are the result of efforts to lower the price of food, which for moral reasons should be an easily accessible commodity. This is an issue which is not a matter of discussion, though it is worth noting that low food prices have not helped to solve the problem of hunger among the global population.

Goal 12 of the "Agenda for Sustainable Development 2030" concerns the deployment of a sustainable model of consumption (and production). Paragraph 28 of the aforementioned document states: *We (Countries) commit to making fundamental changes in the way that our societies produce and consume goods and services. Governments, international organizations, the business sector and other non-state actors and individuals must contribute to changing unsustainable consumption and production patterns, including through the mobilization, from all sources, of financial and technical assistance to strengthen developing countries' scientific, technological and innovative capacities to move towards more sustainable patterns of consumption and production (...)* (UN, 2015). The achievement of goal 12 is fundamental for the achievement of the other goals – including: zero hunger, good health and well-being, clean water and sanitation, sustainable cities and communities, life below water and life on land.

## 2. Goals, scope and methodology

The main goal of the study is to conduct a diagnosis of the level of knowledge and awareness of young consumers on the subject of sustainable development and the behaviours resulting from it with reference to food consumption. The research was conducted in Krakow around the turn of the year 2018/2019 among students of two universities in Krakow: the Jagiellonian

University, University of Economics and University of Agriculture. The sample size was 483 persons<sup>2</sup>, taking into consideration the size of the student population, which in Krakow, amounted to 176,000 persons (Małopolski Ośrodek Badań Regionalnych, 2016), with a maximum error of 5% and a fraction size of 0.5. The selection of the sample was a deliberately targeted choice. Students were chosen from disciplines in which the issue of sustainable development is a particularly important area to explore. The selection of this specific group as a target sample was derived from the results of research published in 2012 funded by the Polish National Fund for Environmental Protection and Water Management concerning education about sustainable development in Poland.

According to the results of this report, despite the obligation to provide schooling in the area of sustainable development at all levels of the education, as determined by the core curriculum, nevertheless (...) *the majority of teachers surveyed believe that it is not obligatory to provide education about sustainable development. 31% of primary, secondary and higher secondary school teachers believe that they are obliged to do so under the Core curriculum* (Narodowy Fundusz Ochrony Środowiska i Gospodarki Wodnej, 2012). A lack of knowledge and awareness with reference to the need to deploy the principles of sustainable development on the part of a generation that is currently coming of age will have a particular influence on real-world transformations. The research was conducted on a sample of young adult consumers with the sample characteristics shown in Table 1.

**Table 1.**  
*Characteristics of respondents with whom the survey was conducted*

| Characteristics                      |   | [%]  |
|--------------------------------------|---|------|
| Sex                                  | female  | 69.3 |
|                                      | male  | 30.7 |
| Age                                  | under 18 years of age                           | 1.1  |
|                                      | 19-21 years of age                              | 79.2 |
|                                      | 22-25 years of age                              | 16.8 |
|                                      | over 26 years of age                            | 2.9  |
| Place of origin                      | large town/city (> 100.000 inhabitants)         | 34.4 |
|                                      | mid-size town/city (20.000-100.000 inhabitants) | 12.3 |
|                                      | small town/city (< 20.000 inhabitants)          | 13.3 |
|                                      | village   | 40.0 |
| Disposable monthly income per person | less than 500.00 PLN (116 EUR) <sup>3</sup>     | 12.8 |
|                                      | 500.00-1,000.00 PLN (116-231 EUR)               | 38.4 |
|                                      | 1,000.00-1,550.00 PLN (231-356 EUR)             | 19.7 |
|                                      | 1,550.00-2,000.00 PLN (356-461 EUR)             | 14.1 |
|                                      | more than 2,000.00 PLN <sup>4</sup> (461 EUR)   | 14.9 |

Source: own elaboration.

<sup>2</sup> The following algorithm was used to calculate the minimum sample size:  $N_{min} = \frac{Np(\alpha^2 \times f(1-f))}{Np \times e^2 + \alpha^2 \times f(1-f)}$ .

<sup>3</sup> On the basis of current average foreign currency exchange rates of the National Bank of Poland (NBP) on 2019.02.26.

<sup>4</sup> In 2017, the level of average disposable income person rounded off to the nearest 1 PLN was 1,598 PLN according to: Główny Urząd Statystyczny (the Central Statistical Office of Poland) <https://stat.gov.pl/obszary-tematyczne/warunki-zycia/dochody-wydatki-i-warunki-zycia-ludnosci/sytuacja-gospodarstw-domowych-w-2017-r-w-swietle-wynikow-badania-budzetow-gospodarstw-domowych,3,17.html>, 26.02.2019.

The instrument used to perform the research was a form consisting of 17 closed questions, of which 12 questions were based on projective techniques (cf. Donoghue, 2000), which were used to two profiles of consumer behaviour: Paweł Nowak – a sustainable, aware consumer, with a pro-ecological approach and Jan Kowalski, representing an opposed set of attitudes. The task of the respondents was to indicate the degree to which they identify with the attitudes of the created characters. The remaining questions concerned declarations made by the consumers regarding their shopping and consumer habits. Metric questions were used to determine differences according to selected characteristics of the surveyed respondents i.e.: sex, age, place of origin and bracket of disposable income per person in the household. The results obtained were presented in table and graphic form. The surveyed population's identification with consumer attitudes was measured by the percentage share of individual answers from respondents.

### 3. Sustainable consumer

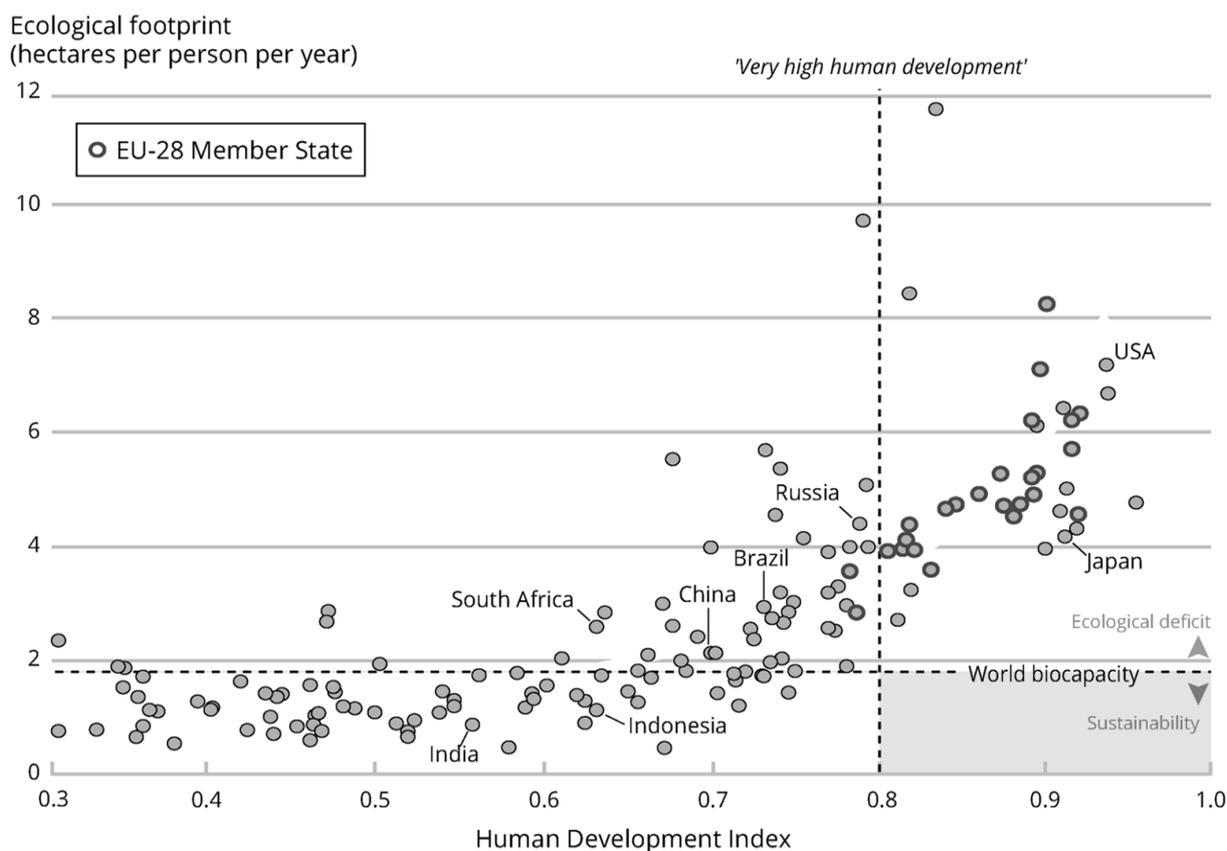
Sustainable consumption is about the conscious and responsible use of natural resources, with respect for quality of life and the needs of all people, including those of future generations. According to the model proposed by the Wuppertal Institute for Climate, Environment and Energy, it is based on several principles:

- shared use of places in private ownership,
- purchasing of used goods; purchasing of goods with a light ecological 'backpack',
- long-term use of those goods which have a heavy 'backpack',
- limitation of consumption of transport-intensive goods,
- economic consumption of resources when making use of consumer goods,
- care for goods, extending their working lifetime,
- minimization of the amount of waste (Jastrzębska-Smolaga, 2000).

The fulfilment of these simple principles nevertheless requires a high degree of awareness and willingness to impose limitations on oneself on the part of consumers. Holding onto existing patterns of consumption comes with a social and ecological risk. A western-centric point of view has resulted in consumers from highly developed parts of the world becoming accustomed to a model of reality where only a small part of humanity are consuming to excess, while consumers in developing, low- and medium-developed countries seem not to count in the collective imagination of the privileged part of the world<sup>5</sup>. Indeed, a lower level of socio-economic development is associated with a smaller ecological footprint, as shown in Figure 1.

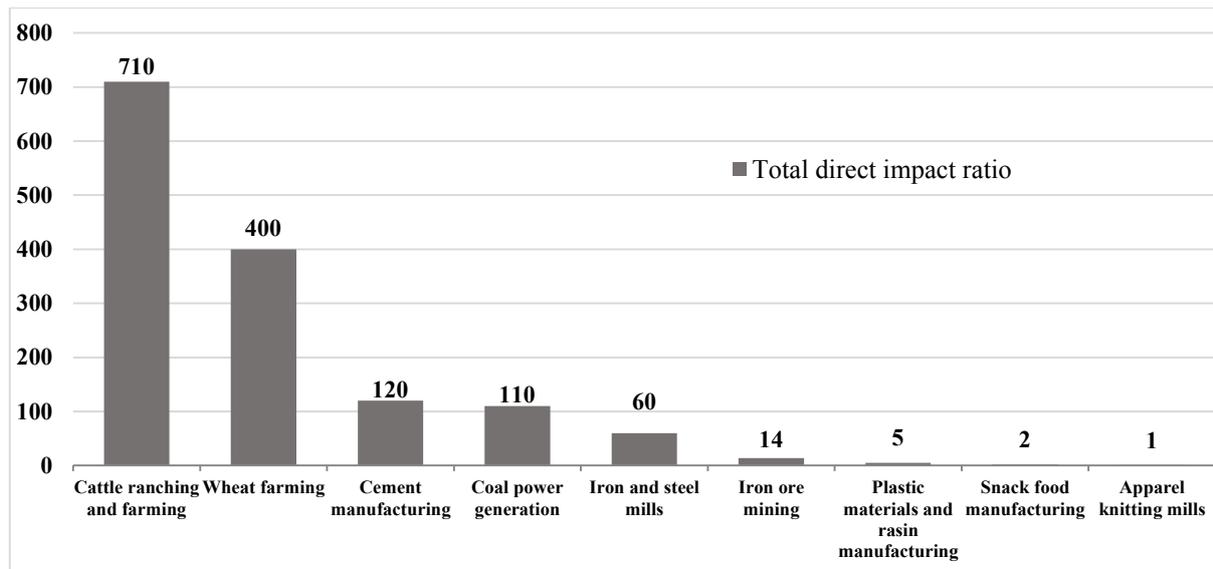
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<sup>5</sup> One of the main problems of the contemporary world are socio-economic inequalities, which are reflected in the level of consumption. According to data from Oxfam (2019), 3.4 billion people subsist on less than \$5.50 a day, while there are more billionaires than ever before (2,208), and their wealth is increasing at a rate of \$2.5 billion per day.



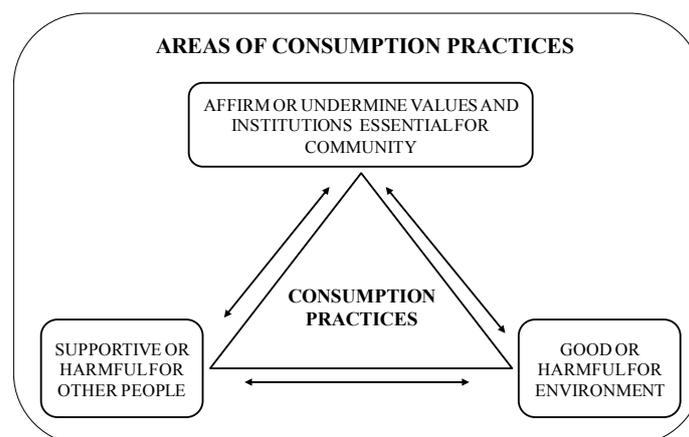
**Figure 1.** Ecological Footprint. Source: Potočník J., *Economy of Transition. The Role of the Circular Economy*, speech given at the Open Eyes Economy Congress, Cracow, November 14-15 2017, based on: Global Footprint Network, 2012; UNDP, 2014a.

There is no reason to assume that the larger part of the world's population, already being on the path to economic growth, will not seek to move towards consumption on the same level as that which is to be seen in highly developed countries, which, as shown in the illustration, have exceeded the limits of biocapacity, something which will also have clear consequences not only of an environmental nature, but in terms of social frustration too, as consumption in a style typical of the highly developed world by nearly 8 billion people will be technically difficult or even impossible. The earth has found itself in a zone of high risk in many areas on which biological existence is dependent. As research by Steffen et al. (2015). indicates, humanity has found itself "beyond the zone of uncertainty (high risk)" in the area of biosphere integrity, particularly with reference to genetic diversity and biochemical flows, where oversupply of phosphorus and nitrogen is taken into account. There are areas of risk that are directly related to the production of food, leading to the most serious consequences in the area of external effects. According to the Truecost report, the top 5 sectors with the greatest overall impact and at least 50% impact in their supply chains are soybeans and other oilseeds processing; animal slaughtering, rendering and processing; poultry processing, wet corn milling, and beet sugar manufacturing (Truecost Raport, 2013). The report also presents total direct environmental damage as a percentage of revenue for an illustrative selection of primary, manufacturing and tertiary sectors using global averages, as shown in Figure 2.



**Figure 2.** Total direct impact ratio (natural capital cost as % of revenue). Source: own elaboration based on: Trucost Report, (2013) "Natural capital at risk: The top 100 externalities of business", London.

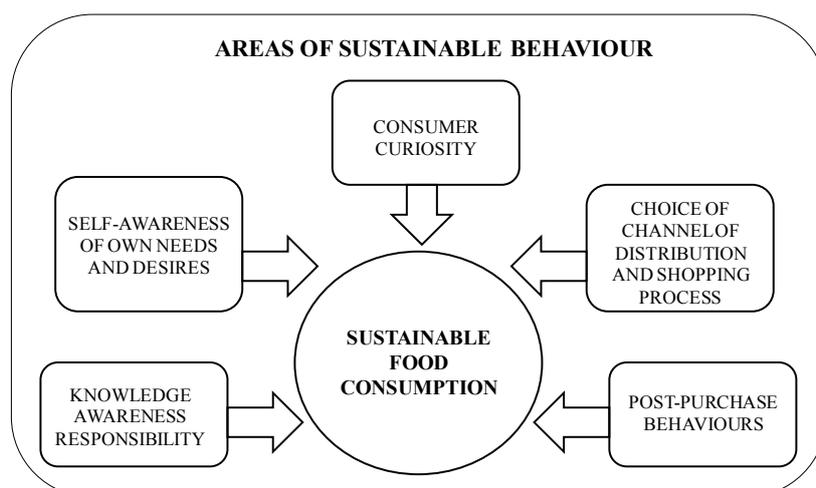
None of the areas with a high degree of impact generates profits which are sufficient to cover the environmental damage it causes. The food sector is responsible for 30% of world energy consumption and 22% of greenhouse gas emissions. Every year 1/3 of all food produced, equivalent to 1.3 bn tons worth \$ 1 trillion is wasted due to agricultural practices and transport problems, as well as due to waste by consumers and retailers. At the same time, a billion people are suffering from malnutrition, and a further billion from hunger, while 2 billion people are overweight or obese (UN, 2015). This is another reason why responsible consumers is a key issue that needs to be addressed in addition to the development of awareness among producers and appropriate policies. Consumption creates well-being for the consumer, but at the same time also has an impact on his/her material and immaterial surroundings on which that well-being also depends. The areas of impacts of consumption practices are shown in Figure 3.



**Figure 3.** Areas of impacts of consumption practices. Source: own elaboration based on: Crocker D.A., Consumption and Well-Being, in: (ed.) Chapman A.R., Petersen R.L., Smith-Moran B., (2000) *Consumption, Population and Sustainability. Perspectives from Science and Religion*, Island Press, Washington DC.

*Well-being refers not to one component of life, such as pleasure or satisfaction of basic needs, but to a heterogenous list of human conditions, activities, inner capabilities and external opportunities. To have well-being, to be and to do well is to function and to be capable of functioning of certain humanly good ways, says Crocker (2000). Well-being manifests itself in the physical sphere, as well as in the psychological and social spheres too. Reasonable consumption is based on awareness and knowledge, and differentiation between one's own needs and desires and those of the social and natural environment. Needs in contrast to desires are something objective, and there is a moral dimension to ensuring they are satisfied. Here, it should be underlined that the satisfaction of desires and a developed level of consumption are absolutely not synonymous with the satisfaction of needs. According to J. Segal, in highly developed countries, the costs incurred on goods and services in order to allow the same degree of satisfaction of needs to be achieved are constantly growing and are leading to the "Red Queen" paradox, and thus to a situation in which to remain standing in one place we are having to run faster and faster (Mansvelt, 2011).*

Consumer awareness and freedom of choice lead to responsibility<sup>6</sup>: for consumer habits and should lead to the deployment of sustainable consumption, which can be defined as: *the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life-cycle so as not to jeopardise the needs of future generations* (The Oslo Symposium, 1994). To which it is possible to add the more simple but well-expressed maxim: *reduce, reuse, recycle* (Mansvelt, 2011). In the context of food consumption, sustainable responsibility of the consumer will be concerned with the protection of his/her own well-being, the well-being of future generations, and of the environment. Put more simply, it applies to the following areas of activity (Fig. 4).



**Figure 4.** Areas of sustainable behaviour of food consumers. Source: own elaboration.

<sup>6</sup> Here it is worth noting that responsible consumer action in itself is not sufficient to provide a solution to the problem of unsustainable consumption. An appropriate institutional environment that provides clear frameworks for consumers is also necessary, and responsibility has to be shared, so as not to overburden consumers whose possibilities are limited by earnings and prices.

The sustainable consumer is thus a responsible, conscious subject, and hence one that makes decisions and acts based on knowledge, making choices with regard to product and place of origin and to impact on the environment across the whole lifecycle. Taking a more long-term view, it seems to be especially important that in particular the generation of young adults, whose consumer decisions will shape the near future, adopt this model of behaviour. Surveys of young consumers have been conducted in a number of countries including Austria, where it was found that 60% of young people (15-19 years of age) and young adults (20-25 years of age) want there to be a rise in the level of organic food consumption, while as many as 81% express a desire for the organic food market to continue to grow. Young Austrians, amongst other things, considered the following aspects to be particularly important in the context of consumer decisions: *free range housing in organic livestock farming, no child labour and fair trade production, strict controls in the organic food import-sector, regional origin of the foodstuffs* (Steinwider et al., 2018).

In global surveys, the relation between consumer awareness and behaviours was also examined. The studies conducted by W. Young (et al., 2010) showed that to close the gap between declared attitudes and consumer behaviours one thing that is important is a system of incentives and appropriate labelling (Young et al., 2010). M. Hume (2010) surveyed representatives of the Y generation (millennials), and discovered that while they are indeed socially, economically, and environmentally aware, there are however contradictions between their awareness and their behaviours (Hume, 2010). At the same time, numerous studies indicate a readiness to pay more for goods which are sustainable. Taking wine as an example, the majority of Spanish consumers are ready pay more for a sustainable product (Sellers, 2016). Similar results, also with reference to wine demand among millennials, have been presented by E. Pomaricci and R. Vecchio (2014) in Italy. Consumers proved to be sensitive to environmental, social and ethical product characteristics, especially older consumers from the millennials generation (27-35 years of age). At the same time, the group of millennials is itself not uniform and *Millennials consist of submarkets that are amenable to ethical purchasing to varying degrees* (Bucic, Harris, Arli, 2012).

#### **4. Awareness and understanding of the concept of sustainable development and sustainable behaviours among young Polish adults**

The survey was based on a series of projective questions, constructed on the basis of attitudes of two fictitious profiles: Paweł Nowak and Jan Kowalski and five questions relating to consumer habits. The aim was to obtain information in the areas specified above (cf. Fig. 4). The general characteristics of the profiles are presented in Table 2.

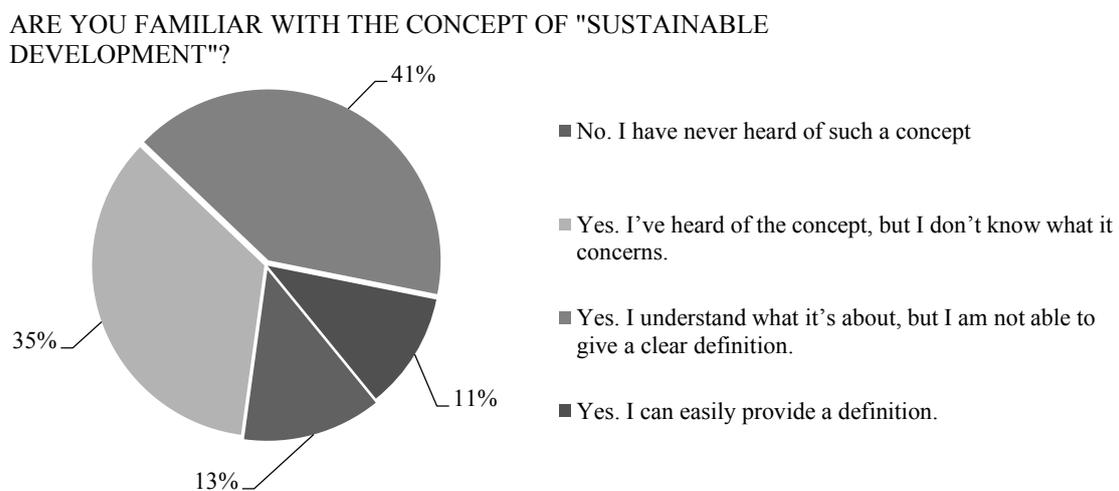
**Table 2.**  
*"Non-sustainable" vs. "sustainable" consumer*

| Jan Kowalski   | Pawel Nowak  |
|--|--|
| Tends to pass responsibility onto the producer and lawmakers, does not believe in the power of the consumer and the impact of consumer choices on the natural and social environment. Considers labels certifying ecological production or fair trade to be a marketing gimmick. Takes only price into consideration when choosing food products, but considers that people have a right to use the planet's natural resources as they choose. | Is a careful consumer, buys what he planned. Reads labels and looks for goods produced with respect for the environment and society. Is aware of the impact that the consumer has in shaping the food sector and the impacts on the food sector on the environment. Segregates waste, prepares meals for himself from unprocessed and – to the extent it is possible to do so – fresh and seasonal products. |

Source: own elaboration.

**4.1. Knowledge awareness – responsibility**

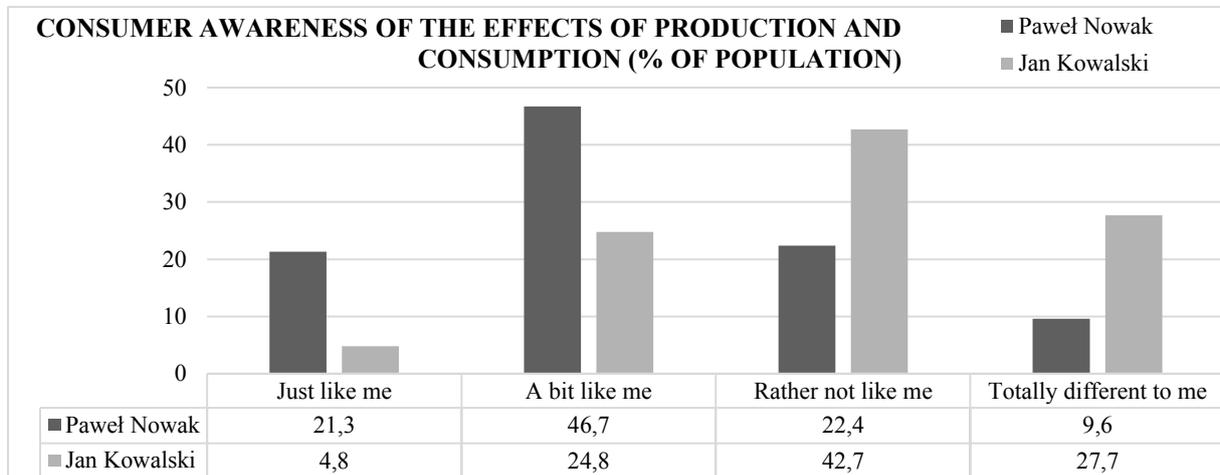
The survey showed a relatively low level of familiarity with the concept of sustainable development. 11% respondents declared that they understood the term clearly, with the majority of these responses (28%) being given by persons in the group of over 26 years of age. Around 10% of women and 13% of men said they understood the concept. The highest level of familiarity with the concept (around 18%) was among inhabitants of large towns/cities (> 100,000 inhabitants), with a relatively high disposable monthly income in the bracket from 1,550.00 to 2,000.00 PLN (around 15%) (Fig. 5).



**Figure 5.** Familiarity with the concept of "sustainable development". Source: own elaboration based on surveys.

The next step in the survey of knowledge and awareness consisted of asking about the set of attitudes of Paweł Nowak and Jan Kowalski. Respondents were presented 2 attitudes in relation to a similar topical area, and were asked to specify the degree to which they identified with them:

- *Paweł Nowak believes that the increasing use of chemicals in agricultural crop cultivation and intensive livestock farming is not safe for the natural environment and contributes to problems related to global warming.*
- *Jan Kowalski believes that the consumer's choice does not have an impact on problems of an environmental (ecological) and social nature (Fig. 6).*

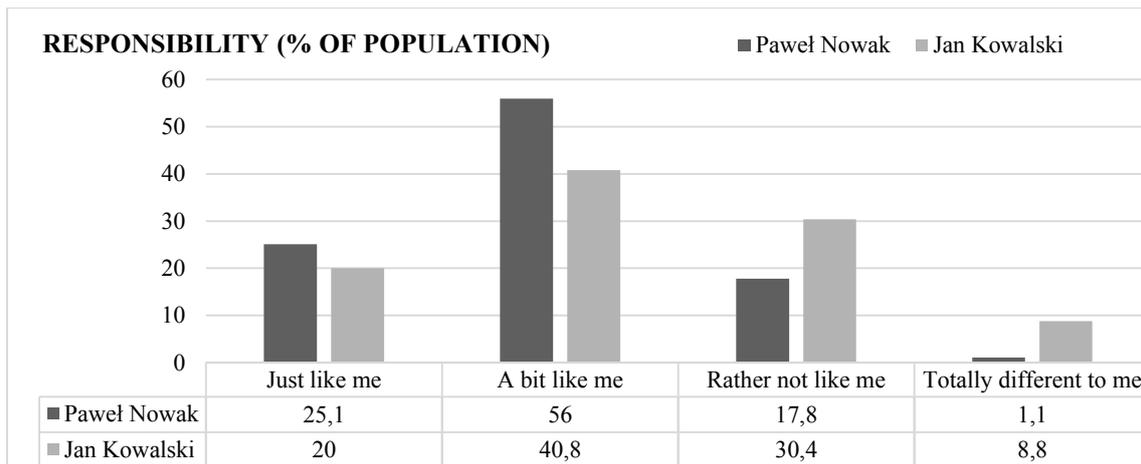


**Figure 6.** Familiarity with the concept of "sustainable development". Source: own elaboration based on surveys.

The questions are formulated to be control questions in relation to each other. The responses indicate a relatively high level of consumer awareness in the areas of the effects of production and consumption. 68% consumers tended to agree with the attitudes of Paweł Nowak, while 70.4% rejected the point of view held by Jan Kowalski. Awareness of the environmental effects of production and consumption is thus higher than the level of familiarity with the notion of sustainable development. The gender breakdown for this question is clearly in favour of women. Nearly 78% of women identified with Paweł Nowak compared to nearly 55% of men. Place of origin also played a significant role here, with nearly 30% of respondents from large towns/cities sharing his views, with this being the case to a lesser degree for residents of small towns (12%).

The next step was to verify the foundations of attitudes to environmental problems, in the context of the feeling of responsibility of those surveyed by means of another set of two differing attitudes:

- *Paweł Nowak: believes that, as a consumer, who makes choices every day, he has a real influence on reality and thus should choose products which come from ethically fair, environmentally neutral or pro-ecological producers.*
- *Jan Kowalski: believes that it is the responsibility of lawmakers and producers to ensure that food that is safe for the consumer and produced in an ethically fair way, and that the consumer does not bear any responsibility for what is put on the market (Fig. 7).*

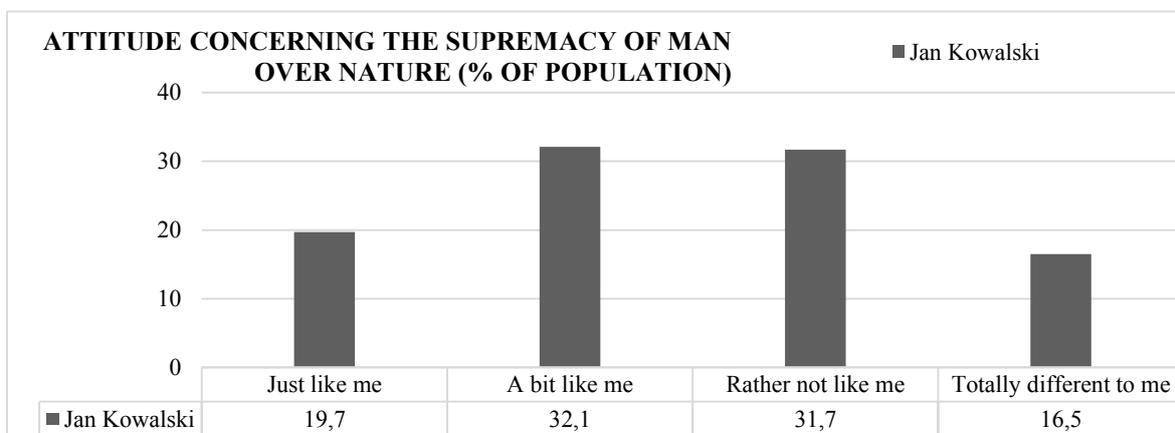


**Figure 7.** Responsibility. Source: own elaboration based on surveys.

Paweł Nowak's attitude is an attitude of responsibility, with which over 81% of respondents agree. Jan Kowalski's attitude is an attitude of waiting for others to take action, with which slightly more than 60% of respondents agree. This may be evidence of a feeling of low effectiveness among consumers or passivity with regard to the behaviours of other entities on the market. It should be underlined that these needs do not have to be contradictory. What is interesting is that the higher the age group is, the more people identify both with the attitude of Paweł Nowak and with that of Jan Kowalski. This may be evidence of a growing awareness of personal responsibility on the part of economic entities too. Inhabitants of small towns and villages expect to a greater degree that inhabitants of small and medium-sized towns/cities that the producer should bear sole responsibility for the production and consumption of goods.

The survey also investigated the relation of consumers to their surrounding environment with reference to the attitude presented by Jan Kowalski:

- *Jan Kowalski: believes that the words from the Book of Genesis of the Bible, where God commands mankind to "...subdue [the earth]", gives humans the right to avail themselves of natural resources, including land for the cultivation of crops and the raising of livestock in the manner which they see fit and to use them for the achievement of personal goals (Fig. 8).*



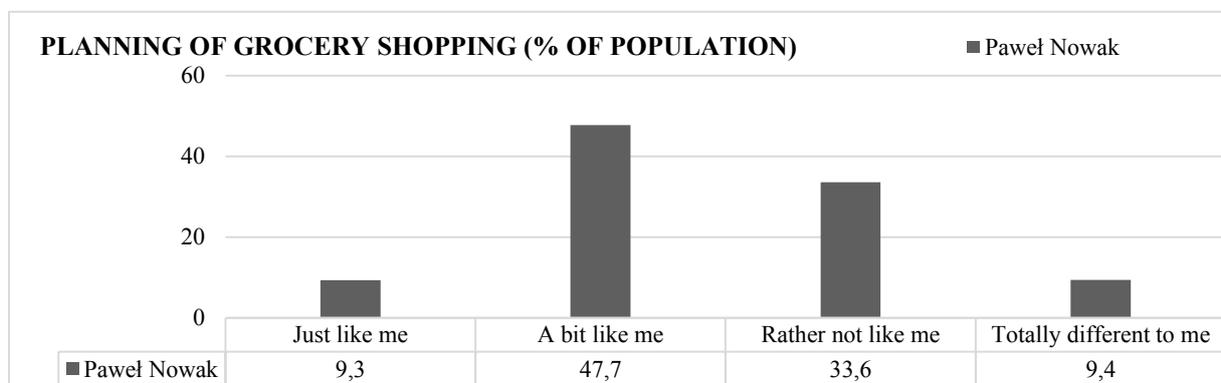
**Figure 8.** Attitude concerning the supremacy of man over nature. Source: own elaboration based on surveys.

Over half of respondents identified with the privileged position of man over nature, giving permission for it to avail itself of natural resources. The option expressing weak support for this thesis garnered the most responses. One in every five respondents considered themselves to have a strong entitlement to avail themselves of natural resources.

#### 4.2. Awareness of own needs and desires

The next area in which sustainable consumption was assessed was that of awareness of one's own needs and desires, and the tendency to be subject to impulsive consumer behaviour. Respondents were asked whether they identified with the following attitude of Paweł Nowak:

- *Paweł Nowak, when shopping for groceries, always buys what he has planned. He never gives in to consumer impulses (Fig. 9).*



**Figure 9.** Planning on grocery shopping. Source: own elaboration based on surveys.

The majority of consumers said they tried to plan their shopping and distinguish needs from impulsive decisions. A preventive approach is more often characteristic of inhabitants of villages and large towns/cities. Impulsiveness in shopping behaviour decreases with age and, unsurprisingly, the amount of responses 'totally different to me' grows with the level of disposable income.

#### 4.3. Curiosity and tendency to seek information about products

Behaviours related to consumer curiosity appear to be closely related to the question of awareness. During the survey, respondents were asked whether they identified with the following attitude of Paweł Nowak:

- *Paweł Nowak: when shopping for groceries, he always reads the list of ingredients on the label of products. He always wants to know as much as possible about the product (Fig. 10).*



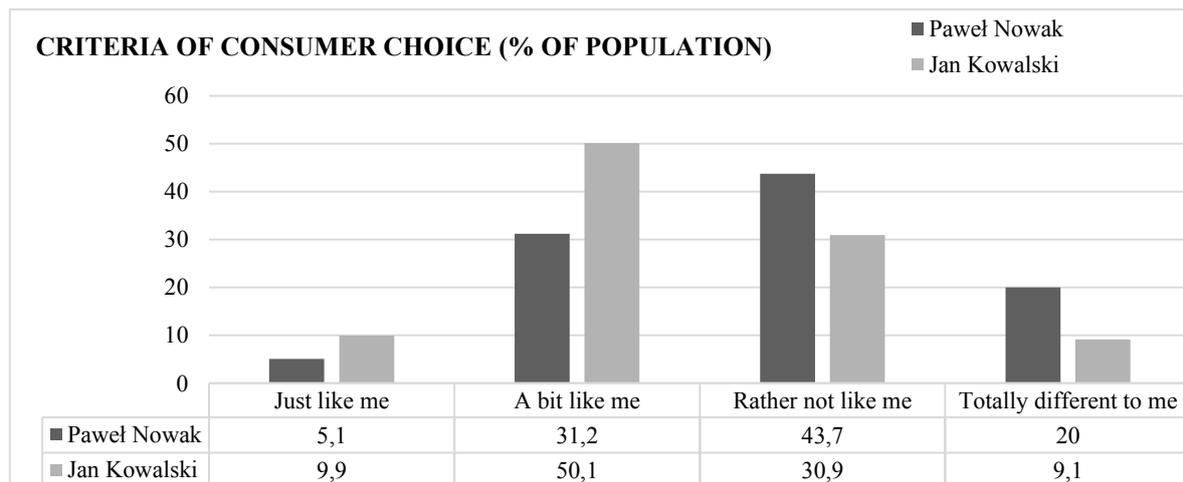
**Figure 10.** Curiosity of consumer with regard to ingredients/origin of product. Source: own elaboration based on surveys.

The responses to the above question lead one rather to conclude that the level of curiosity is low. The declared awareness constitutes an unused potential for action and it can be assumed that the subjects of the survey are characterized by a wishful attitude, where the consumer in fact knows what influence he/she can exert on his/her own health and environment, but prefers to remain unaware, transferring responsibility to the producer.

**4.4. Choice of channel of distribution and shopping process**

This area was studied in the context of the degree to which respondents identified with the following attitudes while doing their food shopping:

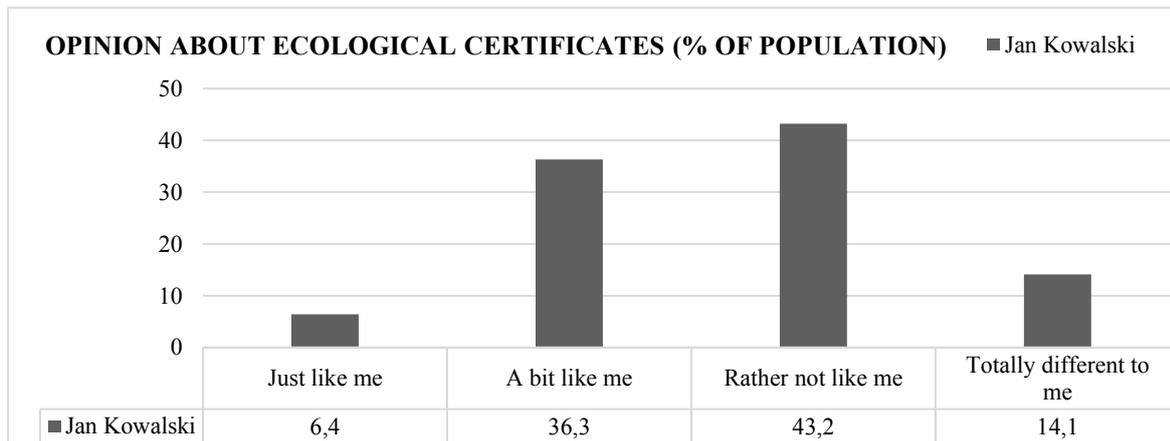
- *Pawel Nowak: tends to choose grocery products, which have certificates providing information about an ecological and / or fair method of production.*
- *Jan Kowalski: chooses grocery products which offer the cheapest alternative (Fig. 11).*



**Figure 11.** Criteria of consumer choice. Source: own elaboration based on surveys.

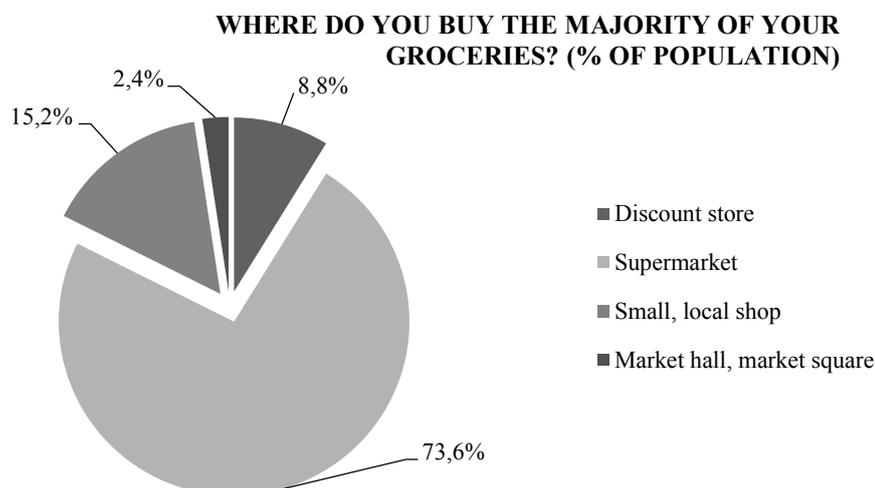
In making their consumer choices, young adults are clearly guided by price considerations, rather than ecological origin of the product. The impact of price is greater, the lower the level of disposable income is. This is not really related to a lack of trust in eco-certification. Attitudes to this type of information are quite positive. They were surveyed based on the identification of respondents with the following attitude:

- *Jan Kowalski: considers that ecological certificates are just a marketing gimmick and does not believe that their use is justified (Fig. 12).*



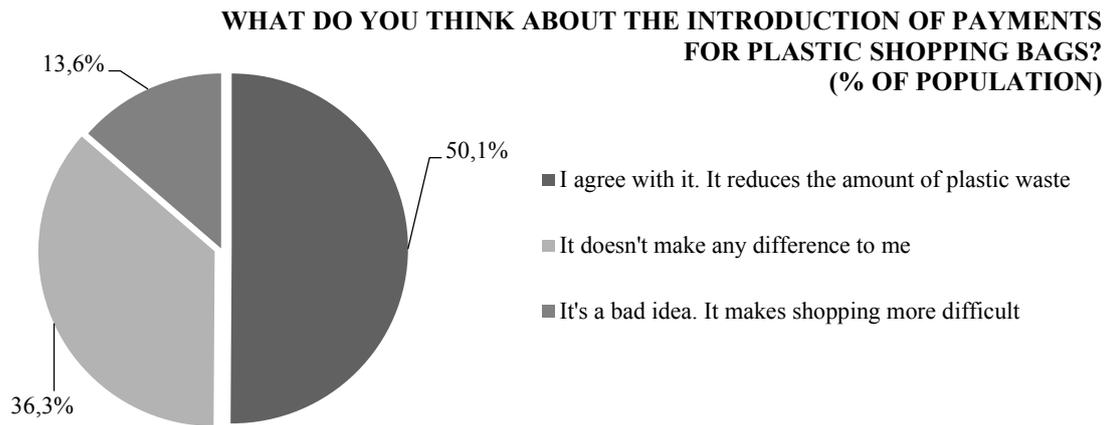
**Figure 12.** Opinion about ecological certificates. Source: own elaboration based on surveys.

The last question in the assessment of shopping behaviours concerned the place of purchase and the means of distribution of food chosen by respondents. Here the method of projective questions was abandoned in favour of a declaration concerning the respondent's own behavior (Fig. 13).



**Figure 13.** Favourite shopping place. Source: own elaboration based on surveys.

A clear majority of consumers do their shopping in large retail stores. The least popular are market halls and market squares, where locally produced food is sold directly. The attitude of consumers to the recently introduced requirement to make consumers pay for plastic shopping bags was also investigated. Until recently, it was possible to make practically unrestricted use of plastic bags in supermarkets (Fig. 14).

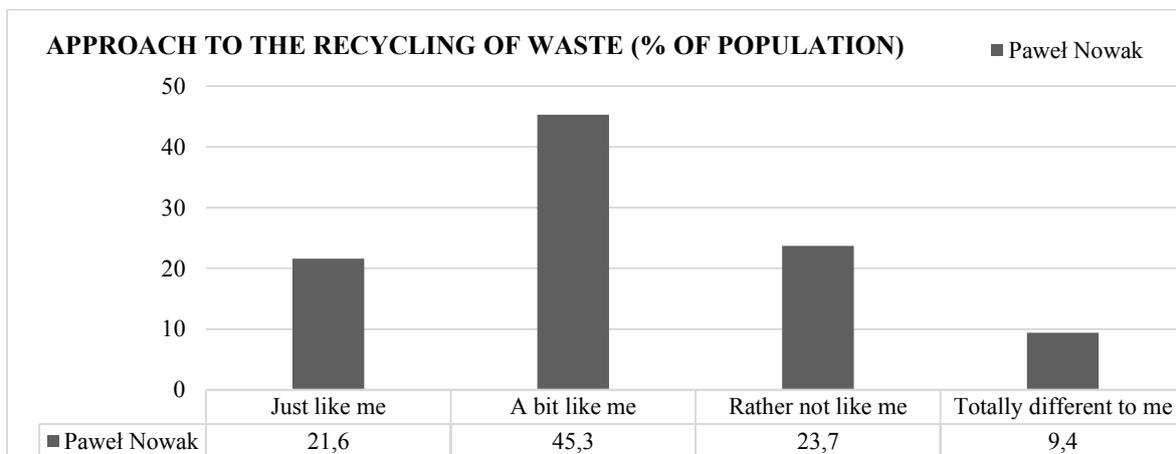


**Figure 14.** Opinion on the introduction of payments for plastic shopping bags. Source: own elaboration based on surveys.

#### 4.5. Post-purchase behaviours

The last area of the survey looked at post-purchase behaviours, the problem of food waste, the recycling of municipal waste and the preparation of meals. The topic of the approach to recycling was assessed based on the identification of respondents with the following attitude of Paweł Nowak:

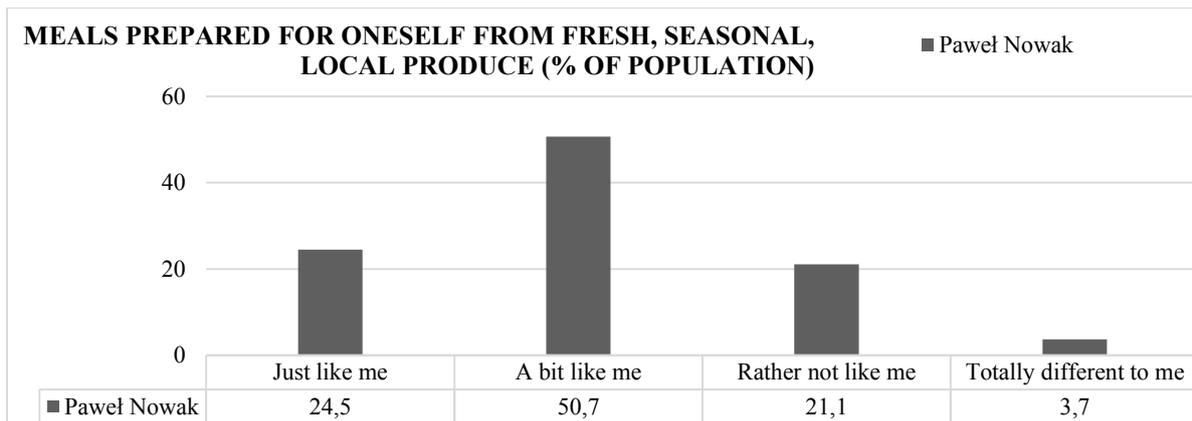
- *Paweł Nowak: always segregates waste and puts it in the recycling* (Fig. 15).



**Figure 15.** Approach to the recycling of waste. Source: own elaboration based on surveys.

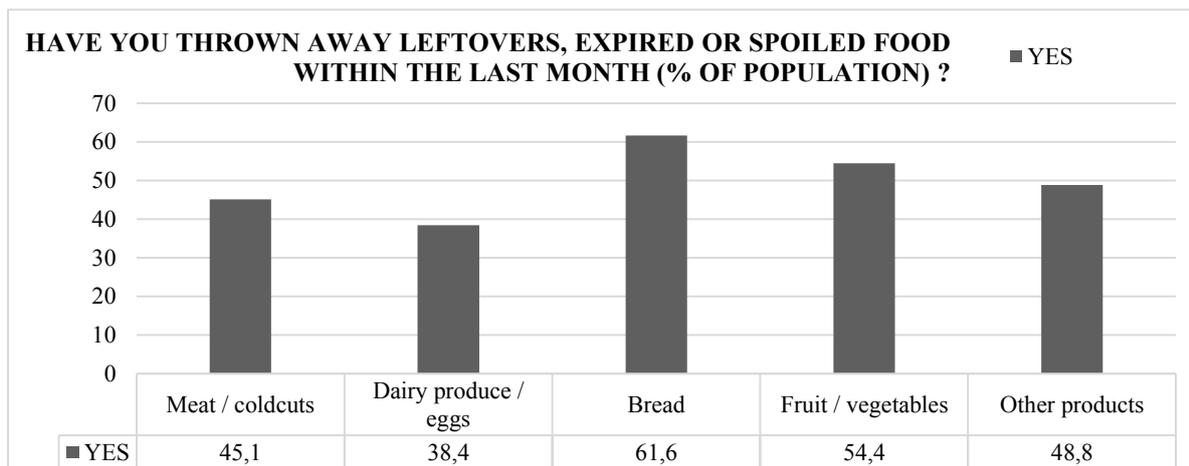
A clear majority of respondents, amounting to nearly 70%, identifies with the profile which segregates waste. This is a relatively high proportion, given that in Poland after 1989 recycling only became widespread at a fairly late stage. Respondents were also asked to assess another attitude of Paweł Nowak, related to the approach to the use of food:

- *Paweł Nowak: cooks for himself and his family himself, choosing fresh, seasonal produce from local producers wherever possible, and generally not using pre-prepared meals (frozen food, semi-finished products, conserved foods)* (Fig. 16).



**Figure 16.** Meals prepared for oneself from fresh, seasonal, local produce. Source: own elaboration based on surveys.

Around 75% of respondents identified with Paweł Nowak's attitude. This is something gives grounds for a positive assessment, but it does raise questions about the results in the other parts of the survey – for example the declaration that shopping is done mostly in large retail stores and a lack of willingness to read food labels. At the end, respondents were asked about their experience with regard to food waste (Fig. 17).



**Figure 17.** Food waste. Source: own elaboration based on surveys.

## 5. Conclusions

The study revealed some specific attitudes among young adults. The low level of knowledge about the definition of the concept of sustainable itself did not transpose itself into a low awareness of the impact of the behaviours of producers and consumers on the environment. A clear majority of respondents had a feeling of consumer responsibility, while at the same time in response to the control question nearly the same proportion of people had a tendency to take responsibility away from the consumer and transfer it to the producer. Over half of the respondents also felt entitled to 'subdue the earth', with nearly 20% believing this entitlement

could be exercised unconditionally. The majority of consumers were guided by the price of goods in making their purchase decisions, which is not surprising – and this was more frequently the case, the lower the level of disposable income was. This was rather not an effect of a low level of trust in eco/fair trade certificates, which were trusted by around 60% of respondents. Planning of shopping purchases was characteristic of older consumers in the group surveyed. With an increase in the income of consumers, shopping habits started to be characterized by a greater degree of spontaneity. Despite declarations about looking for seasonal, local products, the clear majority of respondents buy their food in supermarkets and discount stores, every second respondent declares support for ‘greener’ consumer behaviours e.g. the introduction of payments for plastic bags, over 70% attempt to segregate waste, while at the same time nearly half of the respondents had thrown away food within the last month.

In summary, the behaviours, attitudes and declarations of young adults prove their self-deception, the state *consisting in a motivated blindness to facts that are in some way or for some reason undesirable or unacceptable to the individual concerned* (Flew, 1979). It confirms the conclusion reached by M. Hume (2010). Young people are socially and environmentally aware of the effects of unsustainable consumption and production, but the courses of action which they adopt do not correlate with that awareness, as they are avoiding the responsibility for their own acts of consumers. The reason for this may be an assessment of their own financial situation and the belief that only consumers in a better financial situation can afford sustainable food, but at the same time this does not fit with the level of food waste. Perhaps the problem lies in an insufficient level of ethical sensitivity and indifference to the effects of unsustainable farming, as long as its effect do not affect the respondent directly. A significant issue may also be a 'wait-and-see' attitude to life – in other words, a tendency to pass the responsibility onto others (e.g. producers). This is also to be seen in the context of institutionally-imposed solutions – for example, concerning single-use plastic bags or recycling. Where sustainable behaviours start to be imposed, respondents adapt to them and the majority of them are satisfied with the result. Further work to diagnose the behaviour of young adults should continue to be done in future years to gain more precise insights into the reasons for the gap between their awareness and the courses of action they adopt.

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