PERCEPTION OF LOCAL FOOD IN DIRECT SALE FROM BUYER’S PERSPECTIVE - A CASE OF POLAND*

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Abstract. In industrialized countries, both government bodies, local authorities, and consumers express a growing interest in local food. The legitimacy of the expansion and promotion of the local food concept stems from the support of regional development while maintaining the principles of sustainable development in the social, economic, and environmental dimensions. In order for the local food sector to develop, it is essential to learn about the opinions of consumers and to recognize their expectations towards the production and distribution of this food. Therefore, this research aimed to identify buyers’ perception of local food and to reveal the attributes (values) affecting this perception. The scope of this research is complementary to the cognitive gap, and has a practical dimension. A mixed-method approach was adopted in the study to explore the research problem. Qualitative research (n=5 mini-FGI) and quantitative research (n=770 interviews) were conducted. The study revealed that local food is perceived by an integrated set of features, among which product attributes, socio-economic and environmental benefits resulting from its production and distribution are equally important. The perceived attributes related to the quality of local food products reflect consumer confidence in its producers and should be considered as indicators of expectations towards these products. The survey has shown that local products are ranked higher than mass food because they are perceived as of better quality, healthier, and safer. The distinctive attributes of local food products make them superior over conventional foods, constitute their added value, and should be used in constructing a marketing message. The study results are a valuable source of information for producers and entities acting for the development of local food systems. They also provide a number of key insights that can be used in designing marketing communication.

Keywords: consumer; attributes; values; sustainability of food systems; sustainable consumption

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JEL Classifications: A14, D10, M3

Additional disciplines: management and quality, sociology

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1. Introduction

Within their sustainable development policy, many countries undertake measures to stimulate the growth of supply and demand for local food. Authors of many works have emphasized that food production and distribution in the local food system yield economic, social, environmental and even health benefits (McEachern et al., 2010; Farmer, 2012; Arsil et al., 2014b; Bogomolova et al., 2018; Radzymińska & Jakubowska, 2018). Considering these putative benefits, the local food sector’s development has spurred interest among the representatives of government, local authorities, and science.

However, no common, uniform definition of the local food concept has been developed so far. For this reason, multiple terms and theoretical concepts related to a local product are in use, depending on the adopted point of reference (Feldmann & Hamm, 2015). Local food is usually defined considering the distance between the geographical region in which it was produced and where it is sold (Blake et al., 2010; Khan & Prior, 2010; Pearson et al., 2011; Knight, 2013). In the United States of America and Canada (Campbell et al., 2014), enterprises from the food sector are encouraged to place the “local” label on their products. The labeling can be placed voluntarily on food products following legal regulations defining the use of the “local” term. For example, the US government defines locally or regionally produced goods as: - manufactured in the town or region where the final product is sold, except that the total transport distance is less than 400 miles from the production site of the product; - sold within the state in which it was manufactured. In turn, the Canadian Food Inspection Agency (CFIA) defines “local” as either produced within the province or sold outside of the province, within 50 km of the provincial border. Other definitions refer to the political borders of a country or community (Khan & Prior, 2010; Knight, 2013). Local food is also understood as an alternative to industrially-processed food (Zepeda & Deal, 2009; Adams & Salois, 2010; Weiss, 2011; Knight, 2013). Other approaches link the local food to its attributes (Blake et al., 2010; Knight, 2013) and present it in the context of relations between a consumer and a producer (Smithers et al., 2008; Weiss, 2011). The literature provides a definition encompassing a broad range of consumer expectations and taking account of a strictly defined production-sale area. Emphasis is also put on the need to establish the percentage contribution of local ingredients in the final local product (Pearson et al., 2011).

The EU Committee of the Regions calls for a broad terminology for sustainable food systems, including agricultural food production, food processing and nutritional patterns, to be defined, which is crucial to identify the prospects for a common and comprehensive EU food policy ( Opinion of the European Committee of the Regions, 2017). According to the EU Committee of the Regions’ proposal, the term "local food product" should refer to products:

− with unique characteristics (such as taste, freshness, high quality, cultural determinants, local tradition, local specialty, animal welfare, environmental value, health aspects, or conditions of sustainable production);

− produced locally/regionally;

− contributing to the implementation of the local/regional rural development strategy;

− sold to the consumer through the shortest, most rational, and efficient chain possible, in a local retail store or marketplace under a local contract.

It is emphasized that the point of sale should be the closest within the consumer’s reach (this distance may vary from 1 to 50 km) (Opinion of the Committee of the Regions, 2011, p. 4).
The term “local food” is relatively often used interchangeably with regional food by both public sector authorities and scientists. So, the question is whether it is right? Due to its specific characteristics, certified regional food is a specialty of the region and may be available in various regions, while local products are intended for narrow local markets. Given the definition of local products, assuming that they are manufactured in a non-industrial, non-mass manner, from local raw materials or using local production methods, and are intended for the local market, it can be concluded that the local products include those that may be traditional and regional. Consequently, the lack of an unequivocal position in individual countries regarding the criteria for local food and its legal definition translates into:

- inaccuracies related to the use and application of this term in scientific bodies, in local government and government institutions as well as in messages addressed to the consumer;
- difficulties in actually determining the size of the local food sector;
- limiting the comparability of consumer research results between countries due to the lack of a unified methodology for the subject of research.

In the context of the presented issues, it becomes important to diagnose local food’s perception among its buyers to enable the local development policy and business practice, including the development of a uniform local food concept.

2. Literature review

Investigations conducted thus far have pointed to the growing consumer interest in local food products (Adams & Salois, 2010; Memery et al., 2015). Individual countries have developed their own forms of their direct and indirect sale. In response to the growing number of interested consumers, certain retail networks in the United States and Europe have begun to complete their assortment with local food products.

An overview of literature approaching local food from the consumer perspective has shown the number of related scientific works to increase dynamically in recent years. The consumer surveys on the local food market have been conducted by scientific and academic centers from the economic, management, sociological, and social psychology perspectives. Works of many researchers, especially American (Zepeda & Deal, 2009; Adams & Adams, 2011; Bellows et al., 2010; Onozaka & McFadden, 2011; Campbell et al., 2014; Costanigro et al., 2014; Khachatryan et al., 2018), Chinese (Zhang et al., 2019), British (Penney & Prior, 2014; Memery et al., 2015), Finish (Roininen et al., 2006), Canadian (Knight, 2013; Cranfield et al., 2012), Australian and Indonesian (Arsil et al., 2014a, 2014b, 2018), Italian (Vecchio, 2010; Tempesta & Vecchiato, 2013), German (Feldmann & Hamm, 2015), and Danish ones (Denver & Jensen, 2014; Ditlevsen et al., 2020), have emphasized the importance of undertaking consumer studies related to local food. In the works published so far, authors have focused on the qualitative approach (Roininen et al., 2006; Zeped & Deal, 2009; Adams & Salois, 2010; Adams & Adams, 2011), qualitative approach in most cases (Onozaka & McFadden, 2011; Bean & Sharp, 2011; Gracia et al., 2012; Cranfield et al., 2012; Hu et al., 2012; Costanigro et al., 2014; Denver & Jensen, 2014), and rarely a mixed approach (Ditlevsen et al., 2020). Most of the presented works relate to the local food in general, without distinguishing product categories. However, a few studies have addressed meat (Roininen et al., 2006; Gracia et al., 2012), fruit and vegetables (Costanigro et al., 2014; Denver & Jensen, 2014), or processed food products (Hu et al., 2012; Stolzenbach et al., 2013). In turn, some other works have investigated the issue of local food together with organic food (Zepeda & Deal, 2009; Campbell et al., 2013; Haas et al., 2013; Campbell et al., 2014; Denver & Jensen, 2014). However, it is unclear whether organic and local are two complementary or competitive trends in food consumption (Ditlevsen et al., 2020). These two product categories offer an alternative to the anonymous, globalized food supply chain, but are usually presented in literature as somehow similar but also competitive groups of food products. It has been demonstrated that despite no scientific evidence the consumers perceive local and organic food products as healthier than the conventional ones (Haas et al., 2013). An interesting asymmetry
has been noted in the consumer preferences regarding apples from the organic and local production systems. The respondents who see the benefits offered by organic products showed relatively high preferences for the apples from organic and local production. In turn, the consumers who see the benefits from the locally manufactured products showed high preferences only for the locally produced apples (Denver & Jensen, 2014). Some surveys attempt to explore the producer-consumer relation in the local food system network (Selfa & Quazi, 2005) and determine benefits and barriers from the consumption of locally-produced goods (Knight, 2013; Penney & Prior, 2014). The benefits from the local production and consumption include both the internal traits associated with a food product (i.e., its attributes like appearance, freshness, taste, wholesomeness, authenticity) and the external determinants, such as support of the local economy and agriculture, preservation of arable lands, ensuring food safety, reduced pesticide use, decreased transportation distance, reduced energy consumption, and better treatment of employees and animals (Zepeda & Deal, 2009; Adams & Salois, 2010; Onozaka & McFadden, 2011; Pearson et al., 2011). The results of a study conducted by Knight (2013) indicate that the product-related attributes are more important than social considerations in the hierarchy of benefits perceived by consumers.

The group of experienced and real barriers related to the purchase decisions made regarding local food products includes limited assortment, unsatisfactory availability, and problem with identification (Conner et al., 2010; Pearson et al., 2011). Local food is generally perceived as cheaper in high season and more expensive in low season. The high price and poor availability of local food products have been proved to be the main barriers to their purchase (Khan & Prior, 2010; Murphy, 2011; Penney & Prior, 2014). The prices of local food are usually higher compared to those of goods from industrial production (Lang et al., 2014). At the same time, as evidenced by the results of scientific research, the consumers are willing to pay more for local food products (Adams & Salois, 2010; Onozaka & McFadden, 2011; Nurse Rainbolt et al., 2012).

It has also been found that the consumers find it difficult to unambiguously define a local product (Khan & Prior, 2010; Onozaka et al., 2010). In the consumer approach, local food is often defined considering the distance between production place and retail site, and encompasses a smaller or a larger geographical range. This defined distance is expressed in kilometers/miles (Adams & Adams, 2011, p. 77) or in time needed to travel it (Zepeda & Leviten-Reid, 2004, p. 2, 3). English consumers define local food using distances of 20, 30, 50, and 100 miles (Ilbery & Maye, 2006, pp. 352-367). Over 70% of the surveyed American respondents claimed the local products to be those produced within a radius of 50 miles, whereas 40% of them considered local foods as those produced in their country (Onozaka et al., 2010, pp. 1-6). A study conducted among American consumers from Florida has demonstrated half of them to have no knowledge about local food labeling and 36% of them to be unfamiliar with “Fresh from Florida” logo. Only half of the surveyed respondents were able to indicate a local food manufacturer (Haas et al., 2013, pp. 214-226).

The overview of literature data allows concluding that the scope of research into the local food is associated to a much lesser extent with the cognitive and affective component, and to a greater extent with the behavioral component of the investigated consumer attitudes (Cranfield et al., 2012; Megicks et al., 2012; Maples et al., 2013; Memery et al., 2015; Tackie et al., 2015; Schoolman, 2017). In most studies, it is not the buyers that are the subject of the study. It should be added that the Polish scientific literature rarely addresses the issue of a local food consumers, while available works are fragmentary and non-exhaustive.

In today’s market realities, the production of consumer goods should be subordinated to the buyers. Therefore, for the local food sector to develop, it is essential to know the opinions and beliefs of consumers and to properly identify their expectations regarding the production, distribution, and consumption of this food category. Useful consumer knowledge can be exploited by food producer or other entities interested in the development of local food systems to develop market offer and marketing communication strategies. In the face of the increasing number of measures and initiatives undertaken for the development local food systems, the scope of consumer studies on the local food market is topical and of practical/utilitarian significance. Therefore, this research aimed to investigate the
conceptualization of local food among its buyers. Specifically, the paper aims to identify buyer’s perception of local food and to reveal the attributes (values) affecting this perception. An attempt was made in this study to answer the following research questions:

RQ1. How is local food defined among consumers purchasing local products and what is their emotional attitude towards this product category?

RQ2. By what dimension of attributes (values) is local food perceived and which attributes are the most valued ones in the hierarchy of perceived attributes?

RQ3. Do the assigned characteristics of local food relate to gender, age, education, and frequency of local food purchase?

3. Research objective and methodology

A unique feature of this study is that it is based on observations made among buyers of food produced and sold under sustainable food systems. It was conducted exclusively in a group of consumers purchasing food in short supply chains, in direct sale. The study was accomplished in two stages, adopting a hybrid research method involving the qualitative and the quantitative approach (Fig. 1).

I STAGE OF STUDY
Qualitative research Mini-FGI (n=5)
Scope of research on local food:
- defining/conceptualization
- market image
- diagnosis of values (attributes)
Techniques employed
- uncontrolled associations
- personification
Sample choice criteria
- purposeful choice: persons buying local food in direct sale

II STAGE OF STUDY
Quantitative survey conducted with the method of diagnostic probing, using the direct technique (n=770)
Scope of research:
- estimating perceived values (attributes)
- determining the dimensionality of the perceived attributes
- assessing the effect of socio-demographic variables and the frequency of purchase on the perceived attributes
Sample choice criteria
- purposeful choice: persons buying local food in direct sale

Figure 1. Scheme of the research process
Source: own research

At the first stage, a qualitative survey was carried out using a Mini Focus Group Interview (Mini-FGI). It aimed to explore the issues related to the beliefs and emotions associated with local food, and to establish, i.a., how this food was conceptualized and what values were ascribed to it. Including the emotional attitude of consumers,
perceptions about this food were examined as well. This study was conducted in August and September 2019 and involved a series of five group interviews with inhabitants of the north-eastern Poland (Warmia and Masuria region). Each session was attended by 5-6 persons, buyers of local food in direct sale, including farms and farm markets. Group discussions lasted ca. 1.5 h and were conducted following the customized semi-structured discussion guide, containing issues related to local food, like ways of its defining, visualizing, and imagining. The projective techniques implemented included uncontrolled associations and personification.

The second stage of the study involved the quantitative research. It was carried out since October 2019 till February 2020 at farm markets located in five cities of the north-eastern Poland (Warmia and Masuria region), using the technique of non-probabilistic sample selection – purposeful selection. The respondents were persons purchasing local food at the selected retail points at least once every two months. The structure of the surveyed sample is presented in Table 1. The majority of the respondents were women (69.48%), as they usually buy food more often than men. The most numerous groups among the surveyed were the respondents aged 40-55 years (41.04%), those with high school education or lower educational level (60.52%), and persons buying local food once a week (43.25%).

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>% Of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>235</td>
<td>30.52</td>
</tr>
<tr>
<td>Female</td>
<td>535</td>
<td>69.48</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25 years</td>
<td>103</td>
<td>13.38</td>
</tr>
<tr>
<td>25–39 years</td>
<td>196</td>
<td>25.45</td>
</tr>
<tr>
<td>40–55 years</td>
<td>316</td>
<td>41.04</td>
</tr>
<tr>
<td>56+</td>
<td>155</td>
<td>20.13</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or below</td>
<td>466</td>
<td>60.52</td>
</tr>
<tr>
<td>Above high school</td>
<td>304</td>
<td>39.48</td>
</tr>
<tr>
<td>Frequency of purchase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>two times a week</td>
<td>58</td>
<td>7.53</td>
</tr>
<tr>
<td>once a week</td>
<td>333</td>
<td>43.25</td>
</tr>
<tr>
<td>once every two weeks</td>
<td>190</td>
<td>24.68</td>
</tr>
<tr>
<td>once a month</td>
<td>135</td>
<td>17.53</td>
</tr>
<tr>
<td>once every two months</td>
<td>54</td>
<td>7.01</td>
</tr>
</tbody>
</table>

*Source: own research*
The survey was conducted by face-to-face interviews. A total of 770 interviews were conducted. The questionnaire contained statements referring to the perception of the attributes of local food (15 items). The respondents expressed the degree of their agreement or disagreement with the particular statement (Lušňáková et al., 2019) using 7-point Likert scale, where the values 1,2,3 meant: definitely no, no, rather no; the value 4 denoted an answer: I do not know, I have no opinion; and values 5,6,7 corresponded to answers: rather yes, yes, definitely yes. A questionnaire was developed using the insights and vocabulary gleaned from the focus group discussions.

The results were statistically analyzed using the Statistica 13.3 software. The hierarchy and multi-dimensionality of the perceived values of local food (scores derived from the seven-point Likert scale) were estimated using measures of central tendency, i.e., arithmetic mean, and median, and the principal component analysis (PCA). The Kaizer-Meyer-Olkin (KMO) criterion and the Cattell criterion based on the scree plot were used evaluated the PCA results. The influence of gender, age, and education of the respondents on the perceived attributes of local food was assessed using the one-way analysis of variance ANOVA (Pieloch-Babiarsz, 2020; Raisová et al., 2020). The correlations between the frequency of purchase of local food products at the marketplace and their perceived attributes were evaluated using correlation analysis.

4. Results and discussion

The implemented qualitative approach allowed determining the way the consumers conceptualize local food products, learning about the perceptions of these products, and determining by which set of features/attributes they are perceived. In general, the discussions were rich in ideas and views.

The study demonstrated that the consumers defined local food products based on the criteria linked with the site of its production and sale. According to them, these are food products manufactured by local producers, i.e., entities located in a commune or town, and sold in a poviat, voivodeship, or even the whole country.

However, opinions about the distance between the place of production and the sale were divided. Some respondents claimed that local food is sold only in the poviat or voivodeship, while others that it is sold across Poland. In the respondents’ opinion, local food can be purchased primarily at marketplaces, on farms, in small shops, including the producer’s shops, and in some cases in the local entrepreneur's on-line shops. Few claimed that it is also available in discounters and supermarkets. According to the respondents, local food may fall within the group of regional and traditional products and may be considered traditional or regional. This is due to the common areas of these food categories. Especially the production-sales distance and traditional manufacture methods mean that local food can be regional or traditional. The local food was perceived by the consumers as better than food produced by large producers (so-called mass, conventional food) and also as healthier, tastier, and safer. Consumers emphasized that its production is friendly to the environment and the local economy. According to the respondents, products purchased directly from small, local producers feature high quality and health value, naturalness, and authenticity. These products are of guaranteed quality, traditional, natural, and without stabilizers. Therefore, they are perfect for children.

The health value of this food was understood in two ways. On the one hand, it was associated with the lack of artificial additives and preservatives, while on the other hand it was perceived from the dietetic perspective, i.e., as food providing the appropriate levels of nutrients. In turn, naturalness was associated with the lack of colorants, preservatives, enhancers, and genetically non-modified ingredients. In the respondents’ opinion, the local food is characterized by a stable quality, which is very important to consumers.
The price of local food was perceived as relatively higher compared to the price of conventional food products, which - in the respondents’ opinion - is due to the higher costs of manufacturing this food in small production plants. The study showed that, in all discussion groups, local food was described as of good quality, not cheap, but worth its price, tasty, healthy, easily available, for everyday use, and that its production was claimed environmentally friendly (e.g., through a shortened supply chain) and useful for the region by supporting the development of the local economy (including providing jobs and promoting the region). The weakness of the local food is the lack of advertising, marketing, and clout.

In the conducted mini-FGI, personality characteristics of local food were established using the personification technique. The respondents were asked to describe the food as if it were a person, they were to imagine what character traits it had and what it looked like. Based on the analysis of the collected empirical material, it was found that the image of this food group was natural and familiar. The food represented human qualities, i.e., was trustworthy, joyful, friendly, unique, natural, solidary, authentic, and original. On the emotional level, the image of local food was dominated by such features as modesty and classics. The imagined person was a woman: dressed modestly but elegantly, in good quality materials made of natural fabrics, like cotton and linen. The described image was close to the respondents.

The identification of the characteristics of local food, initiated in the qualitative research, was continued in the quantitative research. The assessment of the perception of local food in terms of the attributes assigned to it is presented in Table 2.

Consumers showed a positive emotional attitude towards these products, which is indicated by the evaluation of the attributes assigned to them. The mean scores ranged from 5.43 to 5.83, M = 6. It was found that local food was perceived through the prism of product-related values such as: natural ingredients (average score 5.59), authenticity (average score 5.65), guaranteed quality (average score 5.51), a low degree of processing (average score 5.52), traditional character resulting from the use of ancient production methods (average score 5.43), and organoleptic characteristics resembling traditional Polish food (average score 5.83). The values assigned to these food products lead to the belief that they are ideal for children nutrition (average score 5.60).

The results of quantitative and qualitative research proved that local food was positioned higher than products from mass (conventional) production. It was perceived as: of higher quality (average score 5.55), healthier and safer (average score 5.53), fresher (average score 5.69), containing less additives and preservatives (average score 5.78), and ensuring a higher nutritional value (average score 5.60). Also, the respondents evaluated it as more expensive compared to conventional food products (average score 5.47).

Altruistic values also gained a high position in the hierarchy of the ascribed characteristics. The respondents perceived local food also in the context of socio-economic benefits for the local economy (average score 5.77) and environmental benefits (average score 5.63).
Table 2. Evaluation of attributes assigned to local food purchased in direct sale

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Local food is healthier and safer than other mass-produced food products</td>
<td>5.53</td>
<td>1.09</td>
<td>6</td>
<td>0.62</td>
</tr>
<tr>
<td>2. Local food has natural ingredients</td>
<td>5.59</td>
<td>1.03</td>
<td>6</td>
<td>0.66</td>
</tr>
<tr>
<td>3. Local food contains lower amounts of additives and preservatives compared to conventional food products</td>
<td>5.78</td>
<td>1.07</td>
<td>6</td>
<td>0.67</td>
</tr>
<tr>
<td>4. Local food offers a higher nutritional value (more vitamins and minerals) than mass-produced food products</td>
<td>5.60</td>
<td>1.21</td>
<td>6</td>
<td>0.72</td>
</tr>
<tr>
<td>5. Local food is authentic</td>
<td>5.65</td>
<td>1.06</td>
<td>6</td>
<td>0.72</td>
</tr>
<tr>
<td>6. I equate local food with guaranteed quality</td>
<td>5.51</td>
<td>1.18</td>
<td>6</td>
<td>0.73</td>
</tr>
<tr>
<td>7. Local food is manufactured with traditional, ancient methods</td>
<td>5.43</td>
<td>1.16</td>
<td>6</td>
<td>0.68</td>
</tr>
<tr>
<td>8. Local food is low-processed</td>
<td>5.52</td>
<td>1.09</td>
<td>6</td>
<td>0.70</td>
</tr>
<tr>
<td>9. Food from local, small producers is of higher quality than other food products available in the market - conventional food</td>
<td>5.55</td>
<td>1.20</td>
<td>6</td>
<td>0.69</td>
</tr>
<tr>
<td>10. The manufacture of local food is beneficial to the region, it ensures workplaces</td>
<td>5.77</td>
<td>1.00</td>
<td>6</td>
<td>0.60</td>
</tr>
<tr>
<td>11. Taste, aroma, and appearance of local food resemble those of traditional Polish food</td>
<td>5.83</td>
<td>1.01</td>
<td>6</td>
<td>0.67</td>
</tr>
<tr>
<td>12. Local food is fresher than conventional food</td>
<td>5.69</td>
<td>1.10</td>
<td>6</td>
<td>0.67</td>
</tr>
<tr>
<td>13. Local food is less detrimental to the natural environment</td>
<td>5.63</td>
<td>1.12</td>
<td>6</td>
<td>0.65</td>
</tr>
<tr>
<td>14. Local food is perfect for children</td>
<td>5.60</td>
<td>1.17</td>
<td>6</td>
<td>0.67</td>
</tr>
<tr>
<td>15. Local food is more expensive than other mass-produced food products</td>
<td>5.47</td>
<td>1.19</td>
<td>6</td>
<td>0.67</td>
</tr>
<tr>
<td>% of variance</td>
<td></td>
<td></td>
<td></td>
<td>76.20</td>
</tr>
</tbody>
</table>

Source: own research

The results of the PCA were presented in Table 2. The principal component analysis extracted one factors which classified variables. This factor was correlated with all items representing the values of local food (factor loadings > 0.60). Extracted factor explained 76.20% of the variance of variables. Results demonstrated that the perception of local food attributes by consumers was integrated through the prism of one dimension. This dimension consisted of attributes not necessarily similar in terms of the functions performed, including both internal and
external attributes of these products. This proves that the product-related, socio-economic, and environmental values are of the same importance for the consumer in the perception of local food.

The study demonstrated (Table 3) that gender and age of the persons buying local food had no statistically significant (p>0.01) effect on the perception of its attributes. It was only found that education of the respondents differentiated the perception of these food products as authentic and of guaranteed quality (p<0.01). The correlation (strength and significance of the correlation) between the perceived attributes of local food and the frequency of its purchase at the marketplace (Table 3) was also determined in the presented study. Weak correlations were demonstrated based on the analysis of the coefficients of the two-way correlation between the variables. Even though the calculated correlation coefficients were below 0.2, the correlations were, in most cases, found statistically significant (p <0.01). The results obtained suggest that the frequency of purchasing food in direct sales is very little related to the perceived attributes of this food.

**Table 3.** Effect of socio-demographic variables of the respondents and the frequency of purchase of local food on the perception of its attributes

<table>
<thead>
<tr>
<th>Items</th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Frequency of purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ANOVA</td>
<td></td>
<td></td>
<td>Correlation analysis</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>p</td>
<td>F</td>
<td>p</td>
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*Source: own research*
The analysis of the results of empirical research presented in this manuscript enabled accomplishing the study goal and answering the research questions. The study has demonstrated that consumers define local food based on the place of production and the place of sale but are, however, inconclusive regarding the distance between these places. The study results confirm conclusions formulated by other authors, which suggested discrepancies in defining this term by consumers and demonstrated the range of consumer conceptualization of local food. This food was defined by consumers from the perspective of reducing miles (kilometers) of its transportation (Campbell et al., 2013, 2014). According to the respondents, local food means the food produced within both the place of residence and within the country (Wilkins, 2002). The British respondents indicated the area within a maximum distance of 20–50 miles from the place of residence as an area of local food production and sale (Chambers et al., 2007). When asked which geographical area the local food should come from, 24% of the British consumers answered that from the city, 33% from the poviat area, while 30% indicated that from the surrounding poviats (Pearson et al., 2011). A study conducted by Arsil et al. (2014b) has indicated that 28% of the Indonesian respondents perceive the production place as the key attribute of the local food.

The results of the qualitative and quantitative research presented in this work indicate a positive emotional attitude of consumers to local food. The results showed that local food was perceived by an integrated set of features, among which the attributes related to the quality of these products, socio-economic and environmental benefits resulting from their production and distribution were found equally important/valuable. The study has proven that local food products are ranked higher than conventional food products. They are rated as of better quality, healthier, and safer. The majority of available research addressing the perception of local food is based on the quantitative approach, while fewer works describe the qualitative approach. The scarcity of data on the perception of local food products by Polish consumers purchasing them makes the complete confrontation of the results obtained impossible.

Earlier studies (Radzymińska & Jakubowska, 2018) conducted among young respondents who do not buy local food have proven that this food category was perceived by them as offering mainly socio-economic benefits, and to a lesser extent as ensuring the product-related attributes and environmental benefits resulting from its production and distribution. Other results, similarly to those presented in this study, have indicated that this food is perceived as of better quality and safer in opposition to mass food (Ditlevsen et al., 2020). It has also been proven in the literature that the consumers’ perception of local food is associated not only with product-related values, but also with social and environmental considerations (Hunt, 2007; Thompson & Coskuner-Balli, 2007). In the study conducted by Roinien et al. (2006), this food was perceived as supporting the economy, related to its short distribution chain, freshness, and guaranteed origin. Amilien et al. (2007) have demonstrated the neighborhood (proximity), expressed by product and consumer affinity, production methods and natural composition, to be the most important attribute in the perception of local products. Haas et al. (2013) found that these products have a strong social dimension, represented by the will to belong to the local community, while the environmental attributes assigned to them rank much lower compared to organic food. The literature works describe interesting studies in which the results of research on the perception of local food next to organic food are presented in relation to production practices (Campbell et al., 2013, 2014). It has been proven that some consumers perceive local and organic food based on the reduced number of miles in transport (local products) and the reduced use of synthetic pesticides (organic products), which is a consequence of intensive promotional activities aimed to clearly display these attributes. At the same time, it is suggested that consumers do not have full knowledge of the manufacturing methods of these products, and that consumer perception focuses only on the main differences resulting from the manufacture methods (Campbell et al., 2013). Local food was mainly associated with shorter transport times and, to a lesser extent, with reduced carbon dioxide emissions, greenhouse gas emissions, as well as product attributes related to better taste and nutritional value. The environmental attributes (no use of synthetic pesticides, lower pesticide residues, use of organic fertilizers, no use of synthetic pesticides, genetically unmodified) also dominated, while product characteristics (better taste, nutritional value) were significantly inferior in the assessment of organic food characteristics. According to the French respondents
The essential features of local products are their origin (including geographical scope) and tradition. The most important factor in the perception of local food is the neighborhood (closeness), defining the relationship between the product and the producer. The relationship between the consumer and the region is also important, with the notion of region referring to the region of origin, the consumer's residence area, and the place of leisure. According to French consumers, a local product is closely related to the producer's know-how and naturalness. On the other hand, the Norwegian consumers living in rural areas feel a close link of the local product with the short supply chain and the producer. The relationship with the producer is based on trust in product quality, environmental protection, and rural development potential. The advantage of local products is their non-industrial origin. In turn, the Norwegian local consumers refer to the vision of local products in which origin is associated with added values, such as tradition and the nature of the products, which play an important role in stimulating demand in municipal, local markets by producers. A study conducted by Zepeda & Leviten-Reid (2004) has demonstrated attitudes toward local food products expressed by the buyers of conventional food and alternative (organic) food. The alternative group was interested in purchasing local food because of the environmental, economic, social, and health benefits. Both studied populations emphasized the essence of the features of these products, i.e., their organoleptic attributes, like freshness and taste. It has been shown that their added value is undoubtedly, inter alia, their character, resulting from both the recipe and the passion of the people who produce them. This is evidenced by the statements of the survey participants (Zepeda & Leviten-Reid 2004) about the hidden love (the heart), that the farmer/producer includes among the product ingredients. According to Roininen et al. (2006), the production of local food is associated with such attributes as freshness, short transportation, contribution into the local economy, and animal welfare. It has been found that the respondents from rural areas, compared to those living in urban areas, are more interested in supporting the local economy. According to the respondents, the production of local food is related to the protection of the environment and health. The negative associations were related to the price of these products, which was considered high. In turn, affordable price, high availability, unhealthy, and industrially-produced are the attributes that were most often ascribed to mass-produced industrial food. Haas et al. (2013) used the verbal association technique to define unconscious consumer attitudes towards local food. The verbal associations that came to mind of the respondents were related to: freshness, the smell of fresh flowers, farms, animal welfare, landscape beauty, and the aspect of communal happiness.

This research has shown that buyers of local food constitute a homogeneous group in terms of the values assigned to this food category. The perception of local food in the group of buyers generally does not depend on gender, age, or education, and is not strongly related to the frequency of its purchase. The literature lacks studies examining the impact of socio-geographic variables on the perception of this food in the group of consumers who buy it. Therefore, it is impossible to compare the results obtained with findings of other authors. Published works concern the role of sociodemographic variables in explaining the choice of local food. However, they are inconsistent regarding the influence of those variables on the choice of the so-called sustainable food products (Vermeir & Verbeke, 2006; Hughner et al., 2007; Campbell et al., 2010). On the one hand, research indicates that demographic factors are not good predictors of the likelihood of buying local food (Zepeda & Li, 2006; Cranfield et al., 2012). In turn, other works have shown women to be more willing to buy these food products than men (Knight, 2013), which is substantiated by their sensitivity to social impacts (Gracia et al., 2012). It is suggested that inhabitants of rural areas (Racine et al., 2013) and the elderly (Dukeshire et al., 2011; Khan & Prior, 2010; Knight, 2013) are more willing to buy local food. Research conducted in the North Carolina (USA) has shown that local products are purchased by families with children, with low income, living in the countryside, eating five or more servings of vegetables a day, whose children suffer from some health issues (Racine et al., 2013). In turn, a study by French scientists (Bougherara et al., 2009) has shown that younger people (under 35 years of age), representing richer households, are more likely to buy local food and participate in initiatives to support agriculture. Likewise, research carried out in Canada (Ontario) (Smithers et al., 2008) has shown that middle-aged persons account for a larger share of local food market customers. Finally, some other study has demonstrated that the enthusiasm for buying local food increases with age (Khan & Prior, 2010).
Conclusions

The results of the present research and the works of other authors enable concluding that it is necessary to try to develop and adopt a uniform concept of local food. It should contain the basic criteria for local recognition of a product, based also on the perception of the food by consumers. The study has shown a division in the consciousness of local food buyers into mass/conventional and alternative food, including local, traditional, and regional food products. Common areas of local, regional, and traditional food do not allow for an unambiguous definition of local food and limit its market identification. Introducing a uniform concept of local food would eliminate consumer confusion.

This research has also shown that local food is perceived by an integrated set of features, among which product-related attributes, socio-economic, and environmental benefits resulting from its production and distribution are equally important. On the one hand, the characterization of local food products based on the attributes related to their quality is a sign of consumer confidence in their producers. On the other hand, the attributes important to the perception may be treated as a hint for producers regarding expectations towards this food category. The main effort of a local food company should therefore be focused on reliable product design, taking into account production methods that minimize the impact on the original characteristics of the products. The results obtained in this study are also a valuable source of information for entities acting for the development of local food systems. They provide a number of key insights that can be used in designing marketing communication, including visual communication. The distinctive attributes of local products that make them superior over conventional food constitute their added value and should be used in constructing a marketing message. It is also necessary to popularize local food with reference to the socio-economic and environmental benefits related to its production and distribution.

However, there are some limitations related to the presented study. It was conducted in a narrow geographical range; therefore, the results obtained cannot be generalized to other regions of Poland. The scope of the presented research was also limited as it focused only on the perception. In the future, research should be conducted in a broader subjective and subject scope. More research is needed to determine if the perceived characteristics of local foods are reflected in the motives for choosing that food by consumers.

This article is based on a large-scale project exploring consumer attitudes towards local food in Poland. As part of further research, it is planned to: - determine to what extent the perceived attributes determine the choice of this group of products, - make a broad characteristic of consumers purchasing local food, based on psychosocial characteristics, determinants resulting from the social structure, and factors determining the choice of this food, - indicate significant variables explaining the attitudes of consumers towards local food in the behavioral sphere based on model concepts, - identify factors conditioning and limiting the demand for this food category. Further research in this area is useful and justified in order to support regional development in line with the principles of sustainable development in the economic, social, and environmental dimensions.
References


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