

# Regional ethnocentrism on the food market as a pattern of sustainable consumption

**Pawel Bryla**  
University of Lodz

## Acknowledgements:

The author's research study was funded by the National Science Centre within an Opus research grant no. 2017/25/B/HS4/00031.

## Cite as:

Bryla Pawel (2019), Regional ethnocentrism on the food market as a pattern of sustainable consumption. *Proceedings of the European Marketing Academy*, 48th, (8699)

Paper presented at the 48th Annual EMAC Conference, Hamburg, May 24-27, 2019.



## **Regional ethnocentrism on the food market as a pattern of sustainable consumption**

### **Abstract:**

The paper aims to assess the level and predictors of regional ethnocentrism on the market of regional food products as well as relate this phenomenon to sustainable development. We conducted a survey in a representative sample of 1000 inhabitants of Poland with the use of the CAWI methodology. In a multiple regression model, 8 statistically significant predictors of the regional ethnocentrism were identified: the importance of brand, and retailer trust on the food market, the importance of quality signs in regional food purchases, opinion that insufficient marketing constitutes an important barrier to the development of the regional food market, buying regional products in shops owned by producers, rather than large distribution networks, frequency of purchasing regional products as a tourist, and, national ethnocentrism on the regional food market. These predictors are strongly related to the three major pillars of sustainable development: economic, social, and ecological.

*Keywords: regional ethnocentrism, sustainable development, local food*

*Track: Social Responsibility & Ethics*

## 1. Introduction

Sustainable consumption and production are identified as one of the essential requirements for sustainable development (Wang, Ghadimi, Lim, and Tseng, 2019). Drawing from the growing body of research on sustainable consumption and production, Bengtsson, Alfredsson, Cohen, Lorek, and Schroeder (2018) identified two dominant vantage points—one focused on promoting more efficient production methods and products (mainly through technological improvement and informed consumer choice) and the other stressing the need to consider also overall volumes of consumption, distributional issues, and related social and institutional changes. Sustainable consumption can encompass both sustainable attitudes and sustainable behaviours (Minton, Spielmann, Kahle, and Kim, 2018). Drawing on signalling theory, Brach, Walsh, and Shaw (2018) showed that third-party certification labels on sustainable products provide brand-like information cues that reduce the perceived risk of sustainable products, but consumers must perceive them as credible to have their risk perceptions reduced. Onet et al. (2018) adopted personas as a way to better explain and understand the holistic nature and complexity of sustainable consumer behaviour in terms of its various stages (i.e. acquisition, usage, and post-use) within key behavioural functions of mobility, housing, clothing, and food. Sustainable consumption is associated, among others, with the reduction of food waste (Morone, Falcone, and Lopolito, 2019), and eating organic food (Author, 2015a; Torres-Ruiz, Vega-Zamora, and Parras-Rosa, 2018) and local food (Annunziata, Agovino, & Mariani, 2019). Networks of producers, consumers and other actors can act to improve food sustainable and anti-consumption behaviours, by embodying alternatives to conventional food systems (De Bernardi & Tirabeni, 2018). In this paper, we argue that the preference for food products originating from one's own region (called regional ethnocentrism) constitutes a pattern of sustainable consumption.

Consumer ethnocentrism has usually been studied at the national level. However, it may also be observed at other levels of analysis, including the preference for products originating from one's own region. Consumer ethnocentrism is an important factor regarding the intention to purchase not only foreign products but also non-regional products (Fernández-Ferrín & Bande-Vilela, 2013). On average, consumers are willing to pay a premium for local food (Printezis & Grebitus, 2018). Most of the consumers view food as local if it is sold in the same state as it was grown (Meyerding, Trajer, and Lehberger, 2019). Health consciousness, concern for the environment, and concern for local economies were found to be significant predictors of attitude toward local food (Kumar & Smith, 2018). Trust and a sense of personal

connection with the farmer comprise part of the "value added" of community-supported agriculture (CSA) participation (Morgan et al., 2018). The findings of Siemieniako, Kubacki, Glińska, and Krot (2011) point to the relative importance of elements such as brand image (based on Polish culture and referring to its symbols), local brands as contributors to local identities and the form of their expression, as well as a moral obligation to buy local brands. Levels of consumer ethnocentrism are sometimes, but not always, related to the actual purchase of local-regional-traditional food products (Fernández-Ferrín, Calvo-Turrientes, Bande, Artaraz-Minón, and Galán-Ladero, 2018). There is a relationship between national ethnocentrism and regional ethnocentrism on the organic food market (Author, 2017).

This paper aims to assess the level of regional ethnocentrism on the food market in Poland and identify certain predictors of this attitude as well as analyse them from the perspective of sustainable development.

## **2. Material and methods**

A survey was addressed to Polish consumers. The sample consisted of 1000 inhabitants of Poland aged 15-65. The sample was representative for the general population, regarding: age, sex, education and the size of the city of origin. The survey was carried out with the use of CAWI (Computer Assisted Web Interview) method by a specialised marketing research agency (ARC Rynek i Opinia) in its online panel (epanel.pl). Whenever a catalogue of options was proposed, the respondents had the possibility to supplement it with their own answer (semi-open questions) so as to ensure that the respondents' opinions are reflected to the highest degree in the research results. The questionnaire was designed in Polish due to the research setting. It is available from the author upon request.

Women constitute 50.1% of the study subjects, which is slightly less than in the general population of Poland (51.6% according to Central Statistical Office, 2013: 195). The age of the study subjects ranges from 15 to 65, with the mean of 40. The age structure of the sample corresponds very well with the general population of Poles belonging to this age interval (Central Statistical Office 2013: 196). As far as education level is concerned, 42.0% of the study subject have only completed primary school, 36.8% have secondary education, and 21.1% graduated from a higher education institution. These figures are also similar to the general population (Central Statistical Office 2013: 199). All the 16 Polish regions are represented in the sample. The sample also resembles the general population regarding the size of the city of origin (Central Statistical Office 2013: 204-207). The proportion between

inhabitants of urban and rural areas is almost identical as in the general population (39.0 % of the study subjects live in the countryside compared to 39.4% of Poles). A more detailed comparison of the sample with the general population may be found in table 1 of a previous article from the same research project (Author, 2015b).

This paper focuses on the importance attached to regional food products originating from the consumer's region of residence. Descriptive statistics,  $\chi^2$  tests, t-tests, simple and multiple regression models were applied. The analyses were conducted in Microsoft Excel 2013 and Statistica 12.0.

### 3. Results

The importance attached to the product originating from the consumer's region is higher for regional food than for organic food or conventional food (**table 1**). 25.5% of the study subjects attached very high importance to this factor on the regional food market, while it was 17.5% for organic food, and 13.4% for conventional food. Only for 6.7% of respondents the information that a regional products comes from their own region is with no importance.

Food products	Very high	Rather high	Average	Rather low	None
Regional	25.5	32.7	28.0	7.1	6.7
Organic	17.5	30.2	32.4	10.4	9.5
Conventional	13.4	26.6	37.5	11.3	11.2

Table 1. The importance attached to food products originating from the consumer's own region (%)

First, we identified respondents who reported very high importance of regional food products originating from their region of residence (255 people) and compared their characteristics, attitudes and opinions with the rest of the sample (745 people). These subsamples had a similar gender composition (48.2% of females v. 50.7% of females, Yates  $\chi^2=0.381$ ,  $p=0.537$ ). They did not differ significantly by age (mean=39.93 v. 38.97,  $t=0.953$ ,  $p=0.341$ ), though slightly higher levels of regional ethnocentrism were observed in the age groups 35-44 and 55-65. The place of residence understood as the size of the city did not affect regional ethnocentrism in a significant way ( $\chi^2=9.844$ ,  $p=0.131$ ), but this attitude tended to be more common among inhabitants of small and medium cities (from 50 to 200 thousand inhabitants). The level of education did not affect regional ethnocentrism ( $\chi^2=3.145$ ,  $p=0.207$ ), even if it was lower among respondents with tertiary education. No statistically significant

impacts of professional activity ( $\chi^2=6.451$ ,  $p=0.375$ ), household size ( $t=0.121$ ,  $p=0.903$ ), and income ( $t=1.028$ ,  $p=0.304$ ) were observed either. Therefore, it seems that demographic and socioeconomic criteria have limited power in explaining the phenomenon of regional ethnocentrism on the food market.

In accordance with our expectations, regional ethnocentric respondents tend to buy more regional food products than the rest of the sample, are willing to pay a higher price for regional food than for conventional food, and tend to select regional products from their own region more often in purchasing regional food (**table 2**).

Measure	Regional (%)		WTP (%)		Own region (%)	
	RE	Other	RE	Other	RE	Other
Mean	38.3	27.3	19.6	16.0	44.4	27.1
Standard Deviation	24.5	22.8	16.9	16.1	29.0	26.4
Variation	0.638	0.836	0.864	1.001	0.653	0.974
Minimum	1	1	0	0	0	0
1st quartile	20	10	10	5	20	5
Median	30	20	20	10	40	20
3rd quartile	60	45	25	20	70	46.25
Maximum	100	100	100	100	100	100

Notes: RE – regional ethnocentric consumers (255 respondents), Other – the rest of the sample (745 respondents)

Table 2. A comparison of regional ethnocentric consumers with the rest of the sample regarding the share of regional products in total food purchases, the willingness to pay a higher price for regional products compared to conventional food, and the share of products from one's own region in one's purchases of regional food

Variables for which significant differences were observed between consumers with a high level of regional ethnocentrism and the rest of the sample were tested in a series of simple regressions in which the dependent variable was the importance attached to regional food products originating from the region where the respondent lived, measured in a 5-point scale (very high, rather high, average, rather low, with no importance). Unsurprisingly, regional ethnocentrism is related to the share of regional products in one's food purchases ( $\beta=0.242$ ,  $SE=0.032$ ,  $t=7.669$ ,  $p<0.001$ ,  $R^2=0.059$ ), and the willingness to pay a higher price for regional products compared to conventional food ( $\beta=0.171$ ,  $SE=0.031$ ,  $t=5.480$ ,  $p<0.001$ ,  $R^2=0.029$ ). It is strongly affected by national ethnocentrism both on the market of conventional food ( $\beta=0.443$ ,  $SE=0.028$ ,  $t=15.602$ ,  $p<0.001$ ,  $R^2=0.196$ ), and regional food products ( $\beta=0.560$ ,  $SE=0.026$ ,  $t=21.378$ ,  $p<0.001$ ,  $R^2=0.314$ ). The importance attached to the following

characteristics of food products turned out to exert a statistically significant impact on the regional ethnocentrism: area of origin ( $\beta=0.326$ ,  $SE=0.030$ ,  $t=10.884$ ,  $p<0.001$ ,  $R^2=0.106$ ), quality signs ( $\beta=0.311$ ,  $SE=0.030$ ,  $t=10.345$ ,  $p<0.001$ ,  $R^2=0.097$ ), brand ( $\beta=0.249$ ,  $SE=0.031$ ,  $t=8.129$ ,  $p<0.001$ ,  $R^2=0.062$ ), trusting the point of sale (retailer) ( $\beta=0.269$ ,  $SE=0.030$ ,  $t=8.808$ ,  $p<0.001$ ,  $R^2=0.072$ ), and product appearance ( $\beta=0.188$ ,  $SE=0.031$ ,  $t=6.043$ ,  $p<0.001$ ,  $R^2=0.035$ ). As far as consumers' opinions about regional food products in comparison with conventional food are concerned, the following statements reached statistical significance: they have a higher quality ( $\beta=0.394$ ,  $SE=0.029$ ,  $t=13.556$ ,  $p<0.001$ ,  $R^2=0.156$ ), they have a higher price ( $\beta=0.120$ ,  $SE=0.031$ ,  $t=3.813$ ,  $p<0.001$ ,  $R^2=0.014$ ), they are more authentic ( $\beta=0.373$ ,  $SE=0.029$ ,  $t=12.715$ ,  $p<0.001$ ,  $R^2=0.139$ ), they are more tasty ( $\beta=0.387$ ,  $SE=0.029$ ,  $t=13.278$ ,  $p<0.001$ ,  $R^2=0.150$ ), they are produced in a more traditional way ( $\beta=0.316$ ,  $SE=0.030$ ,  $t=10.524$ ,  $p<0.001$ ,  $R^2=0.100$ ), they are more environmentally friendly ( $\beta=0.296$ ,  $SE=0.030$ ,  $t=9.784$ ,  $p<0.001$ ,  $R^2=0.088$ ), they are subject to a stricter control ( $\beta=0.251$ ,  $SE=0.031$ ,  $t=8.179$ ,  $p<0.001$ ,  $R^2=0.063$ ), they are healthier ( $\beta=0.344$ ,  $SE=0.030$ ,  $t=11.588$ ,  $p<0.001$ ,  $R^2=0.119$ ), they arouse more trust ( $\beta=0.401$ ,  $SE=0.029$ ,  $t=13.830$ ,  $p<0.001$ ,  $R^2=0.161$ ), they look better ( $\beta=0.293$ ,  $SE=0.030$ ,  $t=9.679$ ,  $p<0.001$ ,  $R^2=0.086$ ), I accept their higher price ( $\beta=0.278$ ,  $SE=0.030$ ,  $t=9.126$ ,  $p<0.001$ ,  $R^2=0.077$ ), and I recommend purchasing them to my family / friends ( $\beta=0.420$ ,  $SE=0.029$ ,  $t=14.614$ ,  $p<0.001$ ,  $R^2=0.176$ ). Regional ethnocentrism also depended (negatively) on considering packaging as a criterion for assessing the authenticity of regional food products ( $\beta=-0.077$ ,  $SE=0.032$ ,  $t=-2.431$ ,  $p=0.015$ ,  $R^2=0.006$ ). It was related to treating insufficiently intensive marketing activities as a barrier to the development of regional food products ( $\beta=0.109$ ,  $SE=0.031$ ,  $t=3.456$ ,  $p<0.001$ ,  $R^2=0.012$ ). Regarding the motives for choosing regional food, curiosity ( $\beta=-0.129$ ,  $SE=0.031$ ,  $t=-4.114$ ,  $p<0.001$ ,  $R^2=0.017$ ) and price ( $\beta=-0.105$ ,  $SE=0.031$ ,  $t=-3.345$ ,  $p<0.001$ ,  $R^2=0.011$ ) reduced regional ethnocentrism, while richness in minerals and vitamins increased it ( $\beta=0.079$ ,  $SE=0.032$ ,  $t=2.506$ ,  $p=0.012$ ,  $R^2=0.006$ ). It is worth noting that regional ethnocentrism was also influenced by motives of conventional food selection, namely consumption pleasure (inverse relationship:  $\beta=-0.072$ ,  $SE=0.032$ ,  $t=-2.294$ ,  $p=0.022$ ,  $R^2=0.005$ ) and advertising ( $\beta=0.079$ ,  $SE=0.032$ ,  $t=2.493$ ,  $p=0.013$ ,  $R^2=0.006$ ). The level of regional ethnocentrism was related to the preferences of distribution channels for regional food. Buying such products directly on the farm ( $\beta=0.148$ ,  $SE=0.031$ ,  $t=4.715$ ,  $p<0.001$ ,  $R^2=0.022$ ), in shops belonging to the producer ( $\beta=0.193$ ,  $SE=0.031$ ,  $t=6.208$ ,  $p<0.001$ ,  $R^2=0.037$ ) and during fairs attended by producers ( $\beta=0.096$ ,  $SE=0.032$ ,  $t=3.041$ ,  $p=0.002$ ,  $R^2=0.009$ ) increases regional ethnocentrism, while purchasing regional food in large distribution networks (hypermarkets,

supermarkets, discount stores etc.) reduces it ( $\beta=-0.082$ ,  $SE=0.032$ ,  $t=-2.604$ ,  $p=0.009$ ,  $R^2=0.007$ ). Finally, the frequency of purchasing regional food products as a tourist has a positive impact on the regional ethnocentrism ( $\beta=0.335$ ,  $SE=0.030$ ,  $t=11.216$ ,  $p<0.001$ ,  $R^2=0.112$ ).

Those independent variables that turned out statistically significant at the level of  $p<0.05$  in simple regressions were included in a multiple regression model. For the sake of parsimony, only those variables that remained significant are included in the final version of the multiple regression model (**table 3**). It explains 46% of the variance and is significant at the level of  $p<0.0001$ . The strongest predictors of regional ethnocentrism are national ethnocentrism and importance attached to quality signs in regional food purchases ( $\beta>0.3$ ). Regional ethnocentrism is also strengthened by: the importance of brand and retailer trust as food product characteristics, indicating insufficient marketing as one of the most important barriers to the development of the market of regional food, purchasing regional food products in shops belonging to the producer and as a tourist. Regional ethnocentrism is reduced by purchasing regional food products in large distribution networks, such as hypermarkets, supermarkets or discount stores.

Independent variables	$\beta$	SE	t	p
Intercept	x	x	-0.076	0.939
Brand (a)	0.064	0.026	2.454	<b>0.014</b>
Retailer trust (b)	0.054	0.026	2.057	<b>0.040</b>
Quality signs (c)	0.308	0.028	11.125	<b>&lt;0.001</b>
Marketing intensiveness (d)	0.057	0.024	2.436	<b>0.015</b>
Producer shops (e)	0.075	0.024	3.137	<b>0.002</b>
Large distribution networks (f)	-0.077	0.023	-3.293	<b>0.001</b>
National ethnocentrism (g)	0.357	0.027	13.205	<b>&lt;0.001</b>
Tourist purchases (h)	0.105	0.025	4.145	<b>&lt;0.001</b>

Notes:  $N=1000$ ,  $R^2=0.460$ ,  $p<0.0001$ ; a) the importance of brand as a food product characteristic; b) the importance of trusting the retailer as a food product characteristic; c) the importance of quality signs in regional food purchases; d) indicating insufficiently intensive marketing activities as one of 3 most important barriers to the development of the market of regional food products; e) purchasing regional food products in shops belonging to the producer; f) purchasing regional food products in large distribution networks; g) the importance of a regional food product originating from Poland; h) purchasing regional food products as a tourist

Table 3. Selected predictors of regional ethnocentrism on the food market (a multiple regression model)

Furthermore, the impact of regional ethnocentrism on declared consumer behaviour was observed, regarding the share of products originating from the consumer's region in the

purchases of regional food ( $\beta=0.309$ ,  $SE=0.031$ ,  $t=9.975$ ,  $p<0.001$ ,  $R^2=0.096$ ). This congruence between the attitudinal and behavioural measures of regional ethnocentrism needs to be emphasised, as it reinforces the managerial implications of our findings.

#### **4. Discussion**

We conceptualised regional ethnocentrism as the importance attached to products originating from one's own region rather than the preference for any regional products. This approach is close to definitions of local food, the consumption of which contributes to the sustainable development of regions. Now we are going to discuss possible connections of the regional ethnocentrism predictors identified in this study with the principal dimensions of the sustainable development concept. We will refer to selected results of both simple and multiple regressions reported above. Regarding the economic dimension, it is worth noting such predictors as: attaching high importance to food brands and quality signs, indicating insufficient marketing as barrier to the development of the market of regional food, accepting higher prices of regional food products, higher willingness to pay, assessing regional products as more authentic than conventional food, purchasing them directly on the farm or in shops belonging to the producer. These factors contribute to higher incomes of local farmers, processors and distributors. National ethnocentrism may be also included in this dimension due to the support for the national economy. As far as the social dimension is concerned, one may mention trust in regional products and in their points of sale (retailers), traditional way of production, purchasing regional food during fairs attended by manufacturers and recommending regional food to one's family and friends. These factors strengthen the embeddedness of supply chains in local communities. Purchasing regional products as a tourist may be added to the social dimension, as it forms a part of the tourist experience in another country or region. Regarding the ecological dimension, it is worth emphasising the conviction that regional products are more environmentally friendly than conventional food, are more healthy, and are subject to stricter controls. Moreover, preferring products from one's own region means lower distances in transporting the products from producers to consumers, which means lower pollution and energy conservation.

#### **5. Conclusion**

Regional products are a diverse category, including products originating from one's own region, but also products coming from other regions with an appeal to the area of origin.

Preferring regional products from one's own region may be considered a sign of regional ethnocentrism. In this study, we identified a number of predictors of this attitude. In a multiple regression model, it turned out to depend on: the importance of brand and retailer trust on the food market, the importance of quality signs in regional food purchases, opinion that insufficient marketing constitutes an important barrier to the development of the regional food market, buying regional products in shops owned by producers rather than large distribution networks, frequency of purchasing regional products as a tourist, and last but not least, attaching high importance to the national origin of regional products (national ethnocentrism). We argue that regional ethnocentrism may be considered a pattern of sustainable consumption, as its predictors are strongly related to the major pillars of sustainable development.

## References

- Annunziata, A., Agovino, M., & Mariani, A. (2019). Sustainability of Italian families' food practices: Mediterranean diet adherence combined with organic and local food consumption. *Journal of Cleaner Production*, 206, 86-96.
- Author (2017). Consumer ethnocentrism on the organic food market in Poland. *Marketing i Zarządzanie*, 2, 11-20.
- Author (2015a). The development of organic food market as an element of sustainable development implementation. *Problemy Ekorozwoju*, 10(1), 79-88
- Author (2015b). The role of appeals to tradition in origin food marketing: a survey among Polish consumers. *Appetite*, 91, 302-310.
- Bentsson, M., Alfredsson, E., Cohen, M., Lorek, S., & Schroeder, P. (2018). Transforming systems of consumption and production for achieving the sustainable development goals: moving beyond efficiency. *Sustainability Science*, 13(6), 1533-1547.
- Brach, S., Walsh, G., & Shaw, D. (2018). Sustainable consumption and third-party certification labels: Consumers' perceptions and reactions. *European Management Journal*, 36(2), 254-265.
- Central Statistical Office (2013). *The Statistical Yearbook of the Republic of Poland*, Warsaw.
- De Bernardi, P., & Tirabeni, L. (2018). Alternative food networks: sustainable business models for anti-consumption food cultures. *British Food Journal*, 120(8), 1776-1791.
- Fernández-Ferrín, P., & Bande-Vilela, B. (2013). Regional ethnocentrism: Antecedents, consequences, and moderating effects. *Food Quality and Preference*, 30(2), 299-308.
- Fernández-Ferrín, P., Calvo-Turrientes, A., Bande, B., Artaraz-Minón, M., & Galán-Ladero, M. (2018). The valuation and purchase of food products that combine local, regional and

traditional features: The influence of consumer ethnocentrism. *Food Quality and Preference*, 64, 138-147.

Kumar, A., & Smith, S. (2018). Understanding local food consumers: Theory of planned behavior and segmentation approach. *Journal of Food Products Marketing*, 24(2), 196-215.

Meyerding, S., Trajer, N., & Lehberger, M. (2019). What is local food? The case of consumer preferences for local food labelling of tomatoes in Germany. *Journal of Cleaner Production*, 207, 30-43.

Minton, E., Spielmann, N., Kahle, L., Kim, C. (2018). The subjective norms of sustainable consumption: A cross-cultural exploration. *Journal of Business Research*, 82, 400-408.

Morgan, E., Severs, M., Hanson, K., McGuirt, J., Becot, F., Wang, W., Kolodinsky, J., Sitaker, M., Pitts, S., Ammerman, A., Seguin, R. (2018). Gaining and maintaining a competitive edge: Evidence from CSA members and farmers on local food marketing strategies. *Sustainability*, 10(7), art. 2177.

Morone, P., Falcone, P., & Lopolito, A. (2019). How to promote a new and sustainable food consumption model: A fuzzy cognitive map study. *Journal of Cleaner Production*, 208, 563-574.

Onel, N., Mukherjee, A., Kreidler, N., Díaz, E., Furchheim, P., Gupta, S., Keech, J., Murdock, M., Wang, Q. (2018). Tell me your story and I will tell you who you are: Persona perspective in sustainable consumption. *Psychology and Marketing*, in press, DOI:10.1002/mar.21132.

Printezis, I., & Grebitus, C. (2018). Marketing channels for local food. *Ecological Economics*, 152, 161-171.

Siemieniako, D., Kubacki, K., Glińska, E., & Krot, K. (2011). National and regional ethnocentrism: A case study of beer consumers in Poland. *British Food Journal*, 133(3), 404-418.

Torres-Ruiz, F., Vega-Zamora, M., & Parras-Rosa, M. (2018). Sustainable consumption: Proposal of a multistage model to analyse consumer behaviour for organic foods. *Business Strategy and the Environment*, 27(4), 588-602.

Wang, C., Ghadimi, P., Lim, M., & Tseng, M. (2019). A literature review of sustainable consumption and production: A comparative analysis in developed and developing economies. *Journal of Cleaner Production*, 206, 741-754.