

Prefer local over organic? Dilemma of Czech organic consumers within social discourse on Organic 3.0

Lokální před bio? Dilema českých biospotřebitelů v rámci diskursu o konceptu Organic 3.0

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ABSTRACT

This paper presents a qualitative study on the organic discourse from the perspectives of consumers in the Czech Republic. The main aim of the paper is to identify partial discourses among consumers in the Czech Republic within the framework of a communication “concourse” on organic farming as one of the sustainable initiatives within the context of the Organic 3.0 concept. The paper is based on Q methodology with 44 final statements which represent current respondents’ discourses (perspectives) on the organic sector. Results reveal that Czech organic consumers could be divided into 3 specific groups – “Convinced organic globalists”, “Modest organic localists” and “Convinced organic rationalists”. The first group of consumers is convinced of the importance of organic farming at a global level and they emphasise the global economic importance of organic farming. The second group are protagonists of organic farming, despite seeing its shortcomings. In the terms of preferences, they rather prefer local food with regard to sustainability than organic food. The third group is characterised by a rationally economic view of organic farming. They see the barrier to further expansion of organic farming in economic factors, such as the price of organic food. The identified barriers of economic rationality and competition of local production are challenges to the future development of the organic sector and its position among other sustainable initiatives. The results also provide better insights into Czech organic consumers’ discourse and their perception of the Organic 3.0 concept.

Keywords: consumers, local products, Q method, organic 3.0 discourse, organic farming, sustainable agriculture

ABSTRAKT

Tento článek představuje kvalitativní studii o diskursu o ekologickém zemědělství z pohledu spotřebitelů v České republice. Hlavním cílem příspěvku je identifikovat dílčí diskursy mezi spotřebiteli v České republice v rámci komunikačního „konkurzu“ o ekologickém zemědělství jako jedné z udržitelných iniciativ v kontextu konceptu Organic 3.0. Příspěvek je založen na Q metodologii se 44 klíčovými výroky, které představují aktuální diskurs (perspektivy) respondentů o ekologickém zemědělství. Výsledky ukazují, že české biospotřebitele lze rozdělit do 3 dílčích skupin – „Přesvědčení bio-globalisté“, „Umírnění bio-lokalisté“ a „Přesvědčení bio-racionalisté“. První skupina spotřebitelů je přesvědčena o důležitosti ekologického zemědělství na globální úrovni a zdůrazňuje jeho globální ekonomický význam. Také reprezentanti druhé skupiny jsou protagonisty ekologického zemědělství, přestože vidí jeho nedostatky. Pokud jde o preference, upřednostňují z hlediska udržitelnosti spíše lokální potraviny než biopotraviny. Třetí skupina se vyznačuje racionálně ekonomickým pohledem na ekologické zemědělství. Překážku dalšího rozšiřování ekologického zemědělství vidí v ekonomických faktorech, jako je cena biopotraviny. Zjištěné překážky ekonomické racionality a konkurence lokálních

potravin jsou výzvami pro budoucí rozvoj ekologického sektoru a jeho postavení mezi dalšími udržitelnými iniciativami. Výsledky také poskytují lepší vhled do diskursu českých biospotřebitelů a jejich vnímání konceptu Organic 3.0.

Klíčová slova: spotřebitelé, lokální produkty, Q metoda, organic 3.0 diskurs, ekologické zemědělství, udržitelné zemědělství

INTRODUCTION

The paper deals with the issue of consumers' perspectives of organic farming and organic consumption in Czech Republic. Theoretically, it is based mainly on the concept of Organic 3.0. Specific attention is paid to the role of consumers within the organic movement. The concept of Organic 3.0 originated in Germany in 2010 (Strottdrees et al., 2011). This concept has been adopted by the International Federation of Organic Agriculture Movements (IFOAM) as a framework for future of organic farming (Freyer et al., 2019). The concept of Organic 3.0 follows on about 100 years' development of the organic movement. It represents the shift from organic pioneers labelled as Organic 1.0, development of production and processing standards and certification schemes labelled as Organic 2.0, to the efforts to solve the challenges in the whole food chain (Arbenz et al., 2017). Specific features of Organic 3.0 were defined by Arbenz et al. (2017). These include a culture of innovation, continuous improvement using the best practice, transparency and integrity, inclusiveness and sustainability, empowerment from farms to consumers, and true value and cost accounting. This means that Organic 3.0 emphasises the role of consumption and consumers also with regard to sustainability, rather than only production and farms. Arbenz et al. (2017) stated that the core of Organic 3.0 is the living relationship between consumers and producers. This is also acknowledged by Rahmann et al. (2017), who stated that farmers and consumers are two of the key players in the organic farming system. In particular, consumers' interests in sustainable and healthy consumption are connected with the ethical aspects of production adopted by organic farmers within the framework of Organic 3.0 (Rahmann et al., 2017). Other authors (Kriwy and Mecking, 2012; Zagata, 2012; Zanolli and Naspetti, 2002) also mention the trust of consumers when buying organic products. Consumers trust that

organic food is healthier, more sustainable and tastes better than conventional food. The growing demand for organic products adopting part of the principles of sustainability is therefore based mainly on consumers' concern about the negative implications of conventional production for health and the environment (Meemken and Qaim, 2018). According to Seufert et al. (2017), organic consumers often mention climate protection and animal welfare when buying organic products. In this context, Naspetti and Zanolli (2014) also mention the importance of the ethical and cultural dimensions of organic food systems as a part of Organic 3.0. However, the transformation of food systems into being more sustainable is difficult without changes in consumption patterns (Tauscher et al., 2003). As stated by Arbenz et al. (2017), the most vulnerable stakeholders (farmers and consumers) should gain more importance within the organic food system. Rasmussen et al. (2017) sum up that the main aim of Organic 3.0 is to support truly sustainable farming, based on organic principles. Instead of the minimum requirements set within the framework of Organic 2.0, Organic 3.0 emphasises the entire farming system, including mainly organic producers and organic consumers. The aforementioned crucial role of organic consumers is one of the reasons for the focus of this paper (and also the ensuing part of the Introduction) on consumers' discourse within the framework of the concept of Organic 3.0. This focus is also acknowledged by Niggli et al. (2017), who mention a focus on organic consumers as one of the suggested strategies in organic farming research within the context of the Organic 3.0 concept.

To date, many studies have been conducted to describe the behaviour of the organic consumers in relation to the purchase of organic products. Unfortunately, there is no exact list of characteristics that can describe the organic consumer in general, because a preference for organic

products ahead of conventional products depends on many individual factors. When buying organic products, we can observe the influence of age, gender, income, level of education and the presence of children in the household (Sharma and Singhvi, 2018). In relation to income, which was found to be a significant factor (Rodríguez-Bermúdez et al., 2020), we can situate consumers of organic food in the high-medium class with a high family income. Similar results regarding the higher price of organic products have been found in other studies (Sirieux et al., 2011), where consumers of organic food tend to be wealthier people. Several studies show that egocentric values, such as health, taste or pleasure affect the purchase of organic products (Zanoli and Naspetti, 2002) more than altruistic values, such as animal welfare or environmental impact (Aertsens et al., 2009; Magnusson et al., 2003). Although there are only limited scientific studies focused on the fact that organic products are healthier, consumers perceive them as being “healthier” products (Gustavsen and Hegnes, 2020; Sirieux et al., 2011; Zagata, 2014). In relation to health consciousness, Essoussi and Zahaf (2009) mention the orientation of organic consumers towards products labelled as “pesticide-free”, “hormone-free”, “no chemicals”, “no pollutants”, “no antibiotics”, “no GMOs”; such foods are “natural” or purely organic. According to Zagata (2014), Czech consumers also perceive organics as “chemical-free” food, which is favourable to health. Another important factor in the eyes of consumers is the relationship between product quality and price. The higher price of organic products plays an important role in their consumption and is also one of the barriers in choosing between organic products and conventional products (Rodríguez-Bermúdez et al., 2020). On the other hand, consumers are willing to pay a higher price, because they perceive these products as healthier, of better quality, safer, and therefore trust them more than conventional products (Rodríguez-Bermúdez et al., 2020; Williams and Hammit, 2000). Assuming that these consumers are educated and know that organic products provide benefits to health, the environment and food safety, we can say that education influences the attitudes towards organic products. Consumers who

have more knowledge about the origin and properties of products will prefer to buy organic products (Çabuk et al., 2014).

As Organic 3.0 emphasises the role of consumers, the distinction between the consumption of organic and local products becomes part of the current discourse (e.g. Hempel and Hamm, 2016; Sirieux et al., 2011). Previous studies show that a large number of people who announced that they were organic food consumers, confused “organic food” with “local food” (Rodríguez-Bermúdez et al., 2020; Wägeli and Hamm, 2015). This stems from the fact that local food has a different meaning for every single person (Wilkins et al., 2002), and the official definition of the term “local” has not yet been identified. According to Feldmann and Hamm (2015), the definitions of “local” food are manifold, and the meaning of the term can largely be influenced by the sociocultural background of people (Tregear et al., 1998). In this study, we use the definition of “local” as a domestic product, in contrast to an imported food product. Importance of the perception of local and/or organic products is also acknowledged by Hempel and Hamm (2016), who state that both rural and urban consumers are willing to pay a higher premium for local food, compared to organic food. They also state that most consumers would rather purchase local than organic food. These are the challenges for the Organic 3.0 concept to become more integrative with other sustainable initiatives.

Sustainability, which is perceived by organic consumers as an important part of organic consumption (Monier-Dilhan and Bergès, 2016), is perceived differently in the eyes of consumers. Laureati et al. (2013) mentions that Italian consumers’ activity within the concept of sustainability is mostly “recycling”, on the other hand, they perceive “waste sorting” as the most sustainable activity. Further studies results show that organic food, its quality and organic practices are strongly perceived as a factor that has a positive impact on environmental sustainability (Monier-Dilhan and Bergès, 2016; Scalvedi and Saba, 2018). However, the concept of sustainability is not fully understood by the consumers despite its wide expansion (Laureati et al., 2013). If we consider purchasing organic

products in relation to sustainability, consumers perceive egocentric values such as taste more than aspects of sustainability (Annunziata and Vecchio, 2016; Laureati et al., 2013).

While the Organic 2.0 concept adopted clearly defined rules and requirements of organic farming, Organic 3.0 is based more on postmodernity, using overall approaches instead of clear definitions. These are the reasons that Organic 3.0 is still not generally accepted and also the reasons for the focus of this paper. How is the concept of Organic 3.0 and its principles adopted within the framework of organic discourse among consumers in the Czech Republic? To what extent do partial discourses (perspectives) differ among consumers in the Czech Republic? These are the main research questions, leading to the formulation of the aim of the paper. The main aim of the paper is to identify common (partial) discourses among consumers in the Czech Republic within the framework of a communication “concourse” on organic farming and consumption within the context of the Organic 3.0 concept.

MATERIAL AND METHODS

The paper is methodologically based on Q methodology, developed by William Stephenson (1953) as a qualitative approach in Social Sciences. Q methodology was traditionally applied in psychology (McKeown and Thomas, 2013). However, the current application of Q methodology is widespread in other social sciences (Addams, 2000). Q methodology is also used in organic farming research (e.g. Zagata, 2010; Zanolli et al., 2018). Despite the qualitative nature of Q methodology, quantitative factor analysis is used for the purpose of grouping of respondents together with similar viewpoints. Q methodology consists of six steps (McKeown and Thomas, 2013; Zagata, 2010):

- construction of a communication “concourse”,
- creation of a Q sample,
- selection of a P set,
- data collection (creation of individual Q sorts),
- factor analysis and identification of partial discourses.

A communication “concourse” generally contains statements which refer to the current discussion within the researched topic. In the case of our research, the communication “concourse” consists of 295 statements. The communication “concourse” was created using the document study technique. Official policy documents, strategic documents, research papers, workshops’ reports and published expert interviews focused on the Organic 3.0 concept and Agroecology were studied. Documents both on a national and international level were included in the study. The 295 statements were then classified in 4 main categories: farming, food production, institutions and organic movement. Also 3 main viewpoints and 18 sub-viewpoints were implied on Organic 3.0 among the aforementioned categories: impacts (environment, animal welfare, socio-economic, organic food quality), challenges (growth of the organic sector, productivity, collaboration with the conventional sector, promotion, training, certification, consumers’ demand, globalisation, price of organic food, governance, subsidies), opportunities (innovations, climate change, policy reforms).

The above-mentioned categories and viewpoints were used for the creation of a Q sample. A Q sample should be representative in relation to a communication “concourse” (Zagata, 2010). The selection of statements for the Q sample was done by narrowing the communication “concourse” and discussion among researchers with regard to the 4 main categories and viewpoints. Finally, a structured sample of 44 statements (Q sample) was selected from the communication “concourse”.

Due to the qualitative nature of Q methodology, only a limited number of respondents (P set) is required (Previte et al., 2007; Watts and Stenner, 2005). According to McKeown and Thomas (2013), representativeness of a P set is not an issue in Q methodology. However, a P set should be selected to ensure as much variability as possible. For these reasons, purposive sampling was used for the selection of a P set. Conscientious organic consumers were considered as the basic population for purposive sampling. These consumers are able to recognise organic products and regularly (at least twice

per month) buy these products. To ensure variability of the P set, 3 categories of consumers were considered: conscientious consumers older than 40 years, millennials, and organic moms. Consumers both from cities and rural areas were also considered. On the basis of the process described above, a P set consisting of 29 respondents was selected.

Individual Q sorts of respondents are created by expression of their opinion on 44 statements. Each respondent sorted 44 statements into a quasi-normal distribution (Figure 1) from “strongly agree” (+ 5) to “strongly disagree” (– 5). After completion of Q sorts, respondents were asked to comment on and justify their distribution.

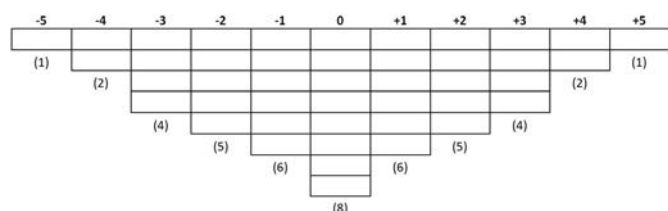


Figure 1. Q sort distribution (N = 44 statement items)

Collected data were analysed using factor analysis with a varimax rotation (Watts and Stenner, 2005) in order to cross-correlate individual Q sorts and to define groups of respondents with similar viewpoints (typical Q sorts). Usually only a few typical Q sorts are identified. In our research, 3 typical Q sorts (partial discourses) were identified, on the basis of percentage of variance explained, the number of respondents classifiable to typical Q sorts and the possibilities of interpretation. Special software for data analysis was used – “QMethod: A package to analyse Q methodology data in R” (Zabala, 2014). Interpretation of the partial discourses identified is part of the Results section.

RESULTS

As mentioned above, a three-factor solution was chosen for interpretation. Factor A explains 27.7% of variance and consists of 16 respondents. Respondents belonging to Factor A (Convinced organic globalists) evenly represent conscientious consumers older than 40 years (31.3%), millennials (31.3%) and consumers

with small children, resp. organic moms (37.4%). There is a higher proportion of respondents living in the capital city of Prague and larger cities (nearly 70%), in comparison with other factors. Factor B (Modest organic localists) explains 13.5% of variance and consists of 7 respondents. Prevailing respondents belonging to Factor B are consumers with small children, resp. organic moms (57.1%). There is a higher proportion of respondents living in small towns or rural municipalities in comparison with Factor A. Factor C (Convinced organic rationalists) explains 10.3% of variance and consists of 3 respondents. Similarly to Factor A, respondents belonging to Factor C also evenly represent all types of interviewed organic consumers (33.3% per each type). However, they solely live in small towns and rural municipalities. In total, 51.5% of variance is explained by the three-factor solution. The rotated factor loadings are shown in Table 1. These factor loadings explain the degree of correlation of individual Q sorts with each factor. Three respondents (1, 6 and 7) do not fit statistically significantly into only one group using the three-factor solution.

Factor A: Convinced organic globalists

The first group of consumers perceive organic farming (see Table 2 and Factor scores) as a suitable method of food production which does not negatively influence the health of consumers [4]. This is the main reason to prioritise organic farming within national and European Union (EU) agricultural policy [24]. Global perspectives within the discourse of this group of consumers is also reflected by the requirements for the adoption of organic farming on a global scale [19] and the necessity of growing organic products in order to contribute to solving global problems [10]. The economic perspectives of food production are an important part of the discourse of this group of consumers. They strongly negatively perceive that the prices of conventional production do not include all real costs – especially environmental costs [14]. This shortage should be reflected by future agricultural policy [2]. The discourse on organic farming is set within the broader (global) framework of sustainability – particularly climate and environment protection and livestock welfare.

Table 1. Factor loading of the final solution – three components after rotation

Respondent ID	A	B	C
13	0.75	-0.02	0.27
17	0.75	0.32	-0.07
2	0.74	0.25	0.07
29	0.74	-0.05	0.19
5	0.72	0.10	0.29
25	0.72	0.06	0.09
8	0.64	-0.06	0.24
16	0.63	0.34	0.07
26	0.63	0.21	0.31
14	0.59	0.19	0.03
24	0.57	0.15	0.03
4	0.56	0.14	0.09
15	0.56	0.48	0.16
19	0.56	0.11	0.07
21	0.56	0.05	0.42
9	0.52	0.29	0.28
20	-0.02	0.82	0.15
12	0.19	0.69	0.06
28	-0.14	0.67	0.25
27	0.13	0.61	0.05
11	0.44	0.52	0.24
22	0.39	0.41	0.05
18	0.17	0.33	0.23
23	0.05	0.23	0.75
10	0.06	0.32	0.73
3	0.44	0.15	0.58
1*	0.53	0.43	-0.33
6*	0.53	-0.23	0.49
7*	0.38	0.46	0.57

Note: Statistically significant factor loading is reported in bold. Respondents labelled by * (1, 6 and 7) do not fit statistically significantly into only one Factor

Economic measures are recommended for solving these problems [31; 33]. The activist approach is part of the discourse of this group of consumers. They emphasise the role of consumers and small-scale producers (as a typical feature of Organic 3.0) within the decision-making process in the future direction of organic farming [27; 37]. The activist approach corresponds with the significance of the economic aspects of organic farming, while their discourse includes an idea for the global acceptance of organic farming.

Neutrally rated statements (rated by “0” on the scale) are those which do not belong to the discourse of this group of consumers and/or the perception of these statements is ambivalent. This group does not consider the structural framework of organic farming. This particularly entails subsidies, the legal framework and support of organic farming [“The dependency on subsidies has a very negative effect on autonomy and stability of farms.”; “Regulations for organic farmers and producers must be simplified.”; “Financial subsidies provided by the EU are not available for small farms and this should be addressed directly.”]. Also the relationship between local and regional food production, on one hand, and organic food production on the other hand is not an issue [“Consumers have more trust in local production, as opposed to organic products, which are globally traded and whose origins and production is not always clear.”]. This is also connected with disregarding of transportation costs for the import and export of organic products [“Organic products are often imported and therefore are not necessarily environmentally friendly.”].

Negatively evaluated statements (strongly disagree and disagree) are listed within Table 3 with their factor scores. Consumers within this group firmly reject the lack of scientific evidence for the positive influence of organic food products on consumer health [35]. On the contrary, the significant influence of organic food products on consumer health is also based on the fact of organic food being more nutritious [26].

Consumers within the framework of the discourse on economics do not share concerns about the low

Table 2. Factor A scores of statements - strongly agree (+5/+4) and agree (+3/+2)

Statements	A	B	C
39. <i>The way we produce and consume our food has a big impact on our health.</i>	+5	+5	+4
4. <i>Food products that have been produced using artificial fertilizers, chemical treatments or GMO should be clearly labelled.</i>	+4	0*	+4
24. <i>Organic agriculture should become a priority within national and EU agricultural policies.</i>	+4	-2*	-1*
16. <i>Organic products should be widely available in hospital catering, schools canteens, green management and public areas.</i>	+3	0*	+1*
19. <i>Organic farming needs to be adopted on a global scale.</i>	+3	-1*	0*
31. <i>One of organic agriculture's strengths is improved livestock welfare.</i>	+3	+2	+2
33. <i>All subsidies for agriculture should be oriented much more towards protection of environment and climate.</i>	+3	+3	0*
2. <i>The future policy needs to take into account the true cost of industrial farming.</i>	+2	+1	0*
10. <i>Organic production must continue to grow to change conventional systems, contributing to solving global problems.</i>	+2	+1	+1
14. <i>If ecological costs would be fully integrated into the price of the products, industrially produced food would be much more expensive.</i>	+2	-1*	0*
27. <i>Small-scale producers and consumers should have a significant voice in the political decisions concerning food and agriculture.</i>	+2	-1*	0*
37. <i>Consumers need to have a greater understanding of the work involved in food production.</i>	+2	+3	+1

* Statistically significant differences at $P < 0.01$ **Table 3.** Factor A scores of statements - strongly disagree (-5/-4) and disagree (-3/-2)

Statements	A	B	C
35. <i>There is no scientific proof to verify that organic food products are more healthy and environmentally friendly than conventionally produced food.</i>	-5	-2*	-2*
26. <i>Organically produced food are not more nutritious.</i>	-4	-3	-3
34. <i>Organic agriculture does not contribute to employment in rural areas.</i>	-4	-4	-4
3. <i>Food security cannot be achieved with organic agriculture.</i>	-3	+2*	-1*
20. <i>Organic agriculture needs to be more productive.</i>	-3	-1*	-1*
32. <i>Organic production requires too much land usage for minimal yield.</i>	-3	0*	-3
38. <i>At present the gap between "conventional" and "organic" production has become smaller and the differences blurred.</i>	-3	-3	+2*
5. <i>A more sustainable lifestyle is more costly for the consumer.</i>	-2	+4*	+3*
11. <i>The controls on organic farms should be strengthened, eliminating any derogations.</i>	-2	+1*	+2*
13. <i>Organic farming and the organic food sector is currently competing with other sustainability initiatives.</i>	-2	-2	+3*
36. <i>The increasingly present term of "regional" in opposition to "organic" creates confusion for consumers.</i>	-2	+2*	-2
44. <i>Organic farms can learn from conventional farms.</i>	-2	-2	-3

* Statistically significant differences at $P < 0.01$

productivity of organic farming [3; 20; 32]. They also do not share the opinion about the higher financial demands of a sustainable lifestyle [5]. This fact is explained by the greater nutritious value of organic food (see above). Other sustainability initiatives are marginalised within the discourse of this group [13]. Also local production is disregarded as competition to organic food products [36; 38]. Therefore organic farming and organic food products, according to the discourse of these consumers, have an exclusive position within sustainable initiatives. It is also reflected within the opinion on the possibility of organic farms learning from conventional farms [44]. Conventional agriculture is perceived negatively, and organic agriculture is perceived uncritically as an ideal concept. This is also reflected within the issue of the control of organic farms, which is not necessary to be strengthened [11].

Generally, consumers belonging to Factor A are convinced of the importance of organic farming on a global scale. They accentuate the economic perspectives of organic farming (comparing organic and conventional agriculture). They also emphasise the activist approach (consumers as key actors) to organic farming. Therefore, the above-mentioned global perspectives and acceptance of organic farming, its uncritical perception as an ideal concept and disregarding local and other sustainable initiatives lead this group to be labelled as “convinced organic globalists”.

Factor B: Modest organic localists

The second group of consumers (see Table 4 and Factor scores), in parallel with other groups of consumers (A and C), realise the importance of perceiving the method of food production and consumption as an aspect that significantly affects human health [39]. Within the discourse of the “Modest organic localists” group, we can deduce the relationship between the higher financial demands for a sustainable lifestyle [5] and the quality of products. Local products can be more expensive than organic food, which is produced in large quantities due to its “local uniqueness” [9]. This logically leads consumers to spending more money on local products than on organic

food. The “Modest organic localists” group tends to increase consumer awareness about the origin of specific foods [37]. This could lead to a solution of the problem in confusing the terms “local” and “organic” [36], in which case local production is taken to be more important than organic food production [25]. Furthermore, the flow of information from organic actors (farmers, institutions, political actors, etc.) towards the final consumer should also be improved [1]. Within the group, organic farming is perceived positively regarding the environment. We are talking here about the necessary support for subsidies to agriculture for the protection of Nature [33], which can assist in more attention being paid to one of the strengths of organic farming – animal welfare [31]. The environment can also be positively affected by rising food prices, which should lead to a reduction of consumers’ food losses [15]. The starting point for a combination of organic and conventional methods of agricultural production could be the expansion of sustainable agriculture as a “comprehensive” model at global level [22]. This could help to overcome the negatively perceived fact, i.e. the insufficient quantity of food production from organic farming [3]. Therefore, this action could lead to the optimal quantity of food production.

Among the list of neutrally evaluated statements (rated by “0”), we can include such statements that do not characterise the given group, or such statements that were not relevant to the respondents for evaluation. The results show that the group does not address the legislative framework of organic farming, which undoubtedly includes food standards (e.g. labelling of products), regulations and the possibility of subsidies to agriculture [“Food products that have been produced using artificial fertilizers, chemical treatments or GMO should be clearly labelled.”; “Regulations for organic farmers and producers must be simplified.”; “Financial subsidies provided by the EU are not available for small farms and this should be addressed directly.”]. Consumers do not pay much attention to the environmental impact of the import of organic products [“Organic products are often imported and therefore are not necessarily environmentally friendly.”].

The next fact which is perceived as ambivalent is the lack of information, which may be one of the reasons for the emergence of ideological barriers between supporters and opponents of organic farming while reaching sustainability [“Ideological barriers between supporters and opponents of organic agriculture need to be overcome to pave the way for reaching higher sustainability.”; “Lack of information is a major factor which limits the uptake of organic methods in modern agriculture.”]. Due to the lack of information, consumers also neutrally weigh up the possibility of enhancing organic food to other catering establishments [“Organic products should be widely available in hospital catering, schools canteens, green management and public areas.”]. Furthermore, consumers do not consider the relationship between the land area of organic farms and the final financial return on final products [“Organic production requires too much land usage for minimal yield.”].

The third group of statements – negatively rated (strongly disagree and disagree) – is seen in Table 5 with

their scores. Based on consumers’ rating in this group, we can deduce “distrust” of organic farming, which certainly cannot provide enough food for the whole European population [6]. Furthermore, they do not perceive organic farming as adaptable to the external environment in terms of regulating market prices and climate change [40]. On the other hand, they believe that organic farming can increase rural employment [34]. “Modest organic localists” aim to prefer organic food because of its better nutritional value [26]. Regarding the distinction between conventional and organic products, which consumers assume as still being the same [38], there is an assessment that there may be a “barrier” that prevents conventional farms from learning from organic farms [44]. In terms of national or European Union support, consumers encourage the flow of subsidies to industrial agriculture [29], which is linked to the fact that, on the other hand, organic farming does not consider them to be given higher priority in national or European policy [24].

Table 4. Factor B scores of statements – strongly agree (+5/+4) and agree (+3/+2)

Statements	A	B	C
39. The way we produce and consume our food has a big impact on our health.	+5	+5	+4
5. A more sustainable lifestyle is more costly for the consumer.	-2*	+4	+3
9. Consumers have more trust in local production, as opposed to organic products, which are globally traded and whose origins and production is not always clear.	0*	+4	0*
22. Smart combinations of organic and conventional methods could contribute toward increases of sustainable farming in global agriculture	+1*	+3	+2
25. Local food production is more important than organic-based food production.	-1*	+3	+1*
33. All subsidies for agriculture should be oriented much more towards protection of environment and climate.	+3	+3	0*
37. Consumers need to have a greater understanding of the work involved in food production.	+2	+3	+1*
1. Organic farming and food sector needs to improve communication towards consumers.	-1*	+2	0*
3. Food security cannot be achieved with organic agriculture.	-3*	+2	-1*
15. Higher prices for food could perhaps contribute to a higher appreciation of their value and resulting in less food waste	+1	+2	-5*
31. One of organic agriculture’s strengths is improved livestock welfare.	+3	+2	+2
36. The increasingly present term of “regional” in opposition to “organic” creates confusion for consumers.	-2*	+2	-2*

* Statistically significant differences at $P < 0.01$

Table 5. Factor B scores of statements - strongly disagree (-5/-4) and disagree (-3/-2)

Statements	A	B	C
6. Organic agriculture can provide more than enough nutrition for the entire European population.	0*	-5	-2*
34. Organic agriculture does not contribute to employment in rural areas.	-4	-4	-4
40. Organic farms can better adapt to volatile fluctuating market prices and climate change.	-1*	-4	-4
26. Organically produced food are not more nutritious.	-4	-3	-3
29. Agro-industry and mass animal production must be restricted and subsidies withdrawn.	-1*	-3	+2*
30. Organic farms can better tolerate periods of drought and other extreme weather fluctuations.	+1*	-3	-3
38. At present the gap between "conventional" and "organic" production has become smaller and the differences blurred.	-3	-2	+2*
13. Organic farming and the organic food sector is currently competing with other sustainability initiatives.	-2	-2	+3*
18. The organic movement should be more inclusive of other issues, such as social justice and food sovereignty.	-1	-2	-1
24. Organic agriculture should become a priority within national and EU agricultural policies.	+4*	-2	-1
44. Organic farms can learn from conventional farms.	-2	-2	-3
36. The increasingly present term of "regional" in opposition to "organic" creates confusion for consumers.	-2*	+2	-2*

* Statistically significant differences at $P < 0.01$

Consumers do not share the opinion of the better adaptability of organic farms to weather changes such as droughts [30]. Within the group's discourse, organic farming is not seen as a competitor to other sustainable initiatives [13] and consumers do not share the opinion that the organic movement should be more open to other options such as social justice or food sovereignty [18].

Generally, the "Modest organic localists" group are protagonists of organic farming, although they also see its shortcomings. In terms of preferences, they prefer local foods, because the locality (with regard to sustainability) is more important than the organic quality of food. Regarding the whole agricultural sector, organic farming has the same important role and place as conventional agriculture.

Factor C: Convinced organic rationalists

The "Convinced organic rationalists" group (Table 6) very strongly perceives the economic conditionality of sustainable and healthy food consumption, while implicitly assuming the generally positive adoption of organic, local and seasonal products in society [17]. The

way in which food is produced and consumed is taken to be an important factor that influences our health [17]. In this context, it also calls for clear labelling of products that are not produced in sustainable and environmentally friendly ways [4]. The economic aspects of organic farming often appear in the discourse of Group C. In the context of ideas about the general preference for organic, local and seasonal products, Group C perceives a sustainable lifestyle as more costly, which they see as a major barrier to wider extension [5]. They also attach importance to subsidy funds, which should be focused only on organic farms [23, 29], while they perceive that this is not currently working. However, the further support for organic farming should come mainly from consumers [42]. "Convinced organic rationalists" also firmly perceive that organic farming is increasingly under pressure from the process of conventionalisation and other sustainable initiatives [13, 38]. These should be countered by the greater control of organic farms [11], in order to strengthen the trust in organic products within society.

Table 6. Factor C scores of statements – strongly agree (+5/+4) and agree (+3/+2)

Statements	A	B	C
17. More people would choose seasonal, regional and organic food products if they had the financial option.	0	+1	+5
4. Food products that have been produced using artificial fertilizers, chemical treatments or GMO should be clearly labelled.	+4	0	+4
39. The way we produce and consume our food has a big impact on our health.	+5	+5	+4
5. A more sustainable lifestyle is more costly for the consumer.	-2*	+4	+3
13. Organic farming and the organic food sector is currently competing with other sustainability initiatives.	-2*	-2*	+3
23. Financial subsidies provided by the EU are not available for small farms and this should be addressed directly.	0*	0*	+3
42. The support for organic agriculture should be provided mainly from the consumers' side.	0*	-1*	+3
11. The controls on organic farms should be strengthened, eliminating any derogations.	-2*	+1	+2
22. Smart combinations of organic and conventional methods could contribute toward increases of sustainable farming in global agriculture.	+1	+3	+2
29. Agro-industry and mass animal production must be restricted and subsidies withdrawn.	-1*	-3*	+2
31. One of organic agriculture's strengths is improved livestock welfare.	+3	+2	+2
38. At present the gap between "conventional" and "organic" production has become smaller and the differences blurred.	-3*	-3*	+2

* Statistically significant differences at $P < 0.01$

On the other hand, this group of consumers does not oppose an appropriate combination of organic and conventional methods and even considers them to be beneficial for the further expansion of sustainable agriculture [22].

Neutrally rated statements (rated by "0" on the scale) are those which do not belong to the discourse of this group of consumers and/or the perception of these statements is ambivalent. It is clear that neither the question of the global expansion of organic farming ["Organic farming needs to be adopted on a global scale."] nor the question of local food ["Consumers have more trust in local production, as opposed to organic products, which are globally traded and whose origins and production is not always clear."] fall within the discourse of the "Convinced organic rationalists" group. They also do not consider the different costs (with regard to sustainability) of organic and conventional farming or the question of subsidy policies ["The future policy needs to take into account the true cost of industrial farming."; "If ecological costs would be fully integrated into the price of the products, industrially produced food would be much more expensive."; "All

subsidies for agriculture should be oriented much more towards protection of environment and climate."]. The role of individual actors (consumers, workers and small producers) in organic farming also does not fall within the discourse of this group ["Organic farming and food sector needs to improve communication towards consumers."; "Small-scale producers and consumers should have a significant voice in the political decisions concerning food and agriculture."].

The members of this group show a strong sensitivity to economic factors and do not share the view that higher food prices can contribute to their higher appreciation [15]. In the context of their previous affiliation, the high prices of organic food are preventing the wider spread of healthy eating within society. Furthermore, according to this group, organic farming can contribute to rural employment [34], although this group does not perceive organic farms as being more adaptable to climate change and market fluctuations [40]. The discourse of Group C is dominated by a rational (non-idealistic) view of organic farms [30, 6], but they do not share the opinion about the low productivity of organic farming [32]. In that respect,

they also do not perceive inspiration of organic farms from conventional farms as being imperative [44]. They generally perceive organic food (with existing evidence) as healthier and more nutritionally valuable [26, 35], and do not consider the lack of information to be a barrier to the spread of organic farming [21] or a problem for distinguishing between organic and local foods [36]. As could be seen from the previous statements of this group, this barrier is mainly the price conditions of organic production (economic aspects). In contrast, the environmental benefits of organic production are lagging behind in the discourse of this group [43], in comparison with their impact on human health and the influence of economic factors (Table 7).

Generally “Convinced organic rationalists” are characterised by a rationally economic view of organic farming. In their opinion, the economic factors, such as the price of organic food, are hindering the further expansion of organic farming. According to this group, the impact of organic production on the health of consumers is of greater importance than the environmental benefits for sustainable development and society as a whole.

DISCUSSION

The main research question of how the Organic 3.0 concept is adopted within the framework of organic discourse among consumers in the Czech Republic, is illustrated in this paper by three perspectives (partial discourses). However, it is important to note that the research methodology does not ensure that these perspectives are the only views among Czech organic consumers. On the other hand, the adopted framework of the Organic 3.0 discourse forms sufficient premise for the reliability of the data.

The first perspective, represented by Factor A and named Convinced organic globalists, perceives organic farming as globally important. An individual approach is adopted and consumers play the central role within the organic sector. This view on organic farming is fully consistent with the development of the organic movement from Organic 1.0 to the Organic 3.0 concept defined by Arbenz et al. (2017). Consumers belonging to the Factor A group also emphasise the global economic perspectives of organic in comparison with conventional farming.

Table 7. Factor C scores of statements - strongly disagree (-5/-4) and disagree (-3/-2)

Statements	A	B	C
15. Higher prices for food could perhaps contribute to a higher appreciation of their value and resulting in less food waste.	+1*	+2*	-5
34. Organic agriculture does not contribute to employment in rural areas.	-4	-4	-4
40. Organic farms can better adapt to volatile fluctuating market prices and climate change.	-1*	-4	-4
26. Organically produced food are not more nutritious.	-4*	-3	-3
30. Organic farms can better tolerate periods of drought and other extreme weather fluctuations.	+1*	-3	-3
32. Organic production requires too much land usage for minimal yield.	-3*	0	-3
44. Organic farms can learn from conventional farms.	-2*	-2	-3
6. Organic agriculture can provide more than enough nutrition for the entire European population.	0*	-5	-2
21. Lack of information is a major factor which limits the uptake of organic methods in modern agriculture.	-1*	0	-2
35. There is no scientific proof to verify that organic food products are more healthy and environmentally friendly than conventionally produced food.	-5*	-2	-2
36. The increasingly present term of “regional” in opposition to “organic” creates confusion for consumers.	-2*	+2	-2
43. Organic products are often imported and therefore are not necessarily environmentally friendly.	0*	0	-2

* Statistically significant differences at $P < 0.01$

The prices of organic products do not play an important role within their discourse, because of the trust in organic farming, as also mentioned by Williams and Hammit (2000). This perspective perceives organic farming and the organic movement uncritically. The concept of Organic 3.0 is perceived positively as a modernisation trend, and other sustainable initiatives (e.g. local perspective) are marginalised. Disregarding local initiatives as an important part of this partial discourse is in opposition to the findings of Hempel and Hamm (2016) from Germany. However, the second identified perspective should explain this fact.

The second perspective, represented by Factor B and named Modest organic localists, significantly differs from the other identified perspectives. This perspective is relatively critical of organic farming. The organic sector is perceived with reservation and the problems of organic farming are emphasised. Conventional farming is perceived as being as important as organic farming. However, this group is also formed by regular organic consumers. The local origin of food products is more important than organic, especially with regard to sustainability. The similar perspective is observed also in Italy, where local products are perceived as more sustainable than organic (Laureati et al., 2013). This is also consistent with the broader perception of the organic movement within the framework of Organic 3.0 and its integrative character as also stated by Hempel and Hamm (2016) and Sirieix et al. (2011). As preference for local food is one of the three perspectives, it is not possible to state that this is a prevailing view in the Czech Republic. However, the German case, researched by Hempel and Hamm (2016), shows that local food products still become more competitive compared to organic production.

The third perspective, represented by Factor C and named Convinced organic rationalists, is similar to the first perspective which considers the importance of organic farming to society. However, the individual versus the global view is implemented. The environmental impacts of organic farming are disregarded, but individual favourable impacts on health are emphasised, as also

stated by Zagata (2014). The opposite perspective is adopted by French consumers, who are motivated more by environmental and generally sustainable factors and less by individual benefits (Monier-Dilhan and Bergès, 2016). On the other hand, the price factor of organic production is perceived as one of the important barriers to the global expansion of the organic farming among other sustainable initiatives. This is consistent with the results of Rodríguez-Bermúdez et al. (2020) about the importance of organic price premium and its influence on organic consumption. Generally, this perspective tries to apply economic rationality to organic consumption. It is quite difficult, as stated by Best (2009), it is mainly the “soft” and intangible factors that are important in the decision-making process within the organic sector.

A comparison of the three above-mentioned perspectives shows four dimensions of differences – the conviction rate of organic consumption, a global or local point of view, position of organic movement among other sustainable initiatives and the degree of economic rationality applied. There are also some common aspects of the organic discourses among Czech consumers. The main common issue is an emphasis on the significance of organic products for health. Therefore, egocentric values are more important than altruistic values for organic food consumption among Czech organic consumers. This is consistent with the results of Zanolini and Naspetti (2002), Aertsens et al. (2009) and Magnusson et al. (2003). However, the results of the research among French consumers are opposite (Monier-Dilhan and Bergès, 2016). Another finding common to all identified perspectives within the discourse among Czech organic consumers is disregarding of the agricultural policy, subsidies for organic farming and organic farming standards. On the contrary, trust, as also mentioned by Zagata (2012), and the crucial role of consumers within the organic sector are an important common aspect of the discourse. This could be interpreted as a move away from Organic 2.0 towards the general acceptance of Organic 3.0 within the discourse.

CONCLUSION

The presented study identified three different perspectives representing the core discourses on Organic 3.0 among Czech consumers. Two of these perspectives (Factors A and C) represent Convinced organic consumers. However, the first of these two groups perceives the organic sector as globally important and the second group puts more emphasis on the barriers to the expansion of organic farming from the economic rationality point of view. The third perspective (Factor B) represents the organic consumers who are reserved and perceive local products as significant competition to organic production. Despite splitting the discourse on Organic 3.0 among Czech consumers into the three aforementioned groups, the concept of Organic 3.0 is generally perceived in a positive manner within this discourse. However, the organic sector has to face competition from other sustainable initiatives – mainly local production, as is perceived by one of the partial discourses. The identified barriers of economic rationality and competition from local production are challenges to the future development of the organic sector in Czech Republic within the framework of Organic 3.0. The results of the study, and especially the identified discourses, could help towards a better understanding of consumers' perception of the Organic 3.0 concept. This could facilitate continuous improvement as an integrative part of Organic 3.0, as well as the wider adoption of the organic movement within the sustainable initiatives and the whole of society.

However, it is necessary to mention the limitations of the study. These are formed mainly by the limitations of Q methodology, which does not allow for generalisation, but allows the analysis of partial discourses within society in more detail. On the other hand, the used methodology and research design give an opportunity to replicate this study on different types of consumers in different regions or countries. Another field for ensuing research is a quantitative study (using representative survey among consumers) within the framework of Organic 3.0 and the identified partial discourses among Czech

organic consumers. In addition, the implementation of Q methodology on the Organic 3.0 discourse within the other EU Member States and a comparative analysis are other important issues for future research.

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