

## Barriers and Facilitators of Purchasing from Short Food Supply Chains: Evidence from Consumer Focus Groups in Germany, Spain, Greece and Hungary

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### Abstract

This study aimed to identify the barriers and facilitators of consumers purchasing from short food supply chains (SFSC). Eight focus groups were conducted with consumers in the rural and urban areas of Germany, Spain, Hungary and Greece. Participants generally felt that increasing the convenience of purchasing SFSC products (in terms of a proximal location and being able to purchase a wide range of produce in one place) was a prerequisite for them to buy such products. Food quality in terms of taste, freshness and organic status were also taken into account in purchase decisions, and there appears to be a greater focus on health rather than the environmental implications of organic production, although the environmental aspects are also appreciated. Some participants also like the idea of supporting their local community through purchasing from local producers and/or retailers. It was believed that small-scale production and SFSC result in better quality food, but participants had less confidence in the hygiene and food safety standards of SFSC compared to longer chains. Participants thought that consumers would purchase local food if they could more easily access a variety of local food in one place, such as through supermarkets, cooperatives, farm shops and markets, or an online platform that aggregates producers.

**Keywords:** Consumer awareness; Consumer attitudes; Short food supply chains; Local food; Sustainable consumption; Focus groups

## 1 Introduction

In Europe the current food system consists predominately of long food supply chains, with most of the population purchasing food from large supermarket chains (Veraart Research Group, 2019). However, there is increasing recognition that supporting short food supply chains (SFSCs) is important for small and medium enterprises and rural development (Kneafsey et al., 2013). One of the more widely accepted definitions of SFSC comes from the Regulation (EU) No 1305/2013 on support for rural development, which defines SFSC as “a supply chain involving a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between food producers, processors and consumers”. Because the consumer perspective has been recommended as the point of departure when designing local food supply chain strategies (European Network for Rural Development, 2016), this study aims to investigate the social and economic factors that underlie consumers’ choices and purchase decisions and what implications this has for SFSCs.

Previous research examining the determinants of purchasing from SFSCs has used top-down approaches focusing on a limited range of factors selected a priori, such as food safety (Yu et al., 2017) or those based on the Theory of Planned Behaviour (Ajzen, 1985; Giampietri et al., 2018). Giampietri et al. (2018) found that the self-reported frequency with which Italians purchase from SFSCs is predicted by how feasible they feel the behaviour is for them to perform (e.g., “Purchasing food at SFSCs is easy to me”), but not by their level of trust in SFSCs (“I trust in purchasing food at SFSCs”). Yu et al. (2017) found that, among US consumers who visited farmers’ markets at least monthly, perceptions of food quality and willingness to support local foods predicted the extent to which they purchased food at the farmers’ market, whereas perceptions of food safety towards farmers’ markets did not.

In contrast, this study adopted a bottom-up approach using focus groups with consumers in Germany, Spain, Hungary and Greece in order to better understand their views regarding SF-

SCs, as well as the risks and benefits they perceive in buying products through these supply chains. This allowed us to determine if there are other (more specific) factors that influence the extent to which consumers shop at long- or short-food supply chains. Identifying these determinants may help researchers and policy makers to find more effective solutions to promote SFSCs to consumers.

## 2 Materials and Methods

### 2.1 Study design and participants

Eight focus groups were conducted across Germany, Spain, Hungary and Greece. Each country featured a focus group with participants from an urban region, and another with participants from a rural region (with < 5,000 inhabitants). This distinction was made because of potential variations on how consumers shop for food, as producers are normally more concentrated in rural than in urban areas. See Table 1 for details about the focus group composition.

Participants in Spain and Hungary were recruited by local agencies. In Germany, participants were recruited via a mix of convenience sampling (through personal contacts) and advertisements via the e-mail newsletter of a university and a Facebook page. Flyers were also placed in the surrounding supermarkets and farm shops, as well as a digital flyer being distributed by local associations. In Greece, participants were recruited by producer cooperatives. Participants in urban Greece were recruited by snowballing, and those in rural Greece were part of a convenience sample from the client database of a rural cooperative. As such, these participants were generally affiliated with the respective cooperatives that they were recruited by, and thus can be considered to purchase from SFSCs more regularly than the average consumer (as can be seen in Table 1). Therefore, the results from the Greek groups should be interpreted in the context of consumers who are particularly engaged with SFSCs.

Participants were screened to be (one of the) primary purchasers of food for their household, and they were recruited to ensure a mixed distribu-

tion of participant age and level of education within each focus group (see Table 1). There tended to be a greater proportion of female participants, as females are typically the ones who purchase groceries for the household. The frequency with which participants purchased from SFSC was also varied within the focus groups, with the exception of those in Greece, where most participants purchased from SFSCs at least once a week. Participants in the Greek focus groups were compensated by having their travel expenses reimbursed and were provided with refreshments; the others were paid between 30-40€.

## 2.2 Structure of the focus group discussion

A funnel approach was adopted for the discussion guide that started with a broad focus on how participants shopped for food, progressively narrowing to what participants thought about particular issues related to SFSCs (See Figure 1).

## 2.3 Focus group procedure

The focus groups were conducted in October and November 2019 by local moderators in the local language. Participants gave informed consent and were told that they could withdraw from the focus group at any time. The number of participants ranged from 8-11, with one or two moderators per group. Each focus group took up to two hours to complete. All the interviews were audio-recorded with participants' consent, transcribed in the original language and then translated into English to ensure consistent content analysis.

## 3 Results and Discussion

### 3.1 Purchase patterns across long and short food supply chains

Across the countries, participants reported mainly shopping at supermarkets, particularly participants in Germany. When urban Germans did buy directly from a producer it tended to

be for specialty products, or during their holidays. In the Spanish urban focus group, only a few participants reportedly purchased from SFSCs, primarily at markets, on site at farms, farm stores, local stores, and in rural areas. From these they purchased mainly vegetables, olive oil, eggs and honey. Participants tended to purchase SFSC products through channels most proximal/convenient for them, whether it was at weekly markets or supermarkets.

When participants in the Spanish rural focus group did buy from SFSCs, they most frequently bought olive oil, eggs, cheese, bread, dairy products, wine and homemade sweets. Markets aggregating multiple producers were a popular SFSC outlet, as consumers can purchase several types of products from different farmers, making this channel more convenient than single-producer outlets. Cooperatives were also visited for homemade wine or dairy products. Some participants also bought specialty products from the internet.

Although the participants in the Greek focus groups were customers of cooperatives, most of them also bought organic fruit and vegetables from producers in open-air markets, often on a weekly basis. Some also sourced onsite from producers directly, but less frequently, and tended to do this for meat and dairy products.

Participants in urban Hungary appeared to be relatively unfamiliar with the concept of SFSCs compared to the other focus groups and did not tend to seek them out. Although they mostly shopped for food at conventional markets, they confessed that they could not distinguish between producers and intermediaries at markets. In rural Hungary, participants felt that small producers could be distinguished by having less produce on offer (as SFSCs were associated with a lower volume of production), having fresher and higher quality products or specialty products, and showing greater personal pride in their products.

### 3.2 Perceptions of short food supply chains

Participants tended to have positive perceptions of local food and considered it to be sea-

Table 1: Participant characteristics per focus group

| Country | Focus group   | Gender & age distribution  | Number of participants per education level   | Frequency of buying from farmers' markets/farm shops/ farm                           |
|---------|---|--|--|--|
| Germany | Urban: city of Stuttgart (n=8)                                    | 5 females (53, 22, 56, 25, 58 years old)<br>3 males (22, 26, 33 years old)             | Upper secondary education: 2   | ≤ once every 3 months: 3   |
|         |   |  | Post-secondary non-tertiary education: 4<br>Bachelor/equivalent: 2   | ≤ once every 3 months: 1<br>≤ once a week: 2<br>Never: 2                             |
|         | Rural: communities in the greater Stuttgart area (n=11)           | 7 females (26, 22, 57, 30, 51, 57, 29 years old)<br>4 males (33, 80, 36, 32 years old) | Upper secondary education: 3   | < once every 3 months: 7   |
|         |   |  | Post-secondary non-tertiary education: 2<br>Bachelor/equivalent: 2<br>Master/equivalent: 3<br>Doctor/equivalent: 1         | At least once every 3 months: 0<br>≤ once a month: 1<br>≤ once a week: 1<br>Never: 2 |
| Spain   | Urban: city of Bilbao (n=9)                                       | 6 females (51, 26, 46, 64, 42, 38 years old)<br>3 males (54, 43, 36 years old)         | Upper secondary education: 2   | < once every 3 months: 3   |
|         |   |  | Bachelor/equivalent: 5<br>Master/equivalent: 2   | ≤ once every 3 months: 2<br>≤ once a week: 4   |
|         | Rural: communities in the Gran Bilbao (Greater Bilbao) area (n=9) | 6 females (51, 35, 44, 24, 65, 57 years old)<br>3 males (34, 62, 51 years old)         | Lower secondary education: 1   | < once every 3 months: 4   |
|         |   |  | Upper secondary education: 1<br>Post-secondary non-tertiary education: 1<br>Bachelor/equivalent: 6                         | ≤ once a month: 2<br>≤ once a week: 3  |
| Hungary | Urban: Budapest (n=11)  | 7 females (54, 56, 43, 36, 34, 38, 36 years old)<br>4 males (49, 54, 37, 38 years old) | Lower secondary education: 2   | < once every 3 months: 2   |
|         |   |  | Upper secondary education: 4<br>Bachelor/equivalent: 4<br>Master/equivalent: 1   | ≤ t once every 3 months: 3<br>≤ once a week: 6                                       |
|         | Rural: Győr (n=11)  | 7 females (63, 38, 29, 49, 28, 49, 56 years old)<br>4 males (43, 44, 32, 61 years old) | Lower secondary education: 1   | < once every 3 months: 3   |
|         |   |  | Upper secondary education: 2<br>Post-secondary non-tertiary education: 2<br>Bachelor/equivalent: 3<br>Master/equivalent: 3 | ≤ once every 3 months: 2<br>≤ once a month: 2<br>≤ once a week: 4                    |
| Greece  | Urban: Corinth (n=10)   | 8 females (55, 64, 53, 68, 57, 56, 63, 39 years old)<br>2 males (68, 48 years old)     | Lower secondary education: 1   | ≤ once a month: 4  |
|         |   |  | Upper secondary education: 3<br>Post-secondary non-tertiary education: 2<br>Bachelor/equivalent: 2<br>Master/equivalent: 2 | ≤ once a week: 6   |
|         | Rural: communities in the greater Chania area (n=9)               | 7 females (43, 43, 46, 63, 56, 65, 82 years old)<br>2 males (48, 68 years old)         | Upper secondary education: 1   | ≤ once a month: 2  |
|         |   |  | Post-secondary non-tertiary education: 5<br>Bachelor/equivalent: 1<br>Master/equivalent: 1<br>Other: 1                     | ≤ once a week: 7   |

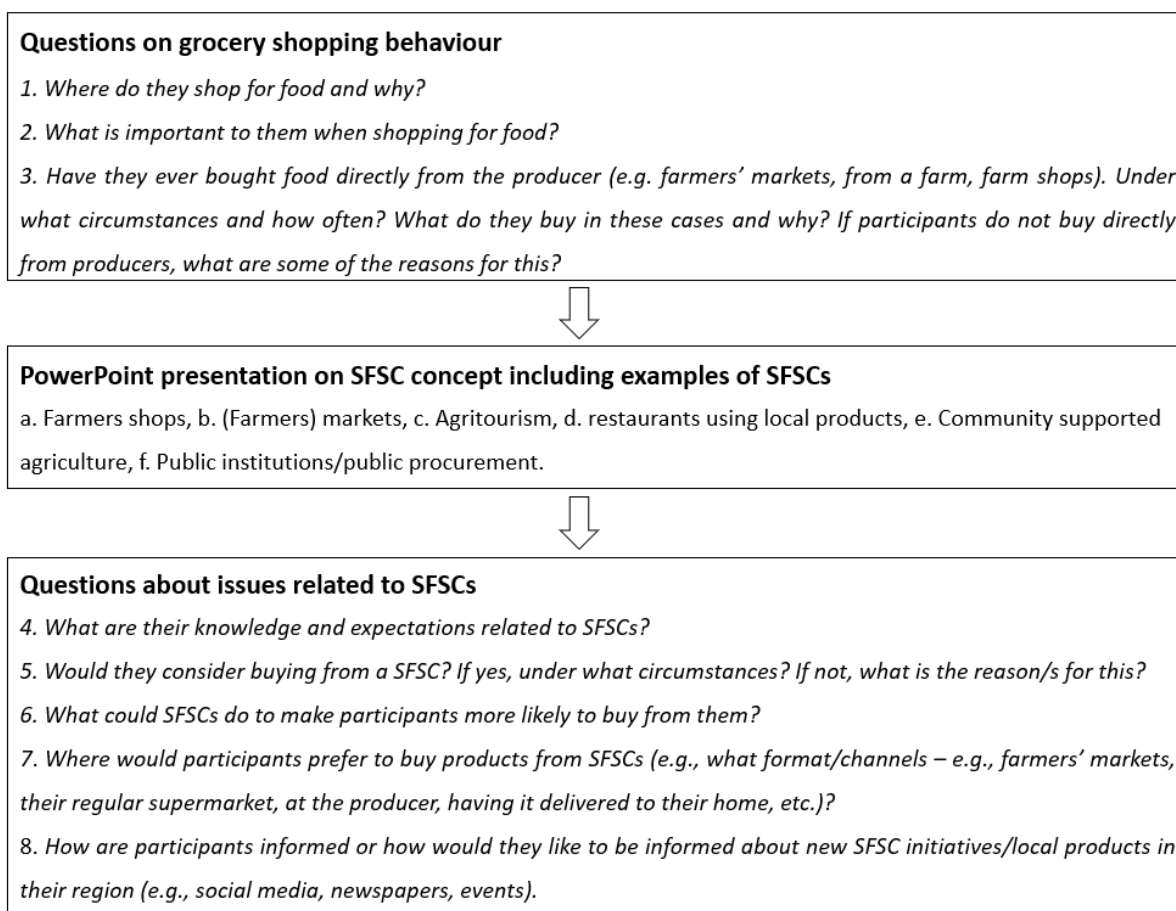


Figure 1: Flow chart of the discussion structure

sonal, freshly harvested and more natural (e.g., not artificially ripened, having fewer chemical residues). Some also understood SFSC to be more environmentally sustainable, and many assumed that SFSC products are generally organic. SFSC were also associated with small scale, traditional production, although some participants in the German urban focus group countered that it is possible to have larger producers follow the SFSC principle of short delivery routes, with this being more environmentally sustainable. Additionally, the rural Spanish and Greek focus groups felt that products from SFSCs were more traceable and they trusted shorter chains more than longer ones. Nevertheless, there was also some confusion

about what constituted a SFSC. For example, some in the Spanish urban focus group initially thought that fresh SFSC products could not be found at large chain supermarkets because such places stock food that is harvested at an unripened stage, whereas local producers harvest their products daily, offering products at their peak quality. Other participants pointed out that the difference in product quality between long- and short- food supply chains may vary depending on how perishable the product is and the location of the supermarket. It was concluded that supermarkets could also be part of SFSCs, if the products sold originate from the same region. Some participants understood that producers re-

ceive a greater percentage of the revenue through SFSCs than through longer chains, and they found this aspect quite motivating. Participants in the Greek urban focus group were particularly concerned about the social implications of SFSCs. For example, some of them noted that they prefer to buy directly from producers because in this way they can inspect whether the workers are exploited.

### 3.3 What do participants care about when shopping for food?

Participants across the focus groups generally agreed that time, money and convenience were their priorities when purchasing food, and that currently the purchase of SFSC products was not compatible with these factors. This is largely consistent with the results of Zepeda and Leviten-Reid (2004) and Giampietri et al. (2018) who found that inconvenience (i.e. time needed) and ease of purchasing respectively influenced consumer purchase of local food. Many participants said that they did not buy directly from producers for practical reasons such as limited opening hours, limited selection of products, inability to pay by credit card, difficulty finding parking, greater effort needed to travel to SFSC outlets and engage with the producer, and lack of knowledge about where to find direct sellers. Instead, most shopped at large supermarkets, which have long opening hours, offer a wide assortment of products covering consumers' needs, are located near where many participants live and have easy parking. Participants in the urban Spanish focus group found it convenient to shop at more local, specialised stores alongside shopping at the supermarket. In contrast, most participants in urban Hungary bought their groceries predominantly at conventional markets, although not specifically from producers. Participants emphasised that they visited markets that were close to where they lived, and that they could buy almost all the food they needed there. This option fulfilled the same convenience criteria that led participants in other focus groups to shop at supermarkets. It was also felt that trust in SFSCs needed

to be strengthened, particularly in Hungary, via tighter regulation and controls, as well as through increasing knowledge and exposure to SFSCs. Participants said that information about SFSCs should be more accessible, and that public institutions had an important role to play in supporting SFSCs and educating citizens about them.

### Convenience

Most participants said that they would only buy from a SFSC if it was conveniently located. For some this meant a few hundred metres or no further than their local supermarket to purchase food, whereas others would travel up to 30km. In urban Germany, it was argued that driving long distances to purchase from SFSCs would defeat the point of SFSCs being more environmentally sustainable – it would be environmentally friendlier for there to be few trips between the producer and the consumer, but to purchase large quantities each time. This point is consistent with research suggesting that the distance consumers travel to purchase from producers contributes to much of the food miles and carbon footprint impact of SFSCs (Malak-Rawlikowska et al., 2019).

Participants suggested that SFSC products should be made more accessible by being offered through local stores and supermarkets. Those in the Spanish urban group suggested that having markets open on more days and for longer hours would facilitate the purchase of local food. In Germany and Hungary, participants further felt that the ease of identifying local food should be improved. They suggested that this could include road signs indicating the locations of SFSC producers, having a local product section at supermarkets, providing information to clearly mark the regionality of food and distinguishing producers from intermediaries in conventional markets.

In order to make it more convenient to shop from SFSCs, participants recommended that producers should band together to offer a wider range of products to consumers through various channels. Those in Germany and Spain favoured the aggregation of producers in market halls and online platforms, combined with home delivery,

and cooperatives were also favoured by those in Spain and Greece. In Hungary, most participants would prefer to buy SFSC products from farm shops or markets, followed by home delivery (including delivery from supermarkets).

In Germany, one convenient channel of purchasing from SFSCs is to buy local food from vending machines, particularly at frequented locations such as central train stations. Indeed, half the urban German focus group already engaged in this practice to purchase products such as eggs, apples, cabbage, potatoes, milk, meat and specialty products. It was mentioned that the products are particularly fresh, and farmers supply the vending machines several times a week. Products from vending machines are generally more expensive, and so this channel tends to be used only when the usual retail outlet is closed.

Some also favoured the convenience and time-saving aspect of home delivery. Some felt that home delivery was more sustainable than traveling to the producer to purchase food, whereas others felt that extensive home deliveries would incur an environmental cost. Workarounds were suggested, such as customers picking up produce from collection points (e.g., workplaces) and having specific zones for regional deliveries. It was also suggested that home deliveries could be reserved for those who would benefit from them the most, such as senior citizens who are less mobile. One common concern expressed about deliveries is that consumers cannot personally select their own SFSC products, and thus might receive products of inferior quality. However, participants who had used this channel endorsed it because they felt that they had received good quality products. Consumer trust for home delivery might be gained by: a) offering first-time promotional offers that encourage consumers to try the service so they can be assured that they receive good quality products; b) publishing reviews/ratings of the delivery service; c) allowing consumers to specify their desired best before dates for fresh products; and d) allowing consumers to refuse/return products with the possibility for an exchange or reimbursement.

## Price

There was a perception in Germany, Spain and Hungary that local products tend to cost more than those from longer supply chains stocked in large supermarkets, which was a barrier to their purchase. In Germany and Spain, participants expressed more concern about value for money, with better quality generally associated with a higher price. Those in Hungary prioritised price over quality because they felt that they had little disposable income to spend on food. Those in the Greek urban focus group also prioritised price, although the Greek groups felt that it was worth paying more for organic products.

Some Hungarian and Spanish participants had the perception that small-scale production was less resource intensive and felt that this should actually reduce costs. Similarly, they also wondered why organic products tend to be more expensive than non-organic products. Their reasoning was that since organic farmers do not have to pay for pesticides and chemical fertilisers, then their products should not cost more. By contrast, others believed that organic production may increase the costs of SFSC products due to the cost of organic certification, or the fact that organic food has a shorter shelf-life (and so may incur expenses related to its storage conditions – e.g., needing to be stored at certain temperatures).

Some participants in Spain and Hungary felt that the higher price of SFSC products may be due to a lower volume of production and/or a slower rate of production compared to longer chains. For example, many in rural Spain felt that larger producers apply fertilisers and pesticides to increase production rates and volumes, thereby reducing production costs relative to the volume produced in a set amount of time, whereas traditional production methods take more time for a smaller yield. However, it was also believed that such traditional methods have a less negative impact on the environment and animal welfare.

In Hungary, it was argued that the elevated prices of small producers provide a financial reserve to mitigate the low sales during the winter. A participant in Spain mentioned that producers from longer supply chains may employ workers at very low wages, which reduces the costs of the

products at the expense of the workers.

Some participants disagreed with the view that products from SFSC are more expensive. Whereas the foregoing arguments are based on the comparison that SFSC products are more expensive than those from long food supply chains, participants who disagreed based their arguments on the idea that it is cheaper to buy a comparable quality product from a SFSC than from a long food supply chain. It is also worth noting that the relative cost of products from SFSCs compared to longer chains may also vary by product type (e.g., Donaher and Lynes (2017)), which may also lead to inconsistencies in consumer perception.

Participants across all the countries except Hungary discussed that producers benefited more financially from SFSCs, as intermediaries in longer chains take a larger share of sales revenues. Measures to promote fair prices for local producers were suggested, such as having pricing information for consumers make explicit the percentage of profit that goes to the producer and intermediaries, in order to increase transparency in the food value chain, and implementing legislation to set minimum prices for local producers and their products, e.g., “They should promote/establish a minimum value that is paid to the producers/local farmers. As well as establishing a minimum value of such products in accessible local stores.” (urban Spain).

Yet, fair prices for producers were not always a priority for participants. Some participants from Spain felt that information about different production costs associated with different supply chains would only influence their behaviour if they could afford to purchase the more expensive product. It was generally felt that groups that struggle financially are particularly price sensitive, and thus cannot afford to prioritise other considerations such as health and food quality over financial concerns, with one Hungarian remarking “... a lot more people would be more attentive [to health] if average salaries weren't that shameful...”. Many Hungarians were unwilling to pay more for a product from a short chain that was of comparable quality (in terms of appearance, ripeness, taste, and organic status) to that from a longer chain, in contrast to other participants.

There can be two sources of price differences of food from long and short supply chains. One is at the production level, where small scale production is more expensive (e.g., Woodhill et al. (2020)). Another is at the retail level, where longer food chains can be more expensive for the same product because of the accumulation of profit margins from more intermediaries (e.g., Malak-Rawlikowska et al. (2019)). In the production stage, participants seemed to be willing to pay more: a) for better quality; and b) if they know that the producer or small local retailer will directly benefit from their purchase. This is consistent with Yu et al. (2017) who found the perception that local food was of better quality and that its purchase would help support the local community predicted the purchase of local food at farmers' markets. However, they were unwilling to pay more for products at large supermarkets if the price increase is due to a greater number of intermediaries in the food chain. Thus, consumers need to be informed they are buying a better-quality product that will benefit the local community more directly when they purchase from SFSCs. They also need to be better informed about the greater costs associated with these types of production, in order for them to feel that the higher price of SFSC products is justified.

## Quality

Participants reported taking quality into account when shopping for produce. Quality was most strongly associated with the taste and freshness of a product, and also whether it was organic or environmentally sustainable. The motivations for buying organic food were referred to mainly in terms of health and food safety, with less emphasis on environmental implications. This is consistent with previous research showing that consumers who regularly purchase food from SFSCs also highlight the values of health, taste and freshness (Vannoppen et al., 2001).

However, Hungarian participants placed less emphasis on whether a product was organic, perhaps because many were suspicious about the authenticity of their production method and did not understand the higher cost. They also mentioned that the appearance of the product was



important, whereas those in urban Germany and Greece did not consider appearance to reflect quality.

In all the countries except Hungary, participants expressed concerns about the seasonality of products, although it was not clear whether consumers valued seasonality because they felt that seasonal products taste better or because of their reduced environmental impact.

### Origin

In all countries, some expressed a preference for regional/national products. In the Greek focus group this was because participants wished to support the local economy, although some mentioned that they trusted the quality standards of local products more than those from overseas, e.g. “The local part is very important, because organic ... but now if we take organic from China ... it may not be the residue of pesticides, but they are other issues, which are not detected, or are not controlled regarding the issues of fungi or other aggravating factors, so it doesn’t tell me anything to get it from China just because it’s organic. I want it to be as close to the local market as possible...” (urban Greece).

However, the origin of products was not always a priority, and sometimes other aspects, such as whether a food is organic or its guarantees of ethical employment, was enough to satisfy participants, e.g. “For me, it does not depend on where a product is produced, but how it is produced. Production quality for me is what matters.” (urban Spain).

It is interesting to note that although some Hungarian participants preferred national products, some admitted that such products were not of a premium quality, suggesting that they may have purchased them for other reasons (e.g., to support the local economy).

### Personal relationships: The “human factor”

Many participants also valued having a personal relationship and interacting with food vendors, particularly for those who frequented smaller retailers. Some in rural Spain felt that specialised

retailers provide consumers with more knowledgeable service regarding the products which helps to facilitate trust. Similarly, participants from rural Germany mentioned that they would pay more for good service and the specialised knowledge of product experts, and these benefits were felt to encourage customer loyalty. It was mentioned that it is also possible to have personal interactions with producers online, and with staff at supermarkets with specialised departments. However, one participant from rural Germany pointed out “if you only buy online or in the supermarket, the number of small producers decreases: butchers, bakers etc. die out, rural farms die out, because there are not enough buyers nearby...”. This awareness is consistent with the theme of customer loyalty that was mentioned by several participants in rural Germany and could explain why consumers in this focus group tended to source different products at a greater variety of specialised stores compared to their urban counterparts.

Producers/local store owners were considered by some participants in Greece and Spain to be more honest with customers, making them seem more trustworthy, e.g., “...the producers or local commerce, they must contact directly with us, so they have to be sincere, they have to be responsible.” (rural Spain). However, it must be noted that other participants did not necessarily feel that larger retailers were less trustworthy, e.g., “The supermarkets are more impersonal but I still trust the people that are selling to me.” (rural Spain).

## 3.4 Strategies to promote the purchase of SFSC products

### Regulation

Hungarians perceived farmers’ markets to be less regulated than the large retail chains, and that vendors sometimes cheated their customers in a way that was less likely to occur in supermarkets (e.g., products labelled with false claims, sellers rounding-up prices). Some Hungarians also doubted the hygiene of some markets, with one remarking, “... nobody could ever sell me meat there [at the market]. What’s out there ... dust,

coughing, sneezing, gasoline vapor... not covered, not cooled even in summer ...". Similarly, a participant from Germany who lacked confidence in the hygiene of SFSCs remarked "It is not transparent at the farmer's store which hygiene rules have been observed, as the control standards are different. The risk is much higher, especially for milk.". However, other Hungarians trusted the food safety of SFSC, with one from the urban focus group remarking "... all the products must be controlled by the NÉBIH [National Food Safety Authority of Hungary], even the products from old farmer ladies.". Greater input from national authorities regarding SFSCs, and more public communication about how these food chains are regulated, along with clearer consumer protection standards may help to increase confidence in SFSCs.

### Information dissemination

Participants generally believed that consumers would be more likely to buy from SFSCs if they had greater access to relevant information, such as food quality and traditional food production methods. In the German groups, it was proposed that there should be improved marketing and clearer communication of the benefits of SFSC products. Relatedly, participants in urban Spain felt that the consumption of more seasonal products should be promoted among consumers.

Many participants felt that schools have a role in educating students and parents about the environmental and social implications of food production, particularly those from urban areas. They suggested that special educational programs could attract the attention of young children, especially if they contain practical components, like vegetable gardens at schools.

Many participants (particularly those in Germany) preferred to learn about SFSC initiatives/local products from non-print sources, such as social media, online newsletters and email; with many preferring to receive this information via mobile phones. Some also favoured outdoor poster advertising, such as those at bus-stops. Those in rural areas also appreciated regional media outlets such as local TV, radio and community newsletters/newspapers. Some also valued personal recommendations (e.g., via

word-of-mouth), whereas others wanted to learn about SFSC initiatives and local products at events such as exhibitions or festivals. Several participants in urban Spain wished to see local stores and products promoted on social media, and to receive reminders about these stores and products, whereas some participants in Germany wanted to receive weekly promotions. Customers of the urban Greek cooperative noted that they typically received information about SFSCs online or contacted the producers by phone directly. Members of the cooperative post special announcements when a seasonal product is available or when something is added to the assortment (e.g., when a product has just been harvested or produced). The customers felt that these measures encouraged their own purchase behaviour.

### Government support

Some participants in Spain and Greece felt that it was the responsibility of governments (e.g., local municipalities) to create a legal and administrative framework to support SFSCs. They suggested that this could be done by providing training and subsidies to encourage small producers to adopt organic production. It was proposed that local governments should also create initiatives to support public procurement, with local or organic products prepared onsite, as many institutions currently outsourced their food production.

## 4 Conclusions

Across all four countries, it appears that participants generally felt that the relative inconvenience of purchasing food from SFSC was a barrier to its uptake, and that having more accessible SFSC and being able to purchase a wide range of produce in one place was a prerequisite for them to buy such products. In some countries such as Hungary and Spain the higher price of SFSC was an additional barrier.

It was believed that small-scale production and SFSCs result in better quality food, and some participants also like the idea of supporting their local community through purchasing from local producers and/or retailers. However, they had

less confidence in the hygiene and food safety standards of SFSCs compared to longer chains. Compared to previous research on the determinants of purchasing from SFSC, the results of this study provide a wider range of potential barriers and facilitators of purchasing from SFSC, covering the urban and rural regions across four EU countries. The multi-country approach used allowed us to identify concerns that were more universal (e.g., convenience) versus those that were more region-specific (e.g., regulation and food safety), and to propose solutions to promote the uptake of SFSC products that consumers themselves felt would be effective. Furthermore, the exploratory nature of the research allowed participants to express their personal concerns and motivations, rather than select from those that were prescribed from an external source. However, the focus group methodology means that only limited conclusions can be drawn, not only because of the small sample size (which in this case conformed to the best practice of 6-12 participants for focus groups; (Onwuegbuzie et al., 2009), but also because the extent to which participant views influence their behaviour cannot be determined. Thus, future studies that examine the extent to which the factors highlighted in this study predict behaviour within a larger sample will be needed to clarify the implications of our results.

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