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DETERMINANTS OF LOCAL FOOD PURCHASE

INSIGHT FROM A CONSUMER SURVEY IN SOUTH TYROL (ITALY)

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#### **ABSTRACT**

A large number of previous studies relate local food purchase to the demographic and financial profile of consumers. This article provides an innovative insight into the sociocultural and spatial factors influencing local food purchase in the multilingual region of South Tyrol (Italy). To derive a representative sample for the South Tyrolean population, 498 consumers have been interviewed through Computer Assisted Telephone Interviewing (CATI). The differences in the consumer attitudes towards local food were tested for significance using both parametric and non-parametric statistical tests. The results show that consumers' cultural background and spatial typology (according to their urban, predominantly urban and rural place of residence) have a significant influence on specific attitudes towards local food purchase. More specifically, differences in urban/rural consumers are observable with regard to the preferred stores to purchase at and in the level of expenditure on local food. The cultural background influences the meanings associated with local food and the reasons attributed to its purchase.

Key words: local food, attitudes, rural urban relations, regional development

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#### **INTRODUCTION**

The increasing concerns of consumers about the health benefits as well as the social and environmental consequences of their consumption patterns has strengthened the recent development of major market trends such as functional, organic and locally produced food (Wirth et al. 2011, Stolz et al. 2011, Falguera et al. 2012, Gracia et al. 2014, Hempel–Hamm 2016a). Among those trends, particularly the larger demand for local food was encouraged by the growing globalization of food production systems and the mounting evidence of scandals, which led consumers to pay more attention to food origin (Adams–Salois 2010, Feldmann–Hamm 2015, Hempel–Hamm 2016a). Although the absence of agreement on a universal definition of local food persists within the scientific community (Feldmann–Hamm 2015, Schwarz et al. 2016, Galli et al. 2015, Taillie–Jaacks 2015), in the last two decades a large number of studies attempted to assess the manifold driving attitudes and preferences of consumers for purchasing local food products. However, as Feldmann and Hamm (2015: 159) argue, while the majority of studies on consumers' preferences and purchasing behaviour used the influence of demographic characteristics, 'social and personal norms were rarely addressed'. For this reason, this study aims at analysing consumer preferences towards local food in South Tyrol, assessing socio-cultural differences among population groups, such as the place of residence and the cultural background of respondents.

With respect to the consumers' place of residence, several scholars maintain that feelings and needs towards local food are related by sociocultural aspects, which in turn may be influenced by the country or place of origin of consumers (Guerrero et al. 2009: 346). Previous studies associated more supportive attitudes towards local food in elderly respondents living in rural areas (Racine et al. 2013, Megicks et al. 2012, Mirosa–Lawson 2012, Khan–Prior 2010, Tregear–Ness 2005, Brown 2003, Wolf 1997), with women generally exhibiting more positive attitudes than men (Cholette et al. 2013, Pelletier et al. 2013, Cranfield 2012, Bellows et al. 2010). Notably Chambers et al. (2007) 'could not identify any differences in attitudes between urban and rural consumers' (Feldmann–Hamm 2015: 156). Weatherell et al. (2003: 242) considered the place of residence of respondents as a 'marker of difference in consumers' view' while Tregear and Ness (2005) documented urban/rural residency among others as strong discriminators to explain variations in local food interest among consumers. While not emphasizing the effect of age and gender on local food purchase in the analysis, as already largely assessed in the existing literature, this paper will provide additional scientific evidence on the hypothesis that attitudes and behaviours determining the purchase of local food vary significantly according to the place residence of respondents. The deriving research question is: what are the similarities and

differences between urban and rural consumers in their purchasing behaviour, and what are the definitions and perceptions attached to local food. We assume differences will be detected in the preferences regarding local food particularly between urban/predominantly urban and rural consumers since they have different lifestyles being positioned at different distances along the regional food system. Guerrero et al. (2009: 346) reported that consumers' place of residence influences lifestyles, beliefs and attitudes determining differences in food choice. Additional previous reviews of food-related lifestyles (FRL) also indicated heterogeneous responses towards food products by urban and rural consumers (Cullen-Kingston 2009), motivating the authors to assess whether the place of residence has an impact on individual choices in the case of local food in South Tyrol. Arsil et al. (2014) also identified lifestyles determining different reasons to purchase local food, such as ease of preparation and lower prices as important attributes for urban and rural consumers respectively. In the case of South Tyrol, rural consumers, for instance, may produce food themselves or have more awareness of farming practices and communities, in contrast with urban respondents, factors determining different perceptions and purchasing behaviours across groups. Memery et al. (2015: 1223) report that consumers exercise selfinterest to attain individual benefits, since they associate local food with higher quality (Adams-Adams 2011, Cranfield et al. 2012), freshness (Hempel-Hamm 2016b, Zepeda-Deal 2009, Chambers et al. 2007), safety (Hempel-Hamm 2016a, Yue-Tong 2009, Darby et al. 2008), healthiness (Naspetti-Bodini 2008, Wawrzyniak et al. 2005), and environmental sustainability (Hempel-Hamm 2016b, Brown et al. 2009, Burchardi et al. 2005). However, consumers also place significance on people operating in their local community as well as support to the economy (Memery et al. 2015, Megicks et al. 2012, Hu et al. 2012) and family farmers (Pirog 2003) as reasons to purchase local food. Further studies acknowledge that respondents from the rural area are 'more interested in supporting the local economy' being closer to the source of food production than participants from the urban area (Roininen et al. 2006:28). Rural consumers have a 'higher priority for civic issues in food choice' and showed 'higher interest in local foods compared to urban consumers' (Weatherell et al. 2003: 242), although other findings indicate that urban consumers might be 'more prone to reconnect with rural roots' purchasing local food (Montanari 1994), as well as attending farmers' markets (Conner et al. 2010). Against the background that various attributes determine the purchase of local food, the present case study will show what motivations are related to food choice among South Tyrolean consumers and if differences emerge among different groups of respondents. Besides the most often mentioned attributes in the literature, such as better quality, freshness, healthiness, environmental sustainability, support of the local economy, the present study also researched whether consumers consider animal welfare (Zepeda–Deal 2009, Onozaka– McFadden 2011), direct contact with farmers (Weatherell et al. 2003), and shopping experience (Zepeda-Li 2006, Lockeretz 1986) when making purchase decisions concerning local food.

Furthermore, the population sample of South Tyrol offered a valuable opportunity to test attitudes towards local food purchase for cultural differences. In fact, due to specific historical developments, the region inherited a multilingual character, witnessed by the three official languages used in South Tyrol namely Italian, German and Ladin. Two large societies live *de facto* in parallel in South Tyrol namely the German and Italian speaking groups (Heiss 2010: 205), currently accounting for 64% and 24% of total population respectively (Provincia Autonoma di Bolzano-Alto Adige 2015). The German language group dates back to the Germanic tribes

crossing the area during the migration period, while the Italian one grew at a higher extent during the earlier Fascist era (1920–1930), after South Tyrol, once belonging to the Austro-Hungarian Empire, was annexed by Italy in 1919, at the end of the World War I (Provincia Autonoma di Bolzano-Alto Adige 2015). This linguistic peculiarity of the region enabled us to consider the attribute mother tongue of respondents, as a reasonable proxy to study the influence of cultural differences on local food attitudes within the population sample. Early studies demonstrate that food habits come into being and are maintained in a particular culture since the cultural aspects can be considered as one of the most powerful determinants of attitudes and behaviours in the food domain (Fieldhouse 1995, Rozin 1990). For this reason, this paper will also explore the research question whether the cultural background of South Tyrolean consumers has an influence on purchase attitudes towards local food. Living together in the region the German and Italian language groups cultivate their own culture (BLS 2015), and this aspect has an influence on food choice, values and attitudes towards local food. Therefore, our research hypothesis is that differences exist across heterogeneous cultural groups, since food consumption itself indicates already that 'people are able to make visible and communicate the social and cultural differences between them and that they adhere to certain values and ideologies' (Nistor 2015: 129, Dolan 2002). We base this hypothesis on the evidence reported in previous cross-cultural studies showing that sociocultural aspects determine consumers' feelings and needs, resulting in differences in food-related aspects even in relatively homogeneous countries (Guerrero et al. 2009: 346). Furthermore, as Askegaard and Madsen (1998) argued that differences are noticeable not only at a national level but also at more regional/local level in terms of food preferences, habits, food related behaviour and attitudes. Therefore, in a multicultural region, such as South Tyrol, the 'crucial aspect of cultural aspects in the approach to local food' (Csurgó–Megyesi 2015: 169), coupled with different values and beliefs, should be translated into different attitudes and awareness about local food, among the considered sample groups.

Following this introduction, a clear definition of the methodological basis of the study will be provided. In the presentation of the results, firstly an overview of the overall consumers' sample attitudes and preferences will be introduced. Secondly, further analyses will provide a deeper insight whether different spatial typology and/or cultural background within the population groups have an influence on selected preferences such as propensity to purchase local food, the overall reasons and specific factors for the choice of local food, as well as the degree of trust and the perception of quality labels.

Finally, the results will be discussed with respect to previous extant scientific publications on the topic and conclusions on the validity of results will be drawn. The case study of South Tyrol presents several attitudes and behaviours offering valuable elements on how different typologies of consumers perceive local food and which values they relate to this concept, as essential background to considering in promoting marketing possibilities for local food (Roininen et al. 2006). Therefore, the findings of this research may help practitioners in the food sector and private – as well as public regional development agencies – to consult farmers, to improve food-marketing strategies and to extend the outreach of local food on the regional scale.

#### **METHODS**

The sample design of the survey portrayed several characteristics and determinants of consumer preferences in the region of South Tyrol (Italy). The composition of the sample (498 respondents) was designed to meet the characteristics of the overall population (518,518 inhabitants, 2014) of South Tyrol. The sample was divided according to the classification urban, predominantly urban and rural, created by the authors according to selected indicator thresholds, in order to evaluate how purchase preferences vary across the spatial typology of respondents (Table 1. Demographic and cultural profile of survey respondents).

Attribute Percent 13.1% Rural Spatial typology 45.7% Urban 41.2% Predominantly urban Language group 15.9% Italian 82.1% German 2% Other 50.9% Over 55 Age 14.3% 18-34 34.7% 35-54 Gender 24.3% Male 75.7% Female

Table 1. Demographic and cultural profile of survey respondents

The criterion of spatial typology identifies rural, urban, and predominantly urban consumers based on their place of residence at municipal level. Urban centres were considered with municipalities of more than 6,000 inhabitants. The characterization of rural municipalities was determined on the base of a previous study instead (WIFO 2011). A broad set of socio-economic and demographic indicators identified peripheral rural municipalities characterized by recurring negative population growth rates and weak socio-economic structures (WIFO 2011). The remaining municipalities neither counting more than 6,000 inhabitants nor being mentioned in the previous study (WIFO 2011) were considered in the intermediate category called predominantly urban. Table 2 displays the proportion of interviewed respondents belonging to each spatial typology, relative to the number of inhabitants living in the considered urban, predominantly urban, and rural municipalities.

Table 2. Sampling spatial typologies

| Spatial typology    | Regional proportion | Sample proportion |
|---------------------|---------------------|-------------------|
| Urban               | 47.9%               | 45.7%             |
| Predominantly urban | 48.7%               | 41.2%             |
| Rural               | 3.33%               | 13.1%             |

The survey on purchasing preferences and determinants of local food was undertaken in 2014 through Computer Assisted Telephone Interviewing (CATI). The German and Italian questionnaire with a Likert scale, binary and open questions were developed in close collaboration with the regional consumers association (Verbraucherzentrale Südtirol). The Likert scale questions ranged from zero (0 – strongly disagree) to five (5 – strongly agree), in order to rate the different perceptions towards purchasing local food products. The main areas of questions referring to the reasons influencing the purchase of local food among consumers are listed in Table 3.

Table 3. Main areas of questions

| Reasons for buying local food  | Item description  |  |
|--|---|--|
| Quality  | Overall perceived superior quality of the product   |  |
| Regional provenance  | Local provenance of the product   |  |
| Taste  | Better flavour/taste of the product   |  |
| Positive impact on the environment   | Local production systems less harmful for the environment (lower carbon emissions due to short supply chains) |  |
| Support to local economy   | Sustaining local farmers and their communities, perceiving a positive impact for rural development            |  |
| Direct contact with farmers  | Ease of access to local food due to social relationships with producers                                       |  |
| Shopping experience  | Specificity of shopping experience (outdoor excursions, story-telling, tasting in loco)                       |  |
| Food safety  | Higher traceability of products, trustworthiness in raw materials utilized                                    |  |
| Animal welfare  Higher consideration of animal welfare and less intensive livestock production |   |  |

In total, 512 questionnaires were collected, however the answers of 14 questionnaires were not considered because they were only partially completed. Due to relatively low composition of the Ladin language group (1.6%), we decided to aggregate that with other language groups (0.4%), and analysing the determinants of the main language groups of respondents, i.e. German (82.1%) and Italian (15.9%). Descriptive statistics will convey information about the profile of the sample and the main emerging preferences and behaviours regarding local food purchase. In the analysis, the demographic and financial profile of respondents focused on selected aspects related to the specific objective of the paper (Table 4. Demographic profile of consumers considered in the analysis).

Table 4. Demographic profile of consumers considered in the analysis

| Respondent information | Categorisation              |
|------------------------|-----------------------------|
| Place of residence     | Municipality of residence   |
| Language group         | Italian – German – Ladin    |
| Age                    | 18–34; 35–54; over 55       |
| Gender                 | Male – Female               |
| Income                 | Gross yearly income (euros) |

The urban/rural distinction has been performed on the base of the aforementioned characteristics of the municipalities surveyed. The three age classes have been sorted to comply with previous research utilizing this categorization (Weatherell et al. 2003). With respect to income, as García and Grande (2010: 63) have already stated, in the analysis of eating habits in a specific group of consumers, utilizing income to explain all the variation would be an exaggeration. The present study, despite acknowledging the importance of income to interpret certain determinants of local food purchase, did not include it in the analysis. Furthermore, another reason behind this choice is the lack of comprehensive data on household income, which being collected on a voluntary basis, were not provided by a sufficient number of respondents to the survey.

The applied notations  $\dot{x}$  and 'Me' indicate the mean and median values. The existence of associations between qualitative variables was tested for through the independent chi-squared test. Furthermore, in order to test the differences in consumers' preferences the non-parametric Kruskal–Wallis test was employed, giving

the possibility to provide quantitative evidence of the existing relations among the considered groups. The values of the mean ranks (MR) resulting from the Kruskall–Wallis tests, identifying the degree of association to surveyed items are indicated in brackets after the respective sample groups of reference.

#### **RESULTS**

#### General results

More than 90% of respondents regularly purchases local food, and a large majority of them identifies local products as those grown, produced and processed regionally (80.9%), on the premises within the region (8.3%), or in the bordering Italian and foreign provinces (5.8%). A relatively low percentage of respondents (4.0%) associate local food to specific South Tyrolean products or other aspects (1.0%). None of the respondents clarified a specific measure or range distance to identify local food, but the references to proximity were expressed in abstract terms such as 'close surroundings', 'nearby areas' and 'neighbouring zones'.

In the region, half of the respondents purchase local food more than approximately six times per month (Me=6.5) and on average more than two times per week ( $\overline{x}$ =8.93 times per month). To buy food products, the vast majority of the consumers go to supermarkets (74.9%) or to local specialist local stores (44.0%) such as grocery, butchery and bakery shops. Relatively fewer respondents attend farmers' markets (18.9%), direct selling points (10.8%), and organic food stores (10.0%).

The respondents considered most of the proposed survey items, listing the decisive factors to purchase local food, particularly valuable to justify the purchase of local food. The perceived higher quality of local food (92.3%), the regional provenance (91.6%) and the positive contribution to the environment (88.4%) were considered strong reasons to purchase local food. A relatively lower number of respondents rated the personal direct contact with farmers (59.9%) and the shopping experience (31.3%) as decisive reasons to purchase local food in a particularly positive manner. With respect to the overall category of food products (i.e. considering both local and other origins of food products), quality is also considered a relevant aspect by the majority of respondents (81.5%). In this regard, the majority of consumers (60.5%) declared to trust quality labels, since they represent reliable indications to identify higher quality food products (56.7%). However, a relatively low percentage of respondents stated that they pay particular attention to labels signalling quality (39.8%), organic (29.9%), and fair trade products (27.9%) while purchasing food products.

About two thirds of respondents (64.47%) revealed spending up to €20 during a single purchase of local food, while a relatively lower number of consumers is willing to make a purchase between €20 and €50 (28.95%) or spend more than €50 (6.57%).

The general results described in this section, provided an overview of the sample and the main attitudes towards local food products. The next two sections will illustrate the results of in-depth analysis, carried out to detect whether spatial and cultural factors can explain differences in attitudes towards local food purchase of South Tyrolean consumers, and if so to what extent.

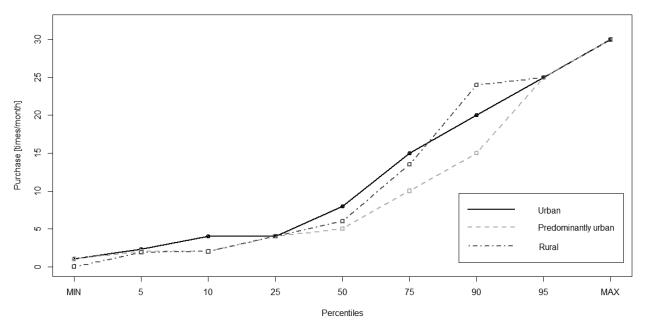


Figure 1. Distribution of purchase frequency (times/month) according to spatial typology of respondents

### Consumer preferences according to spatial typologies

The definitions and meaning of local food, which respondents associate with local food, do not significantly differ among the spatial typologies considered. However, approximately the entire sample of urban consumers (96.3%) considers local products as those produced in South Tyrol. The fraction of urban consumers buying local food is 42.1%, higher than the proportion for predominantly urban (36.2%) and rural (12.0%). However, no significant relation emerges among spatial typologies and the decision on whether to purchase local food or not ( $\chi$ 2(2)=3.410, p=0.182). Conversely, there are significant differences ( $\chi$ 2(2)=8.997, p=0.011) since the frequency of purchases (times/month), increases from predominantly urban (184.52) to rural (199.08) and urban (221.69) consumers' group (Figure 1. Distribution of purchase frequency (times/month) according to spatial typology of respondents).

The stores in which local products are physical purchased also vary among groups. The chi-squared analysis confirmed that this relation was significant ( $\chi$ 2(2)=23.169, p=0.000). A Z-test yielded the result that urban consumers attend organic food stores and outdoor markets such as weekly, farmers and grocery significantly more than the other two groups of the population sample. Furthermore, although urban consumers choosing organic food stores represent a relatively higher proportion, compared to the other spatial typologies considered, the aggregated percentage of all consumers preferring this category of stores is rather low (10.2%).

With respect to factors considered prior to a food product purchase, a Kruskal–Wallis H test was conducted to determine if there were significant differences in the distribution of the attribute 'Regional Provenance' between groups. Statistically significant differences among groups ( $\chi$ 2(2)=9.836, p =0.007), indicated that the importance of the provenance (expressed in mean ranks) for the choice of buying food products increased from predominantly urban (227.79) to rural (245.05) and urban (268.67) consumers. The same test did not highlight any significant difference in the distributions among groups for the other attributes, although the value of the median values point to relatively high level of agreement among consumers of the three groups, for the

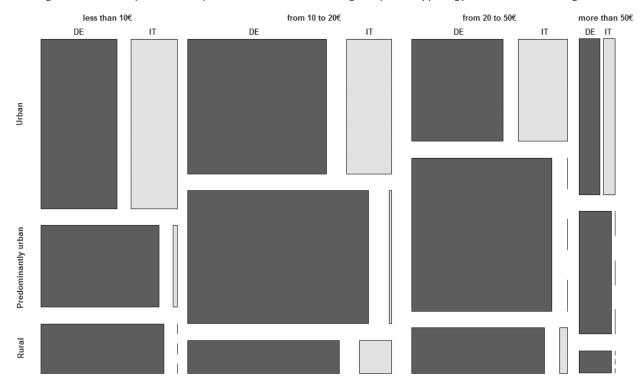


Figure 2. Mosaic plot over expenditure levels according to spatial typology and cultural background

consideration of quality (5='Strongly agree'), price (4='Agree'), and regional provenance (4='Agree').

Differences in the attributes 'Regional Provenance', 'Quality' and 'Direct contact with farmers' are observable among groups with respect to reasons for purchasing local food. The Kruskal–Wallis H test indicated that the importance of quality significantly increased ( $\chi$ 2(2)=7.478, p=0.024) from urban (209.83), to predominantly urban (228.52) and rural (247.52). The distribution of regional provenance, as a reason to explain the purchase of local food ( $\chi$ 2(2)=6.143, p=0.046.), also indicates that this attribute is relatively more important for rural (251.75) compared to predominantly urban (222.39), and urban (212.81) consumers. Statistically significant differences ( $\chi$ 2(2)=9.556, p=0.008) were found in the attribute 'Direct contact with farmers', showing a higher importance of this attribute than in the previous cases, for rural (250.68) consumers, compared to respondents living in predominantly urban (223.19), and urban (198.95) areas.

In terms of expenditures for local food, differences exist among consumers from different spatial typologies. Resulting data from the chi-squared test confirmed that the relations among groups were significant ( $\chi$ 2(6)=16.669, p=0.011). Urban (32.0%) and rural consumers (31.5%) differ in proportion to the predominantly urban respondents regarding the category 'Up to 10 euros' spent in a single local food purchase. There is a significant difference in proportions between consumers in predominantly urban (35.9%) and urban (22.1%) in the category range '20-50 euros'. No significant differences among spatial typologies have been detected for the other expenditure ranges considered, namely '10–20 euros' and 'more than 50 euros'. Figure 2. Mosaic plot over expenditure levels according to spatial typology and cultural background shows the distribution of respondents according to their spatial typology (urban, predominantly urban and rural) and cultural (DE=German and IT=Italian language group) characteristics across expenditure levels devoted to a single purchase of local

food (Less than 10 euros; 10–20 euros; 20–50 euros; more than 50 euros).

Among spatial typologies of consumers, no relations in the levels of trust of labelled local food can be detected. The association of the attribute 'Quality' to labels relates significantly to both groups ( $\chi^2(2)=12.744$ , p=0.002), while no significant associations were detected for 'Animal welfare', 'Environmental protection', 'Contribution to the regional economy', and 'Food safety'.

## Impact of the cultural background on consumer preferences

Consumers belonging to the German-speaking group associate local food with the region of South Tyrol. The Italian-speaking respondents, on the contrary, identify local food with specific products such as apples, speck, and dairy products. These relations concerning the meaning associated to local food are statistically significant ( $\chi$ 2(2)=29.825, p=0.000). A significant relation exists between the purchase of local food and cultural background groups ( $\chi$ 2(1)=7.597, p=0.006). A Z-test for the proportions confirms higher share of respondents from the German buying local food compared to the Italian language group. On the contrary, chi-squared test yielded no significant results concerning the relation between the frequencies of purchase (times/month) and cultural background. Statistically significant differences were also found in the importance of price as factor considered prior to a purchase of food products ( $\chi$ 2(2)=9.648, p=0.002), indicating higher importance towards this attribute for inhabitants belonging to the Italian (287.47) compared to the German (235.58) language group. Nevertheless, the distribution of responses regarding the expenditure levels do not differ between the two language groups ( $\chi$ 2(3)=4.805, p=0.187). Furthermore, no significant differences were found for the remaining attributes, however median values indicate relatively high consideration of quality (5='Strongly agree'), in both language groups. Statistically significant differences exist in the typologies of shops chosen to purchase food. Respondents of the German language group favour supermarkets, local specialist stores, and weekly markets significantly more compared to consumers belonging to the Italian language group.

In the analysis of the reasons, influencing the purchase of local food, no statistically significant differences in the distribution between the two language groups were observable. The analysis of the median revealed the highest rates for the majority of attributes, except for the attribute direct contact with farmers (4='Agree') and shopping experience (3='Neutral').

No statistically significant differences among groups can be detected in the levels of trust in labels and to the list of attributes, which consumers associate to certified local food products.

#### Discussion

This paper compared the preferences in purchasing local food across a significant sample of the South Tyrolean population, to study whether significant differences exist among specific consumer typologies. The analysis of the survey conducted in this the study provided in depth analysis of selected preferences for two categories of consumers, living in heterogeneous places of residence and manifesting different cultural backgrounds. The results revealed a number of significant differences in specific purchasing attitudes among groups (Table 5. Significant differences in the distribution of selected items

according to spatial typology and cultural background), testing the hypothesis formulated, confirming and partly reviewing the evidence provided by similar previous studies.

Table 5. Significant differences in the distribution of selected items according to spatial typology and cultural background

| Item                                 | Туре        | Spatial typology | Cultural background |
|--------------------------------------|-------------|------------------|---------------------|
| Preferred place to buy food          | Likert      | ***              | *                   |
| Factors considered prior to purchase | Likert      | *                | *                   |
| Purchase of local food               | Binary      | /                | *                   |
| Meaning of local food                | Categorical | /                | ***                 |
| Frequency of local food purchase     | Scale       | *                | /                   |
| Reasons to buy local food            | Likert      | *                | /                   |
| Trust on quality label               | Binary      | /                | /                   |
| Labelled food products added value   | Binary      | *                | /                   |
| Average expenditure for local food   | Categorical | *                | /                   |

\*\*\* = 0.001; \*\* = 0.005; \* = 0.010; / = no difference

## Overall sample characteristics and local food

The results of this study, presented at the aggregate level of the entire sample, tend to confirm the evidence provided in previous studies, particularly with regard to the higher involvement of female respondents in purchasing local food (Bellows et al. 2010). The higher percentage of female respondents in the survey also signals the relatively greater role that this group plays in the management of food provision and purchase in the household.

The large array of meanings that consumers associated with local food confirms the difficulty in precisely defining the term 'local' and the subsequent overall lack of a universally accepted definition of local food (Schwarz et al. 2015). Interestingly, the respondents who named the geographical distance between source of production and consumption as the principal item for defining local food (Galli et al. 2015; Taillie–Jaacks 2015) could not clarify specific a range of minimum-maximum distance. In terms of the implications of these results for food marketing it follows that the widely heterogeneous meanings and values that consumers associate with local food should be considered and addressed accordingly in advertising, packaging and communicating the attributes of local food. Therefore, standard communication strategies should be discouraged, considering the heterogeneity of target groups within the same region.

A further aspect emerged in the analysis is the ambiguous behaviour of consumers with regard to quality labels: although consumers mention their trust in quality labelling and consider quality as a major driver to purchase local food, little attention is paid to quality labelling prior to the purchase. We link this behaviour to the presence of highly heterogeneous meanings, definitions and values of local food. Since a single definition of 'local' does not exists, nor a standardized label for the local origin, products labelled as such may not match the consumers' wide-ranging views and expectations (Feldmann—Hamm 2015). As a result, consumers do not pay much attention to labels while buying local food, although their concerns related to sustainability and quality of the products are relatively high. Evidence confirms that among consumers 'when they are asked about the level of concern with issues related to sustainability in food production in general terms and that there is currently

generally a moderately high level of concern, however this level does not translate into corresponding level use', for instance in the concrete food product choice (Grunert et al. 2014: 187).

## The influence of spatial typology on consumers' attitudes

Contrary to Chambers et al. (2007), this study has identified difference in attitudes according to spatial typologies in general terms linked to urban and rural residency of respondents. Different attitudes relating to the stores where food is usually purchased were also found. Similar to Weatherell et al. (2003), the majority of respondents privilege supermarket. However while in this study urban consumers were less aware of farmers' markets, the survey revealed that South Tyrolean urban consumers prefer outdoor markets such as farmers' markets concerning regional food products. This result confirms the evidence that farmer market shoppers 'tend to live in urban areas' (Conner et al. 2010: 744). As a reason to explain such a behaviour, the study reported that this form of food retailing was considered antiquated and in contrast, rural groups tended to buy directly from farms, moreover, seeing this as a way to access higher quality foods (Weatherell et al. 2003). Although there are no differences with regard to direct purchase of local food – as a way of accessing local food – such an aspect emerged as significantly more important for rural than for urban consumers as reasons to buy local food, partly confirming the previous evidence. Intuitively, the same reason of better access to quality products applies, due to the closeness of rural consumers to origin of products (Feldmann-Hamm 2015). In fact, deeper quantitative analysis showed that South Tyrolean rural consumers place significantly more importance on quality compared with the other groups. The high consideration of this attribute confirms previous evidence pointing to quality and better taste as main drivers motivating consumers to purchase local food (Adams–Adams 2011, Cranfield et al. 2012, Feldmann–Hamm 2015).

The direct contact with farmers could also be considered an approach to ensure the quality of products, as Weatherell et al. (2003) also found out. Furthermore, although respondents rank the contribution of local food to the local economy, stewardship of natural landscapes and persistence of farming communities particularly highly, no significant differences are observable among groups.

At variance with other studies, which found different degrees of willingness to pay for local products (Denver–Jensen 2014, Gracia et al. 2014, Gracia et al. 2012), the current analysis was based on the comparison of respondents' proportions across different ranges of expenditures. Nevertheless, the study reported the existence of differences in the expenditure levels among groups, although previous studies did not reveal significant differences between urban and rural respondents to this respect (Weatherell et al. 2003).

## Cultural background and local food

The results of the current investigation regarding the existence of different attitudes between heterogeneous cultural groups in South Tyrol, confirms that local food is a culturally driven complex phenomenon (Nistor 2015, Martinez et al. 2010, Pratt 2007). More specifically, the cultural background influences the meaning of local food associated by individual consumers. In the perceived meaning and individual definition of local food, significant differences exist between German and Italian speaking consumers. The first group relates

local food to the region of South Tyrol, while the latter to specific typical products produced and processed in the region, such as apples, speck and dairy products. This evidence suggests that stronger non-material and subjective concerns (Cohen–Murphy 2001) play a significant role in the individual conceptualization of local food. The results point to the influence of cultural background on difference in the overall attitude to purchase local food among groups, in line with the evidence that 'food is also bound up with cultural meanings for consumers, tying local and national identities to corresponding local and national specialities' (Autio et al. 2013: 564).

Such a case also shows that culture has an influence on this attitude towards local food, however this case deserves a more cautious reflection. In fact, such an association may be due to latent attributes characterizing the German and Italian language groups. The inclusion of additional variables – such as the income level distribution across the considered groups – could have provided further elements to explore the relation between cultural background and purchase of local food in more depth. In the absence of such an additional characterization of the respondents, we acknowledge that differences exist among cultural groups.

If we attempt interpreting the factors considered prior to the purchase, we observe that differences in the preferences between the two groups exist with respect to price. However, the higher consideration of the attribute price — in this case of the Italian language group- may be also influenced by budgetary reasons, whose impact cannot be measured for the sake this analysis, because of the lack of data. The choice of preferred stores affects the individual search costs for purchasing local food (Zepeda—Li 2006). In the case of South Tyrolean consumers, we notice significant differences between cultural groups. The German-speaking, although aware of incurring in higher costs, demonstrates a stronger willingness to undertake shopping in multiple venues such as grocery, farms and weekly markets.

## **CONCLUSIONS**

The research aimed at understanding the preferences for local food purchase in a selected sample of the South Tyrolean population, according to their urban, predominantly urban and rural residency, as well as cultural background. Evidence deriving from the statistical analysis of the survey showed that spatial and cultural characteristics of consumers influence their preferences towards local food.

Specific results regarding the reasons are consistent with previous studies, confirming quality as a decisive attribute to take into account in the purchase of local food. This attribute, as well as regional provenance and the preference of direct contact with farmers, emerged as relatively more important for rural consumers. These findings show important aspects to consider in marketing local food in the region, since the relation with local food appears relatively stronger for rural compared to urban respondents. It follows that accessibility barriers and more targeted promotion of local food within the urban community is needed to increase the outreach of local food across consumers. Differences exist with respect to expenditure levels across spatial typologies indicating that higher proportions of rural and predominantly urban consumers spend approximately in the range 20–50 Euro, compared to urban ones.

Differences in the cultural background of respondents significantly influence the meanings and definitions associated with local food. The major findings show that the German and Italian language groups associate local food with the region of South Tyrol and specific products respectively. These results highlight the importance of non-material concerns in shaping the individual concept of local food. Furthermore, the results of the paper reaffirm the stark perceived relation of local food with a specific region of production.

In order to explore additional relations and attributes in more depth, related to the purchase of local food, further research would consider a wider population sample and more specific economic indicators e.g. household income. Furthermore, future studies undertaking similar consumers surveys, should take into account an adequate distribution of demographic characteristics such as age and gender across the analysed groups, to control the risk of correlations between independent variables, which as the authors of the present study acknowledge may partly influence specific results.

#### REFERENCES

- Adams, D. C. Adams, A. E. (2011) De-placing local at the farmers' market: Consumer conceptions of local foods. *Journal of Rural Social Sciences*, 26, 74–100. http://dx.doi.org/10.1017/S1742170510000219
- Adams, D. C. Salois, M. J. (2010) Local versus organic. A turn in consumer preferences and willingness-to-pay. *Renewable Agriculture and Food Systems*, 25, 331–334. http://dx.doi.org/10.1017/S1742170510000219
- Arsil, P. Li, E. Bruwer, J. (2014) Perspectives on consumer preceptions of local food: a view from Indonesia. *Journal of international Food & Agribusiness Marketing, 26,* 107–124. http://dx.doi.org/10.1080/08974438.2012.755725
- Askegaard, S. Madsen, T. K. (1998) The local and the global: exploring traits of homogeneity and heterogeneity in European food cultures. *International Business Review, 7*, 549–568.
- Autio, M. Collins, R. Wahlen, S. Antilla, M. (2013) Consuming nostalgia? The appreciation of authenticity in local food production. *International Journal of Consumer Studies, 37,* 564-568. http://dx.doi.org/10.1111/ijcs.12029
- Bellows, A. C. Alcaraz, G. V. Hallmann, W. K. (2010) Gender and food, a study of attitudes in the USA towards organic, local, U.S. grown, and GM-free foods. *Appetite*, *55*, *540-550*. http://dx.doi.org/10.1016/j.appet.2010.09.002
- Brown, S. Dury, S. Holdsworth, M. (2009) Motivations of consumers that use local, organic fruit and vegetable box schemes in Central England and Southern France. *Appetite*, 53, 183–188.
- Brown, C. (2003) Consumers' preferences for locally produced food: A study in southeast Missouri. *American Journal of Alternative Agriculture*, 18, 213–224.
- Burchardi, H. Schröder, C. Thiele , H. D. (2005) Willingness-To-Pay for food of the own region: Empirical estimates from hypothetical and incentive compatible settings. In *American Agricultural Economics Association annual meeting*, Rhode Island, USA, July 24–27, 2005, online available at: http://ageconsearch.umn.edu/bitstream/19365/1/sp05bu02.pdf [Accessed 09.08.2016]
- BLS [Business Location Südtirol] (2015) South Tyrol: The Economy. Bolzano: Business.
- Location Südtirol Alto Adige 2015. Available at: http://www.bls.info/upload/file/South\_Tyrol.\_The\_Economy\_web%5B0%5D.pdf [Accessed 04-04-16]
- Chambers, S. Lobb, A. Butler, L. Harvey, K. Traill, W.B. (2007) Local, national and imported foods. A qualitative study. *Appetite*, 49, 208-213. http://dx.doi.org/10.1016/j.appet.2007.02.003
- Cholette, S. Ozluk, O. Ozsen, L. Ungson, G.R. (2013) Exploring purchasing preferences: Local and ecologically labelled foods. *Journal of Consumer Marketing*, 30, 563–572.
- Cohen, M. J. Murphy, J. (eds) (2001) Exploring sustainable consumption. Environmental Policy and the Social Science. Oxford: Elsevier.
- Conner, D. Colasanti, K. Brent Ross, R. Smalley, S.B. (2010) Locally grown foods and farmers markets: consumer attitudes and behaviors. *Sustainability*, 2, 742-756. http://dx.doi.org/10.3390/su2030742
- Cranfield, J. Henson, S. Blandon, J. (2012) The effect of attitudinal and sociodemographic factors on the likelihood of buying locally produced food. *Agribusiness*, 28, 205–221.
- Csurgó, B. Megyesi, B. (2015) Local food production and identity. Interdependency of development tools and results. socio.hu *Social Science Review. Special Issue No. 3*, 167–182. http://dx.doi.org/10.18030/socio.hu.2015en.167
- Cullen, F. Kingston, H. (2009) Analysis of urban and rural consumer behaviour toward new food products using a food-related life-style instrument. *Journal of Foodservice Business Research*, 12, 1, 18–41.
- Darby, K. Batte, M. T. Ernst, S. Roe, B. (2008) Decomposing local: A conjoint analysis of locally produced food. *American Journal of Agricultural Economics*, 90, 476–486.
- Denver, S. Jensen, J. D. (2014) Consumer preferences for organically and locally produced apples. *Food Quality and Preference*, 31, 129–134.
- Dolan, P. (2002) The sustainability of "sustainable consumption". *Journal of Macromarketing*, 22: 170–181. http://dx.doi.org/10.1177/0276146702238220
- Falguera, V. Aliguer, N. Falguera, M. (2012) An integrated approach to current trends in food consumption. Moving toward functional and organic products? *Food Control, 26,* 274–281. http://dx.doi.org/10.1016/j.foodcont.2012.01.051
- Feldmann, C. Hamm, U. (2015) Consumers' perceptions and preferences for local food: A review. *Food Quality and Preference*, 40, 152–164. http://dx.doi.org/10.1016/j.foodqual.2014.09.014
- Fieldhouse, P. (1995) Food and Nutrition: Customs and Culture. Second Edition, Springer US.
- Galli, F. Bartolini, F. Brunori, G. Colombo, L. Gava, O. Grando, S. Marescotti, A. (2015) Sustainability assessment of food supply chains: And application to local and global bread in Italy. *Agricultural and Food Economics*, 3, 1–17. http://dx.doi.org/10.1186/s40100-015-0039-0.

- García, T. Grande, I. (2010) Determinants of food expenditure among older consumers. The Spanish case. *Appetite*, 54, 62–70. http://dx.doi.org/0.1016/j.appet.2009.09.007
- Gracia, A. Barreiro-Hurlé, J. López-Galán, B. (2014) Are local and organic complement or substitutes labels? A consumer preferences study for eggs. *Journal of Agricultural Economics*, 65, 49–67. http://dx.doi.org/10.1111/1477-9552.12036
- Gracia, A. De Magistris, T. Nayga, R. M. (2012) Importance of social influence in consumers' willingness to pay for local food: Are there gender differences? *Agribusiness*, 28, 361–371.
- Grunert, K. G. Hieke, S. Wills, J. (2015) Sustainability labels on food products: Consumer motivation, understanding and use. *Food Policy*, 44, 177–189. http://dx.doi.org/10.1016/j.foodpol.2013.12.001
- Guerrero, L Guàrdia M.D. Xicola, J. Verbeke, W. Vanhonacker, F. Zakowska-Biemans, S. Sajdakowska, M. Sulmont-Rossé, C. Issanchou, S. Contel, M. Scalvedi, M.L. Signe Granli, B. Hersleth, M. (2009) Consumer-driven definition of traditional food products and innovation in traditional foods. A qualitative cross-cultural study. *Appetite*, *52*, 345–354. http://dx.doi.org/10.1016/j.appet.2008.11.008
- Heiss, H. (2010) La Provincia di Bolzano modello di un'autonomia riuscita? In Kreisel, W. Ruffini, F. V. Reeh, T. Pörtge, K. H. (eds.) Südtirol Alto Adige. Eine Landschaft auf dem Prüfstand. Un Paesaggio al banco di prova. Tappeiner AG, 200–209.
- Hempel, C. Hamm, U. (2016a) How important is local food to organic-minded consumers? *Appetite*, 96, 309–318. http://dx.doi.org/10.1016/j.appet.2015.09.036
- Hempel, C. Hamm, U. (2016b) Local and/or organic: a study on consumer preferences for organic food and food from different origins *International Journal of Consumer Studies*, 00, 00–00. http://dx.doi.org/10.1111/ijcs.12288
- Hu, W. Batte, M.T. Woods, T. Ernst, S. (2012) Consumer preferences for local production and other value-added label claims for a processed food product, *European Review of Agricultural Economics*, 39(3), 489–510.
- Khan, F. Prior, C. (2010) Evaluating the urban consumer with regard to sourcing local food: a Heart of England study. *International Journal of Consumer Studies*, 34, 161–168. http://dx.doi.org/10.1111/j.1470-6431.2009.00836.x
- Lockeretz, W. (1986) Urban Consumers' Attitudes Towards Locally Grown Produce, *American Journal of Alternative Agriculture*, 1, 83–88
- Martinez, S. et al. (2010) Local Food System. Concepts, Impacts, and Issues. ERR 97, US Department of Agriculture, Economic Research Service, May, 2010.
- Megicks, P. Memery, J. Angell, R. (2012) Understanding local food shopping: unpacking the ethical dimension. *Journal of Marketing Management*, 28, 264–289.
- Memery, J. Angell, R. Megicks, P. Lindgreen, A. (2015) Unpicking motives to purchase locally-produced food: analysis of direct and moderation effects. *European Journal of Marketing*, 49, 1207–1233. http://dx.doi.org/10.1108/EJM-02-2014-0075
- Mirosa, M. Lawson, R. (2012) Revealing the lifestyles of local food consumers. *British Food Journal*, 114: 6. http://dx.doi.org/10.1108/00070701211234345
- Montanari, M. (1994) The culture of food. Oxford: Blackwell.
- Naspetti, S. Bodini, A. (2008) Consumer perception of local and organic products: Substitution or complementary goods? *The International Journal of Interdisciplinary Social Sciences*, 3.
- Nistor, L. (2015) Discourse about the meaning of the local food. Investigation in Romanian urban contexts. *Socio.hu Social Science Review.* Special Issue No. 3. 128–144. http://dx.doi.org/10.18030/socio.hu.2015en.128
- Onozaka, Y. McFadden, T. D. (2011) Does local labelling complement or compete with other sustainable labels? A conjoint analysis of direct and joint values for fresh produce chains. *American Journal of Agricultural Economics*, 93, 693–706.
- Pelletier, J. E. Laska, M. N. Neumark-Sztainer, D. Story, M. (2013) Positive attitudes toward organic, local, and sustainable foods are associated with higher dietary quality among young adults. *Journal of the Academy of Nutrition and Dietetics,* 113, 127–132.
- Pirog, R. S. (2003) Ecolabel Value Assessment: Consumer and Food Business Perceptions of Local Foods. *Leopold Center Pubs and Papers*, Paper 134. Available at: http://lib.dr.iastate.edu/leopold\_pubspapers/134 [Accessed 09.08.2016]
- Pratt, J. (2007) Food values. The local and the authentic. Critique of Anthropology, 27, 285–300.
- Provincia Autonoma di Bolzano- Alto Adige (2015) I gruppi linguistici. Available at: http://www.provinz.bz.it/729212/it/autonomia/gruppi-linguistici.asp [Accessed 05-08-2016].
- Racine, E. F. Munfold, E. A. Laditka, S. B. (2013) Understanding characteristics of families who buy local produce. *Journal of Nutrition Education and Behavior*, 45, 30–38.http://dx.doi.org/10.1016/j.jneb.2012.04.011
- Roininen, K Arvola, A. Lähteenmäki, L. (2006) Exploring consumers' perceptions of local food with two different qualitative techniques: Laddering and word association. *Food Quality and Preference*. 17, 20–30.

- Rozin, P. (1990) The importance of social factors in understanding the acquisition of food habits. In Capaldi, E. D. Powley, T. L. (eds.) *Taste, experience, and feeling.* Washington, DC, US: American Psychological Association, 255–269.
- Schwarz, J. Schuster, M. Annaert, B. Maertens, M. Marthijs, E. (2016) Sustainability of Global and Local Food Value Chains: An Empirical Comparison of Peruvian and Belgian Asparagus. *Sustainability*. http://dx.doi.org/10.3390/su8040344
- Stolz, H. Stolze, M. Janssen, M. Hammb, U. (2011) Preferences and determinants for organic, conventional and conventional-plus products The case of occasional organic consumers. *Food Quality and Preference*, 22, 772–779. http://dx.doi.org/10.1016/j. foodqual.2011.06.011
- Taillie, L. Jaacks, L. (2015) Toward a just, nutritious, and sustainable food system: The false dichotomy of localism versus supercenterism. *The Journal of Nutrition*, 145, 1380–1385.
- Tregear, A. Ness, M. (2005) Discriminant analysis of consumer interest in buying locally produced foods. *Journal of Marketing Management*, 21, 19–35.
- Weatherell, C. Tregear, A. Allinson, J. (2003) In search of the concerned consumer: UK public perceptions of food, farming and buying local. *Journal of Rural Studies*, 19, 233–244. http://dx.doi.org/10.1016/S0743-0167(02)00083-9.
- Wirth, F. F. Stanton, J. L. Wiley, J. B. (2011) The relative importance of search versus credence product attributes: organic and locally grown. *Agricultural and Resource Economic Review*, 21, 495–503. http://purl.umn.edu/106064.
- WIFO [Institut für Wirtschaftsforschung]. (2011) Eine Wirtschaftlich-soziale und demographische Analyse Südtiroler Gemeinden.

  Bolzano/Bozen, Italy: Institut für Wirtschaftsforschung der Handelskammer. Available at: http://www.hk-cciaa.bz.it/sites/default/files/uploaded\_files/IRE\_ricerca\_economica/Pubblicazioni/15136\_Wirtschaftlichsoziale\_demografische\_Analyse.pdf
  [Accessed 19-05-16]
- Wawrzyniak, J. Jader, K. Schade, G. Leitow, D. (2005) Consumers' attitudes and behaviour in relation to regional products results of empirical research in Germany and Poland. *Ekonomica*, 4, 145–161.
- Wolf, M. M. (1997) A target consumer profile and positioning for promotion of the direct marketing of fresh produce: A case study. Journal of Food Distribution Research, 28, 11–17.
- Yue, C. Tong, C. (2009) Organic or local? Investigating consumer preference for fresh produce using a choice experiment with real economic incentives. *HortScience*, 44, 366–371.
- Zepeda, L. Deal, D. (2009) Organic and local food consumer behavior: alphabet theory. *International Journal of Consumer Studies*, 33(6), 697-705.
- Zepeda, L. Li, J. (2006) Who buys local food. Journal of Food Distribution Research, 37(3), November.