A methodology for mapping consumer preferences for local products: The case of the Capicollo Azze Anca Grecoanico Slow Food-Calabria

This report has the purpose to investigate on motivations that drive consumers towards purchasing cold cuts and in particular Capicollo Azze Grecoanico Slow Food (through a survey carried out in Calabria). The research provides also an analysis of the producers. A Multiple Correspondence Analysis has provided consumer’s motivational profiles. Furthermore, a Logit regression allowed us to evaluate the relationships between individual motivations and some socio-demographic characteristics of local cold cuts and capicollo consumers. The results show a consumers’ propensity to the link between territory and product quality and the importance related to food security. The results are useful for the implications of the choices, the actions and policies of marketing that can offer.

1. Introduction

In Europe, 30-50% of the member states’ total volume of butchered meat is used as an ingredient for processed food products (primarily in minced meat, meat based preparations, and meat based products). In total it is estimated that approximately 70% of the production volume of processed meats is constituted by pig meat, followed by poultry (18%), beef (10%), and other types of meat (2%). The EU meat processing industry involves more than 13,000 companies, employs around 350,000 people, and represents a market of 85 billion euro (European Commission, 2013). The meat processing sector in the EU is characterised by a low level of concentration, with a preponderance for highly specialised small and medium-sized enterprises (approximately 90% of production). Furthermore, the supply chain of pork used as an ingredient is very long and complex, and comprises various production and marketing phases for the end products that function independently and with little vertical integration.

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In this context, a strong point of Italian food production is represented by the typical cold cuts with marked PDO and PGI\(^2\), territorial connotations and other recognised marks of quality, such as Slow Food and ‘Libera Terra’. For this reason, the European Union establishes some precise rules for their protection, providing for the creation of specific normative regimes of quality, to protect the consumer’s good faith and to give manufacturers some concrete tools to identify and promote the best products with specific characteristics, as well as to protect them from unfair practices.

In 2014, the exports of Italian cold cuts have even increased. According to ISTAT, in 2014, our exports have reached 148,830 tons (+4.7%) with a record turnover of 1,260 billion euro (+ 6.3%). A good result in terms of volume and especially in terms of values, developed in a context characterised by the crisis and the increase in non-tariff barriers (US and Russia).

Another point of strength is the growing interest from new non-EU countries in imports of Italian cold cuts and made in Italy products. However, there is strong competition in the cold cuts/sausage market from other EU producers (Germany, Denmark, Spain) on one hand, and weak protection of Italian processed products on the other, as is evidenced by the presence of numerous imitations and counterfeits (Nicoletti et al., 2007; Vecchio and Annunziata, 2011). Calabria boasts a great number of food and wine specialities that animate an import-export market of quality agri-food products. Amongst the cold meats, a prominent place is held by those from Calabria (‘soppressata’, ‘salsiccia’, ‘capicollo’ and ‘pancetta’), typical pig-meat based products of ancient tradition which attained the PDO mark in 1998.

Against official data that reveal a consistency of pig numbers in Calabria amounting to 51,209 heads (ISTAT, 2010), according to reliable estimates about 130,000 pigs are reared in Calabria, 25,000 of which are intended for the production of charcuterie (ARSSA, 2008). Currently, the breed of black Apulo Calabrese pig amounts to about 3,000 animals reared across forty companies, supplying excellent quality meat primarily destined for processing, for the production of typical regional cold cuts, and also PDO (salsiccia, soppressata, capicollo e pancetta). It is a breed of great hardiness and medium-large size, characterised by a remarkable frugality and versatility that is well adapted to marginal areas. The outdoor farming system, semi-wild, and with limited investments, allows for a low environmental impact and is in line with the prin-

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\(^2\) The PDO and PGI products represent the best of European agro-food production and each is the result of a unique combination of human and environmental factors, characteristic of a given area. Regulation (EU) 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs (are hereby repealed Reg. 509/2006 and 510/2006).
ciples of environmental sustainability and animal welfare (set out under Legislative Decree 122/2011). The Rural Development Plan of the Calabria Region has provided lines of aid and intervention for the spread of extensive environmentally-friendly pig breeding, and for the promotion of typical high quality pig meat products, from which premium products of the traditional Calabrian butchery are obtained (the four PDO Calabresi salami, the Capicollo Azze Anca Grecanico, and other quality products) (Micari et al., 2007; Nicolosi et al., 2009). The black Apulo Calabrese pig is used for the production of the Slow Food protected Capicollo Azze Anca Grecanico. This ‘capicollo’ (using meat from the thigh), locally called ‘Capicoddho Azze Anca’, was particularly influenced by the cultural impression left by the ancient Greek civilisation.\(^3\)

The Association Slow Food through the Presidium supports small traditional and excellent products endangered and works around the world to protect food biodiversity and build links between producers and consumers. It is representative of a production area, a culture and made in respect of biodiversity with sustainable and environmentally friendly technologies.

In the light of these considerations, this paper aims at investigating on motivations that drive consumers towards purchasing cold cuts and in particular Capicollo Azze Grecanico Slow Food.

### 2. Background

In recent years we have seen an increased interest of consumers in products adhering to the requirements of social, environmental and economic sustainability. Changes in consumption and the tendency to behave in a responsible, moral and socially active manner orientate consumers to a different qualitative value (Rozin, 2006; Idda et al., 2008).

In Italy, the behaviour of food consumption has been characterised by a strong regional tradition and a keen sense of conviviality. The origins of this food habit can be found in the particular socio-economic development of Italy more than in other countries. Political fragmentation and social and economic situation caused a marked development and varied local products and food uses. There was a gradual abandonment of the ritual dimension of food. The

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\(^3\) The Slow Food Italian presidi number 230, and involve more than 1,600 small producers: farmers, fishermen, butchers, herders, cheesemakers, bakers, and pastry chefs. The ‘Slow Food’ mark appears on product labels to better identify them on the market. Slow Food operates all over the world, has collected 1,400 traditional products at risk of extinction in the Ark of Taste, and has initiated over 400 practical projects for the protection of sustainable food production worldwide (<www.slowfood.it>).
causes of these changes lie in the changes in the pace of life and the spread of different consumption patterns, and in a progressive loss of contact of the consumer with the territory and its products.

Recently, however, the Italian consumer has shown a greater autonomy in his choices and purchases, trying to optimise the price-quality ratio of products, whilst also taking into account the place of origin and typicality⁴ (Piccinini and Chang Thing Fa, 2001; Fabris, 2003).

A significant role has had the recognition by UNESCO of the Mediterranean diet as intangible cultural heritage of humanity. The Mediterranean diet involves a set of skills, knowledge, rituals, symbols and traditions concerning crops, harvesting, fishing, animal husbandry, conservation, processing, cooking, and particularly the sharing and consumption of food.

Moreover, in many cases the consumer is tending more and more to organise his buying habits critically and ethically, and to prefer products that meet certain quality standards whilst promoting the defense of the common good, environmental sustainability, and human dignity (Pascucci, 2010; Annunziata and Scarpato, 2014). If on the one hand, consumers are likely to explore the link between the territory and product quality (in terms of differentiated products and high cultural-historical value), in many cases also choosing the point of sale in which to make the purchase, on the other hand, rural communities are reorganising themselves in an effort to increase the value of their production by developing a network system and alternative food community (Presidio Slow Food/Fish, Groups of solidarity action, short supply chains, e-commerce, biological products, PDO, PGI, etc.).

It has long been discussed as to whether the red meat is really bad for health, especially if transformed.

In the case of cold cuts there is an addition of nitrites from which then originate nitrosamines, toxic to humans (additions that should be kept under control), while in the case of red meat, the cooking leads to the formation of dangerous substances, such as aromatic amines or polycyclic aromatic hydrocarbons, all potentially carcinogenic substances that can be harmful if you overdo it with the amount.

All of these substances are not present in typical meats, in particular for the craft products because there are only additives of natural origin (chilli, salt, fennel, etc.).

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⁴ The Italian shopping cart is becoming ever more ‘socially engaged’, with those who bought products from socially responsible companies increasing by 12% compared to the previous year. 45% said they were willing to spend more on services or products originating from companies that follow social responsibility programs, and 53% expressed a preference for working in a company that has a positive social and environmental impact (Bolognani, 2014).
New structures of governance, organisations, and institutions are emerging which focus on the innovation and on the enhancement of the agri-food sector. This phenomenon is still developing, and is increasingly gaining the interest of scholars, both from a theoretical point of view, and from those approaches based on case studies and on methodologies of innovative research (Cembalo, 2015).

The search for an environmentally aware consumer involves broad aspects of social life, and the desired quality in agricultural food production has taken on different and wider connotations. Buying a product, in short, involves not only simple economic considerations, such as the quality to price ratio, but also an ever growing concern amongst consumers about the social conditions under which certain goods are produced.

Spurred on by this strong pressure from consumers regarding ethics, ecology, and respect for ‘social norms’, many companies are modifying their behaviour, and can no longer expect to implement policies that are contrary to these principles that hold a central role in the choice of purchasing of food product, without seeing a reaction from consumers, or at least some of them. Experience shows that it is possible to introduce positive behaviour in companies, such as their adoption of codes of conduct or of union agreements to protect workers in terms of a general revaluation of the quality of life, to protect the environment, to care for social relations, and to defend the common good. The producer allies himself strongly with the consumer who orients the market, and has himself become the key expert and image for the diffusion of the concept of quality.

The direct relationship that develops between producers and consumers is aimed at reassuring the origin, quality, and control of food products, and is based on a rigorous system of traceability, reliability, and seriousness of the brands, supply alternative networks and network marketing (Renting et al., 2003; Aguglia et al., 2009; Bouguerara et al., 2009).

Food Community Networks (FCN) are growing worldwide (Lombardi et al., 2012; Favilli et al., 2015), and define those systems and organisational models that provide a direct seller/purchaser relationship between producers and consumers, resulting in clear benefits for consumers, for the producers, and for the community at large. They concern the relationship of trust that is established between the consumer and the producer to guarantee the product being purchased, to the point that a formalised certification may not be necessary (Aguglia et al., 2009; Cicatiello and Franco, 2008; Pascucci, 2007). Moreover, reductions in transactional costs are achieved by reducing the number of intermediaries (van der Ploeg, 2006; Cicatiello and Franco, 2008). Companies can increase their market power by selling even small quantities of product. The community benefits from the reduction in energy costs of transport and
product packaging (Bougherara et al., 2009), the territory benefits from the development and the enhancement of the production areas, it favours the defense of the local varieties and the traditional transformation processes of the territory (Battershill and Gilg, 1998).

In this study, the functional integration between the production, consumption, and enhancement of the territory is considered to be an important source of strength for the small traditional productions that are at risk of disappearing (Nicolosi et al., 2014), and the research has therefore focussed on the ‘rural system’ where the Capicollo Azze Anca Grecanico is realised, and the socio-economic, scenic, gastronomic, and touristic resources/potentiality are present. The Hellenism in Calabria has ancient roots that are not limited to the medieval Greek communities of the old Magna Graecia region, but are bound to the history of the ‘Duchy of Calabria’, an ancient possession of the Byzantine Empire of which the region was an outpost for centuries. A line of unbroken historical-linguistic continuity ties the first Greek colony with the Ellenofoni communities of Aspromonte of the present day. In the whole of Calabria, and in the area of study in particular, there are traces of this linguistic and cultural presence: in the place names, the dialects, the ethno-anthropological world, etc.

The Grecanic area is located in the most southerly part of the province of Reggio Calabria, in the extreme tip of the Italian peninsula, where the Apennine chain ends almost overhanging the sea. Here the sea and the mountain characterise the territory of the Aspromonte, with lush woods, and medieval villages perched on the southern slopes facing the sea. The coastline is characterised by long beaches of sand and gravel, many of them deserted and scarcely populated even in summer. The products and the cuisine reflect the mixture of cultures and traditions that have come and gone over the centuries, from the earliest times. The cuisine of the Greeks of Calabria is a pastoral one, not particularly sophisticated, but genuine: a true reflection of a community forced to live for so long in conditions of economic and social hardship and in harsh or even inaccessible territories. Among the meats, a key element was certainly the goat (and sheep) along with the pig. In the traditional world the rearing and processing of pork had a central importance, and maintains a strong hold over the common domestic rearing practices of today.

3. Methodology

The analysis takes into account the characteristics of sustainable development (environmental, social, and economic), such as those of the preservation of native breeds at risk of extinction, the recovery of traditional processing techniques and their transmission to future generations, and the market refer-
ence and type of marketing approach. We have therefore identified and inter-
viewed producers who adhere to the Presidio, and who maintain real micro-
chains within the territory. These are companies with an estimated number of
1,500 slaughtered animals. Since from each garment you can get two ‘capicoll-
i’, each of whom has a weight of 2 kg just pulled that lose 30% of the weight.
It is sold full piece or divided further into 2 parts, this also serves to prove the
success of seasoning.

Central to the study are the consumers, seen as independent experts, who
are analysed in terms of the economic, sociological, cultural, and psychologi-

cal factors that determine variations in their purchasing behaviour in time
and space. The decision to study and analyse a specific and quality product
came from the observation of the current trend towards buying typical foods,
and the propensity of consumers to explore the links between territory and
quality in terms of differentiated products that have a high historical-cultural
value on one hand, and the promotional policies for products with a careful
examination of the economic space in which the examined product grows and
develops, on the other (Oostindie et al., 2016).

With reference to the market for the consumption of the Capicollo Azze
Anca Grecanico, a survey was conducted through the formulation and admin-
istration of a semi-structured questionnaire, comprising free and/or pre-for-
mulated responses, to a panel of 250 consumers intercepted and interviewed
in the Grecanic area of the province of Reggio Calabria. For the administra-
tion of the questionnaires, in order to intercept consumers of different types
and purchasing capacity, two retail outlets, a point of retail sale, a local mar-
ket, and four local food events were selected. The questionnaires were admin-
istered in larger gatherings. The face to face interviews were carried out be-
tween May 2014 and October 2015. The valid and controlled questionnaires
which were subjected to processing numbered 236. The questionnaire was di-
vided into two parts. The first focussed on the respondents’ knowledge of the
marks of protection, consumption, availability and frequency of purchase of
cold cuts/capicollo and the Capicollo Azze Anca Grecanico in particular, the
motivations of the consumer, and the price. The second part of the question-
aire included questions that identified the type of consumer and his socio-
demographic characteristics (habits of consumption and purchasing, food
tastes, age, gender, and educational level).

The database of collected data was processed, analysed, and initially inter-
preted through descriptive analysis to highlight the principal characteristics
and then making use of Multiple Correspondence Analysis (MCA) and the
logit model. The software used was SPSS (version 20). MCA is used to analyse
a set of observations described by a set of variables, coded as binary variables
(1 and 2). We remand to Abdi and Valentin, 2007, Greenacre, 1984, Graça
J. et al., 2015 for more detailed information on MCA properties and goals. Through a representation in a low-dimensional space-designed on the basis of a few major components (Abdi and Valentin, 2007; Mäkiniemi et al., 2011), we aimed at defining some profiles of consumers for Capicollo Azze Anca Greccanico.

MCA allows to analyse the pattern of relationships of several categorical dependent variables. By a technical point of view, MCA is used to analyze a set of observations described by a set of nominal variables. Each nominal variable comprises several levels, and each of these levels is coded as a binary variable (1 and 2). MCA aims at attributing factor scores to each observation and to each category in order to represent relative frequencies in terms of the distances between individual rows and/or columns in a low-dimensional space (Hair et al., 2010). MCA is obtained by using a standard correspondence analysis on an indicator matrix (X). This is a J x M matrix where Jk is the vector of the levels for each K nominal variable (with \( \Sigma J_k = J \)), and M is the number of observations. Performing MCA on X will provide two sets of factor scores: one for the rows and one for the columns. These factor scores are in general scaled such that their variance is equal to their corresponding eigenvalue. In MCA, proximities are meaningful only between points from the same set (i.e., rows with rows, columns with columns). In other terms, when two row points are close to each other they tend to select the same levels of the nominal variables (Idda et al., 2008). However, we need to distinguish two cases: 1) the proximity between levels of different nominal variables means that these levels tend to appear together in the observations; 2) because the levels of the same nominal variable cannot occur together, the proximity between levels means that the groups of observations associated with these two levels are themselves similar.

In this study, analysis should allow us to put on evidence relationship between the six individuated motivations that lead cold cuts consumer choices. Through a representation in a low-dimensional space – designed on the basis of few principal components – we aimed at defining some clusters (profiles) for cold cuts consumers.

In this study, MCA is carried out by building a J x M indicator matrix (X), where Jk = 2 (yes or no sensitivity for each motivation) is the vector of the levels for each K nominal variable; K = 4 are the nominal variables represented by the number of motivations and M = 236 are the number of observations.

They have been applied to identify and analyse the main explanatory variables and in particular to highlight the distinctive attributes that most influ-

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5 For its inherent nature, MCA can be also viewed as a generalization of principal component analysis when the variables are categorical instead of quantitative.
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ence the decision making of consumers to purchase a traditional product (Resano et al., 2011). For a discussion of the methodology, see Idda et al. (2008). A description of the $x_i$ variables referred to each interviewed consumer is included in Table 1. The objective of this analysis was linked to the necessity to focus on fields in which to operate in order to prepare interventions in line with the expectations and with the needs of consumers and producers, also through the interaction of agribusiness marketing and territorial plans.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>Motivation</td>
<td>$P$ it assumes a value equal to 2 in case of positive answer to the question, and 1 otherwise</td>
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<tr>
<td>Importance of origin area</td>
<td>$X_1$ it reflects the question: It considers is important to the origin area of the CAA? $1 = No; 2 = Yes$</td>
</tr>
<tr>
<td>Knowledge Slow food</td>
<td>$X_2$ it reflects the question: Why do you buy CAA? $1 = No; 2 = Yes$</td>
</tr>
<tr>
<td>Experience</td>
<td>$X_3$ I usually buy it $1 = No; 2 = Yes$</td>
</tr>
<tr>
<td></td>
<td>I purchase it on advice of others: $1 = No; 2 = Yes$</td>
</tr>
<tr>
<td>Gender</td>
<td>$X_4$ 1 if male, 2 if female</td>
</tr>
<tr>
<td>Education</td>
<td>$X_5$ 1 = primary school; 2=intermediate school; 3 = high school; 4 = graduate college (or post-graduate education)</td>
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<td></td>
<td>$1 = 18-29 years old; 2 = 30-39 years old;</td>
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<tr>
<td>Age</td>
<td>$X_6$ 3 = 40-49 years old; 4 = 50-59 years old; 5 = 60-69 years old; 6 = more than 70 years old</td>
</tr>
</tbody>
</table>

**Logit model.** Logit is a regression model commonly used in settings where the dependent variable is binary. Generally, in analyses carried out from surveys, dependent variable is a yes/no answer to the administrated question and the dependent variable reflects probability of observing a positive answer. Therefore, the empirical specification of the binary yes/no choice can be formulated in these terms (Idda et al., 2008):

$$P(Yes|x_i) = F_\eta(Z_i) = F_\eta(\alpha + \beta x_i) = \frac{1}{1 + e^{-Z_i}}$$

(1a)

where $P_i$ is the probability of observing a positive answer; $F_\eta$ is the value of logistic cumulative density function associated with each possible value of the
underlying index $Z_i$; $X_i$ is a vector of independent explanatory variables; $\alpha$ is the intercept; $\beta$ is a vector of unknown parameters, and:

$$Z_i = \log\left(\frac{P_i}{1 - P_i}\right) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_n x_n + \varepsilon \quad (1b)$$

In the light of (1), the developed model was described as follows: (2) Motivation ($\text{Yes} | x_i$) = $\alpha + \beta_1 \text{Importance of origin area} + \beta_2 \text{Knowledge} + \beta_3 \text{Experience} + \beta_4 \text{Gender} + \beta_5 \text{Education} + \beta_6 \text{Age}$.

Analyses were performed using IBM SPSS Statistics (version 20).

4. Results

4.1 Production techniques of Capicollo Azze Anca

The farmers who produce the Capicollo Azze Anca use pigs from the Gre- canic area, and in particular the black Calabrese pig, an endangered native breed. The production is carried out mainly in the municipalities of: Bova, Condofuri, Melito di Porto Salvo, Palizzi and Motta San Giovanni. Pigs are reared in a semi-wild state, and fed according to a rigorous discipline that pro- vides for cereals, fodder, tubers, and beans, and does not allow use of animal meal, silage, and GMOs. The processing follows a precise production technol- ogy that achieves the characteristic Capicollo Azze Anca. On the production process of the Capicollo Azze Anca Grecanico, the thigh muscle of the pigs is used. The processing cycle runs as follows:

- **Storage of the meats:** controlled temperature between 3-3.5°C. In order to ensure the traceability of the processed products, each half carcass is assigned a lot number (which will also appear on all products derived from it), carefully noted in special registers. The carcasses remain hanging in the refrigerator for at least 24 hours.

- **Sectioning and portioning of the half carcass** (at a temperature of 16°C and humidity of 70-75%).

- **Removal of the skin and cutting fat slices; boning of thigh; grooming and dis- section of thigh; grooming of muscle; salting and brine.**

- **Resting of muscle and slicing of the fat in cold room under brine:** for a pe- riod of about 70 hours, during which the Capicollo is manually massaged.

- **Addition of aromas and fat slices:** red chilli flakes, half grain black peppers, and whole seeds of wild fennel are added to the carcass, which is then clad with slices of the fat extracted from the brine and inserted into a net casing, tightly tied with an elastic cord, so as to facilitate the escape of excess liquids and allow proper maturation.
Binding: the binding operation determines both the compactness of the sausages and its organoleptic characteristics in general. A good adhesion of the fat slices to the muscle, moreover, is indispensable to avoid the onset of oxidation, which could irretrievably compromise the healthiness and goodness of the product.

Ageing in cold room: on completion of the binding, the Capicollo Azze Anca is hung for a period of maturation, varying, according to the size of the product, from between 180 and 210 days, in special curing premises, in which, in compliance with the regulations in force, temperature and humidity are maintained within values ranging between 13-20°C and 70-80%, respectively. Efficient ventilation ensures adequate change of air. During the entire course of maturation, each capicollo is subjected to a thorough inspection, being turned once a day for the first 10 days and, subsequently, twice a week.

Labelling: the Capicollo Azze Anca Grecanico is released to the market only if it has undergone the minimum period of ageing, and after the affixing of the label which is compiled according to the regulations, for the traceability of the product. At the end of the curing period, the capicollo should ideally weigh between 1.5 and 2.5 kg, and in any case, never less than one kilogram. The loss from ageing varies from between 37 and 47%.

Storage in maintenance room: for the maturation phase, the ‘capicolli’ are arranged in appropriate locations in which the parameters that influence the curing (temperature, humidity, air change) are constantly monitored. The production of Capicollo Azze Anca Grecanico sold under the Slow Food mark is currently limited in extent, and it is focussed mainly on the local market. It is estimated a production of 3,000 capicolli a year with a weight of about 1,200/1,300 grams each one. Increasing amounts of the product are sold on the domestic and international market. The sale price is € 18.00 per kg.

4.2 Consumer habits in a sample area

The results of a market survey carried out in the area of investigation are reported in order to verify the strength and image of the brand, and to measure the degree of acceptance and the importance it has for consumers as a local product that is strongly anchored to the local and regional food traditions and that, at the same time, fulfils the requirements for social, environmental and ethical sustainability, etc. (Pascucci, 2010) in line with the new food trends that highlight the importance of disintermediation, ethics, responsibility of consumption, the report, and of the experience. The consumers of capicollo interviewed in the survey have a medium-high cultural level (58.9% are graduates) and for the most part consume capicollo regularly. Of the 236 re-
spondents, most fall within the 30-39 age group (34.3%) and between 18-29 (22.9% of the sample). They have a very good knowledge of organic products (94.1%), PDO (83.9%) and GPO (68.2%). Analysis showed that the PDO and PGI logos are commonly the main purchasing motivation for shoppers with an excellent knowledge of the EU certification labels, while consumers with no knowledge of the European origin trademarks tend to base their decision to buy on the product’s lower price, better appearance and Italian origin (Vecchio and Annunziata, 2011). 39.8% of respondents know the Slow Food mark for products, and 35.6% the ‘Libera Terra’ mark for products originating from land confiscated from the mafia (Tab. 2, Tab. 3). From an initial examination of the answers given by the respondents, it emerges that almost all (98.3%) consume cold cuts regularly (89.8%) or occasionally (8.5%). Consumers consume regularly Capicollo of Calabria PDO (70%), the Capicollo Azze Anca branded Slow Food, specifically, is known to 31.8% of respondents, and 27.1% know that it is made with meat from the black Apulo Calabrese pig. 65.7% considered the ease of

<table>
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<tr>
<th>Tab. 2. Socio-economic characteristics of the respondents</th>
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<tr>
<td>Sex</td>
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<tr>
<td>Female</td>
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<tr>
<td>Male</td>
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<tr>
<td>Age</td>
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<tr>
<td>18-29</td>
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<td>30-39</td>
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<td>40-49</td>
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<tr>
<td>&gt;50</td>
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<tr>
<td>Knowledge of protection mark</td>
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<tr>
<td>Biological mark</td>
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<tr>
<td>POD Mark</td>
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<td>GPO Mark</td>
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<td>Slow Food Mark</td>
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<tr>
<td>Libera Terra Mark</td>
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<tr>
<td>Level of education</td>
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<tr>
<td>Secondary school</td>
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<tr>
<td>Degree</td>
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<tr>
<td>Secondary/ Elementary school</td>
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<tr>
<td>Place of food purchase</td>
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<tr>
<td>Supermarket/Ipermarket</td>
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<tr>
<td>Retailer</td>
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<tr>
<td>Town market</td>
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<td>Local producer and doorstep selling</td>
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<tr>
<td>Food purchaser</td>
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<tr>
<td>Interviewed</td>
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<tr>
<td>Head of Household</td>
</tr>
<tr>
<td>Other</td>
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<tr>
<td>Family production of meats</td>
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Source: Own elaboration
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sourcing the product as medium, and 55.9% attach importance to the Calabrian origin of the raw material and production. However, the interviews show that only 20.5% are habitual consumers of Capicollo Azze Anca Grecanico branded Slow Food. This is probably because the product, strongly anchored to the traditions and consumed regularly, is bought on impulse without regard to the brand.

Moreover, we must reiterate and underline the widespread custom of the domestic rearing and the consequent family production of cold meats (21.6% at the household level produces sausages, brawn, capicolli, bacon, etc.). The majority of respondents were also the ones responsible for purchasing food (62.7%) and the place of purchase was primarily the large distributors (70%)
due to the diversity of brands and the consumer’s preference for a single location for their food shopping. However, 30% went to smaller locations, such as town markets (11%), local producers (11.9%), and retailers (7.2%).

Among the reasons given for the purchase and consumption, the highest rated parameters of choice are: the craftsmanship of the product and the safety of the meat (96.2%), followed by the quality, authenticity, and long shelf life (78%), price (57.2%) and different occasions for consumption (the question concerning opportunities for consumption in 53.8% of cases was divided between two or more responses). Other aspects which were particularly appreciated were the taste and the versatility of the product, because it was liked by everyone in the family, characterised the table, and was suitable to accompany the wine (53.8%) (Tab. 4). These reasons have been used as a base in the MCA model. The price is not considered relevant by 42.8% of respondents, who purchased primarily based on the quality, and neglect other attributes such as price.

The need to maintain local food habits is confirmed by the frequency of purchases and the average quantity purchased. For the majority of respondents, the consumption of cold meats has remained constant (75.8%) and the purchase is frequent (78% several times a month, while 16.1% buy the products at least once a month). With regard to the judgment of the pricing, the majority considered the price normal (70.8%) while 23.7% considered it low. The quantities purchased were primarily between 300 grams and one kilogram. The responses on possible substitutes for the Capicollo show a prevalence of consumers who consider Capicollo as irreplaceable (35.6%), the other responses regarding substitutes by other cold cuts such as, for example, pancetta (10.2%), bresaola (14.8%), and filetto (14%).

**Tab. 4.** Motivations for purchasing Capicollo Azze Anca (motivations of MCA model)

<table>
<thead>
<tr>
<th>Motivations</th>
<th>Strong</th>
<th>Weak/Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n.</td>
<td>%</td>
</tr>
<tr>
<td>ST ‘Safety and Tradition’: Meat safe, handcrafted, it is storable traditional product of my area</td>
<td>227</td>
<td>96.2</td>
</tr>
<tr>
<td>TQ ‘Tasty and Quality’: It is tasty, it is genuine, it is storable and reliability of the product</td>
<td>184</td>
<td>78.0</td>
</tr>
<tr>
<td>P ‘Price’</td>
<td>135</td>
<td>57.2</td>
</tr>
<tr>
<td>TDO ‘Togetherness/Different occasions’: Enjoy and use on different occasions</td>
<td>127</td>
<td>53.8</td>
</tr>
</tbody>
</table>

*Source: Own elaboration*
4.3 Main results and discussion Multiple Correspondence Analysis (MCA) and Logit model

MCA results show how much is difficult to classify consumers by the reasons driving the demand. The sum of the eigenvalues of the two dimensions is 2.557 of the variance explained, by the size of dimension one is equal to 41.6% and 22.3% for the dimension two (Tab. 5). Let us take a look at Figure 1 during their discussion. The first dimension (horizontal axis) clearly separates consumers driven local and craft products and sure products (positive values) those indifferent to these requirements (negative values on the horizontal axis). The second dimension (vertical axis) identifies individuals aware of buying safe products, traditional, versatile (positive values on the vertical axis), but also attaches significant importance to consumers wishing to taste and price that are placed in the quadrant with negative values for the dimension two. Therefore it is appropriate to consider carefully the characteristics of the variables in both dimensions. This result can be interpreted as a clear suggestion of using the first dimension as an indicator of regular use and aware of Capicollo, consumers consider it a typical product, handicraft, safe and quality. We can see positive in Figure 1 values for both dimensions, where there are subjects sensitive to the safety of traditional products (ST2) and conscious consumers of the versatility of the product (TDO2). They are mainly young women (18-39 years) with high average level of education. The profile of these consumers can be summarized as ‘young modern consumers of traditional, safe and versatile products’, they account for 16.1% of the respondents. In the positive quadrant for size 1 and size 2 we found negative for consumers willing to buy the product while paying attention to the price (P2) for its quality and for the connection to the local tradition (TQ2). They are more or less equally represented men and women older than 40 and a medium-high level of education. The profile summary in the second quadrant is ‘traditionalist consumers with a special bond with the territory’. They represent 50.4% of

| Tab. 5. Model Summary |
|-----------------------|-----------------|-----------------|-----------------|
|                       | Dimension       | Cronbach’s Alpha| Variance Accounted For |
|                       |                 |                 | Total (Eigenvalue) | Inertia | % of Variance |
| 1                      |                 | .532            | 1.664            | .416    | 41.597        |
| 2                      |                 | -.160           | .893             | .223    | 22.316        |
| Total                  |                 |                 | 2.557            | .639    |               |
respondents. Consumer preferences are therefore related to the historical and cultural content and refer to the place of origin and the characteristics of the product, strongly anchored traditions. In the third quadrant (negative for both dimensions) are the consumers who do not pay attention to traditional food products, but they usually buy on impulse without regard to the origin, safety and versatility of the product (17.8%). The profile of these women and men, who are equally represented between the age of 30-59 years and with a title of high school, is 'consumer disinterested and indifferent'.

In the negative quadrant for the dimension 1 and positive for the size 2, we place consumers who respond negatively to taste and quality and who are indifferent to price. Even here women and men equally represented are mainly young people between 18-39 years and with a title of high school. We can define their profile as ‘casual consumers’ who buy regardless of the price and the origin of the product (15.7%). The four consumer profiles above mentioned can be analyzed in depth by the support of stepwise Logit models where the relationships between Capicollo Azze Anca Grecoanico purchasing reasons and socio-demographic-behavioural variables are detected.
Table 6 summarizes the results obtained by applying the logit model. Let us discuss the most important among them. The p-value associated with the index Hosmer-Lemeshow (with \( \alpha = 0.05 \)) suggests that all four profiles and 6 variables must be satisfactory for the data.

The Safety/Tradition (ST) model confirms the impression given by MCA first quadrant observations, consumers are attentive to the safety of the meat, the craftsmanship and the importance of the production area, and is also consistent with the high percentage (96.2%) of consumers attentive to these aspects.

The Price model offers some interesting results. First, the most significant character is related to the importance of the origin area. Reasons for purchasing Capicollo Azze Anca is the importance of local area of production and the motivation linked to experience (buy it because is produced with safe meat, and for purchasing advice to others).

Another important aspect in the Price model is the Slow Food brand awareness, as those involved show a notable awareness of the quality and characteristics of the product and of the producers, thus representing the potential for the purchase of Capicollo Azze Anca Grecanico. Finally, descriptive analysis highlights that the consumer is primarily male.

Even in the TQ model, it is highlighted the importance of experience linked to the habits of consumption. These attributes are related to the frequency of consumption and purchase decision of cold cuts connected with the taste and the intrinsic characteristics of Capicollo Azze Anca. The TDO model highlights principally the importance of production area, the consumer's attention to the local food and also the experience. All of these aspects are linked to: the products' authenticity, the fact that the Capicollo is enjoyed by the whole family, that it is a winter food, and that it is suitable with a wine. Consumers prefer this type of salami because it is a regular part of the family, but also because the purchasing decision by the consumer is linked then to the versatility of the product, its appreciation and consumption by the whole family, and its flexibility for a variety of consumption occasions (as a snack, appetizer, entree, dinner, or lunch).

Increasing awareness and concern with global climate change has led to a push to identify local food consumption as a way to reduce food miles and help preserve the environment (Verain et al., 2016). The journey from farm to fork is rarely a simple connection between farmer and consumer but it rather involves a range of different actors and agents, located in different places and at different socioeconomic scales.

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6 This statistic examines the difference between the observed frequency and the expected frequency for deciles of data. The value is compared to a \( \alpha \)-distribution with \( g \)-degrees of freedom (\( g \) is equal to the number of deciles).
Tab. 6. Estimated parameters of the Logit models

<table>
<thead>
<tr>
<th>Variables</th>
<th>$ST = Safety/Tradition$</th>
<th></th>
<th></th>
<th>$TQ = Taste/Quality$</th>
<th></th>
<th></th>
<th>$TQ = Taste/Quality$</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>S.E.</td>
<td>P-value</td>
<td>$\beta$</td>
<td>S.E.</td>
<td>P-value</td>
<td>$B$</td>
<td>S.E.</td>
<td>P-value</td>
</tr>
<tr>
<td>Costant</td>
<td>-7.532</td>
<td>2.355</td>
<td>0.001</td>
<td>-6.634</td>
<td>0.888</td>
<td>0.001</td>
<td>-12.578</td>
<td>1.904</td>
<td>0.000</td>
</tr>
<tr>
<td>Importance of origin area</td>
<td>3.875</td>
<td>0.890</td>
<td>0.000</td>
<td>0.578</td>
<td>0.347</td>
<td>0.009</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Knowledge Slow Food</td>
<td>1.481</td>
<td>0.859</td>
<td>0.085</td>
<td>-0.911</td>
<td>0.373</td>
<td>0.043</td>
<td>1.793</td>
<td>0.469</td>
<td>0.000</td>
</tr>
<tr>
<td>Experience (I purchase it on advice of others)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.754</td>
<td>0.373</td>
<td>0.043</td>
<td>1.793</td>
<td>0.469</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-2 log likelihood</td>
<td>44.222$^a$</td>
<td></td>
<td></td>
<td>240.943$^a$</td>
<td></td>
<td></td>
<td>220.136$^a$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hosmer-Lemeshow</td>
<td>0.393</td>
<td></td>
<td>0.312</td>
<td>0.504</td>
<td></td>
<td>0.397</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ST: $^a$ = Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.
P: $^a$ = Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.
TQ: $^a$ = Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.
TDO: $^a$ = Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.
5. Conclusions

The report investigates the motivations of consumers about a local production. A Multiple Correspondence Analysis was developed to identify consumers’ motivational profiles, and a Logit regression to evaluate the relationships between motivations and socio-demographics.

The results show a strong propensity of consumers to the link between territory and product quality and the importance related to food security. Capericollo is considered tasty, quality, storable and lends itself to a variety of consumption occasions (snacks, appetizers, entrees, snacks, dinner, lunch). The purchase decision is connected with the traditions, habits and eating patterns of consumers surveyed.

The results suggest that the total, combined effect of consumers’ image of regional certification labels is substantial. To protect consumers, and support SMEs and rural economies, many countries around the world have introduced regulations enabling SMEs to legally protect the names of their regional products. The success of these regulations largely depends on consumers’ appreciation of regional certification labels that inform consumers that the name of the regional product is protected and that it denotes the authentic product (van Ittersum et al., 2007; van der Lans et al., 2001). Hence, consumers’ appreciation of regional certification labels may provide opportunities to increase consumer demand by marketing the protected regional product with Slow Food regional certification label. Any product is perceived by different consumers in different ways. Value derives from different attributes, according to the type of consumer.

Consumers’ attitudes towards the region of origin influence the perceived quality of the product. Consumers’ attitudes towards the region of origin also directly influence consumers’ attitudes towards the protected regional product. These results suggest that the emotional aspects related to regional products are also part of consumer attitudes.

When value is based on the origin of the product that can be associated with the region, Slow Food or the producer, these different attributes assume a different importance according to the distance (geographical and cognitive).

PDO, Slow Food, PGI certification can be considered as a good tool to reduce the perceived distance for consumers living far from the region of origin (often tourists) but, on the other hand, it does not add value for people who do not perceive any cognitive distance, as locals.

This research has several implications. First, protecting regional products and marketing these protected regional products with regional certification labels, such as Slow Food labels, may be beneficial, in particular because without protection there might be the danger of copycat products spoiling
regional-product reputations (van Ittersum et al., 2007; Freibauer et al., 2011). Second, our research findings also enable SMEs and policy-makers to develop focussed communication strategies towards consumers.

The objective of this analysis was linked to the necessity to focus on fields in which to operate in order to prepare interventions in line with the expectations and with the needs of consumers and producers, also through the interaction of agribusiness marketing and territorial plans. It’s important to train a new food model and the application of the fundamental aspects of destination marketing in order to identify a strategic plan that enhances the territory through the collaboration of all stakeholders. This takes into account the competitiveness of tourist destinations, as the sum of all its attributes, that allows it to adopt a strategic and operational positioning over its competitors also in terms of internal corporate management (Kim and Eves, 2012; Marchioro, 2014; UNWTO, 2012). At the same time, it takes into account the capacity of a territory, with all its touristic and gastronomic characteristics and peculiarities, to attract visitors to that particular destination.

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**References**


A methodology for mapping consumer preferences for local products


