The Attitudes of Calabrian Wine Consumers: A Preliminary Survey

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Abstract

The wines of southern Italy have experienced an unprecedented development in the last two decades, especially Calabrian wines that have entered interesting niches of the market. In Calabria, the domestic market absorbs about 70% of regional wine production while the rest is marketed on the national market. Exports of Calabrian wines to the main international markets are severely limited and there is no particular commercial performance even in emerging markets. This study is a preliminary survey about the attitudes of consumers of Calabrian wine. It is organized in 4 sections: the first one presents the main characteristics of wine consumption in Calabria (frequencies, places of purchase and methods of consumption); the second section analyses the importance that consumers give to wines certifications; the third section is about the intrinsic and extrinsic attributes that matter for consumers in the choice of a wine.

Keywords: *calabrian wine; wines certifications; protected designation of origin (PDO); protected geographical indication (PGI); organic.*

1. Introduction

The wines of southern Italy have experienced an unprecedented development in the last two decades, as a result of the great importance that these products have acquired on the domestic and international markets (Caracciolo et al., 2015; Di Vita et al., 2015). Alongside traditionally renowned regions, such as Sicily and Apulia, Calabrian wines have entered important market segments, especially niches. Calabria is the fifteenth Italian region in terms vine growing surfaces, with 10,300 hectares that represent about 2% of Italian vineyards. In Calabria, the domestic market absorbs about 70% of regional wine production while the rest is marketed on the national market (ISTAT, 2017).

Despite there being a consolidated phenomenon of the so-called 'regionalization of wine consumption', there are the conditions for expansion on the domestic and foreign markets. Currently, exports of Calabrian wines to the main international markets are severely limited and there is no particular commercial performance even in emerging markets (Dal Vecchio et al., 2018).

After decades of stagnation and immobility, in recent years the actions of some winemakers have gradually revitalised the sector, especially thanks to the generational change that has characterized the small and medium enterprises in the sector.

In this sense, the adoption of specific EU policies, by means of the Rural Development Programs, could certainly lead to an improvement of marketing strategies and communication, taking a chance on sustainable performances of agriculture and the presence of an importance heritage of biodiversity in terms of ancient local grape varieties (Falcone et al., 2015; 2016).

Calabrian wines have acquired a growing importance in the Italian wine scenario, with a growing importance for the territorial economy and the environmental sustainability (Strano et al., 2013; D'Amico et al., 2014; Borsellino et al., 2016; Pellicanò and De Luca, 2016). Based on this premise, this study is a preliminary survey about the attitudes of consumers of Calabrian wine.

The present study is organized in 4 sections: the first one presents the main characteristics of wine consumption in Calabria (frequencies, places of purchase and methods of consumption); the second section analyses the importance that consumers give to wines certifications (PDO, PGI, organic, etc.); the third section is about the intrinsic and extrinsic attributes that matter for consumers in the choice of a wine.

2. Data collection and methods

The survey on the consumption of Calabrian wine in Italy was conducted in the period between October and December 2016, in two different areas of northern Italy, in particular in the metropolitan areas of Milan and Turin.

The questionnaires were submitted to 327 interviewees: 160 in Milan and 167 in Turin. In both areas, the interviews were carried out with the face-to-face mode.

The questionnaire was structured with either closed and open-ended questions to gather qualitative and quantitative information on the socio-economic and cultural background of interviewees, their behaviour in the purchase phases and how it was influenced by the characteristics of commercial distribution, on their perception of the quality and price of a product, and further opinions linked to the consumption phase. Interviewees were asked to express their preferences with a scale of intensity going from very strong interest (7) to very low interest (1). The questionnaires were submitted at those hypermarkets (mass distribution circuits), in Turin and Milan, with the greatest affluence of purchasers of agri-food produces.

Questions with multiple-choice answers were coded to help interviewees choosing quickly the answers more suitable to their opinion or behaviour. Moreover, almost all the questions were articulated through the predisposition of Likert scales.

The questionnaire was divided into six sections. The first part of the questionnaire was aimed at measuring the frequency of purchase and consumption of wine, taking into account the places of purchase and consumption methods.

The second part focused on the levels of perception, preferences and attitudes towards certified wines – such as wines with Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI) labels, and wines made from grapes from organic, integrated and biodynamic agriculture.

The third section of the questionnaire was aimed at detecting the significance and the level of importance assigned to the intrinsic and extrinsic attributes of wines and at verifying the knowledge about the main Italian and Calabrian wines.

The last part of the survey aimed to identify the socio-economic characteristics of the consumers interviewed.

Data were processed through univariate statistical analyses carried out by calculating mean, medians, mode and standard deviation.

3. Results

In order to outline the characteristics and patterns of wine consumption behaviour, data were firstly processed through simple descriptive statistical analyses (mean, mode, median and standard deviation). The socio-economic characteristics of the sample examined (327 units) are reported below (tab. 1).

Category	Variable	Number	Percentage
gender	female	147	45
	male	180	55
age (classes)	18-30	74	22.6
	31-45	110	33.6
	46-60	94	28.7
	> 60	49	15.0
education	Primary-middle school	43	13.1
	High school	123	37.6
	University	134	41.0
	Post graduate	27	8.3
Average monthly income (Euro)	< 1,000	16	4.9
	1,000-2,000	109	33.3
	2,000-4,000	102	31.2
	> 4,000	30	9.2
No answer		70	21.4
Total		327	100

Table 1. Socio-economic characteristics of the sample

Wine consumption is strongly diffused in the area examined, although purchases are made with some regularity by only 67% of respondents, while for the remaining part of the sample consumption appears rather sporadic.

Concerning distribution channels (Figure 1), wine purchases are mainly made in supermarkets and, to a slightly lesser extent, in hypermarkets, confirming the main role of the large-scale retailing. Nonetheless, the purchases made from wine shops and producers are quite significant, as they represent more than 32% of the sample. This phenomenon confirms that consumers prefer a direct contact with the retailer or with the producer himself, to get more information about the wine purchased.

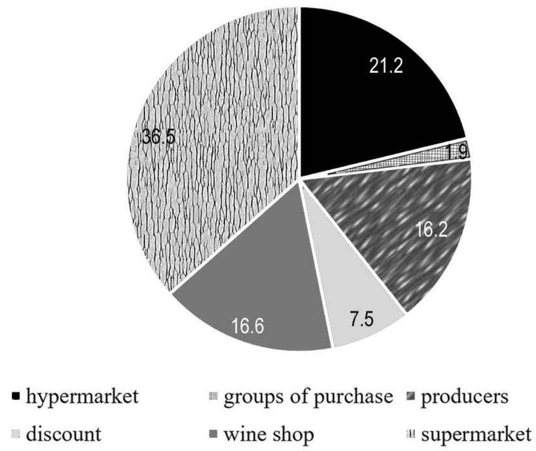

Figure 1. Places of purchase (%)

Concerning the frequency of wine purchases (Tab. 2), this has been divided according to the main categories of products on the market: certified wines (PDO, PGI, DOCG) and ordinary wines. The highest purchase frequency is for certified wines, in particular for DOCG wines and PDO wines, while ordinary wines do not seem to represent a particularly appreciated category, regardless of the type of packaging (glass, boxes or bulk).

	DOCG	DOP	IGP	ordinary boxes	ordinary glass	ordinary bulk
mean	3.9	3.8	3.5	1.8	3.0	2.5
mode	4	4	4	1	3	1
median	1	5	1	1	1	1
stand. dev.	2.11	1.98	1.98	1.42	2.00	1.90

Table 2. Consumption frequency per wine category

Among the consumers interviewed, the habit of drinking wine during main meals is very diffused, with dinner as the most suitable moment of the day for the interviewees. The moments of consumption during the morning or evening aperitif are not significant, probably because among the interviewees the number of young people is relatively low; in fact, this habit is more diffused among young people.

	Brunch	Aperitif	Pranzo	Happy hour	Dinner
mean	1.7	3.2	3.7	3.5	5.5
mode	1	3	4	3	6
median	1	1	1	1	7
stand. dev.	1.3	2.1	2.1	2.2	1.7

Table 3. Times of the day with high frequency for wine consumption (1 time – 7 times)

As expected, the most frequent places of consumption are those where the main meals are consumed, i.e. home and restaurants; in all other places the consumption of wine is not so widespread, probably because of the specific target of consumers, considering that the surveys were carried out at large organized distribution networks (Tab. 4).

Finally, concerning the origin of the wine, the quantity of bottles consumed, and the average price paid per item, results are shown in table 5 and figures 2 and 3. As reported in the table, the interviewees declared that they prefer to consume

Italian wines – instead of foreign ones, and they buy an average of one bottle per week (50% of the sample) in a price range between 4 and 8 euros (48% of interviewees).

	home	pub	disco	restaurant	pizzeria	wine shop	bar
mean	5.5	2.1	1.3	4.7	2.9	3.3	2.3
mode	6	1	1	5	3	2	1
median	7	1	1	5	1	1	1
stand. dev.	1.68	1.66	0.80	1.98	1.92	2.44	1.75

Table 4. Places of consumption

	Local	Regional	National	Foreign
mean	3.7	4.7	4.9	2.2
mode	4	5	5	1
median	1	5	7	1
stand. dev.	2.10	4.51	1.90	1.72

Table 5. Origin of wine consumed

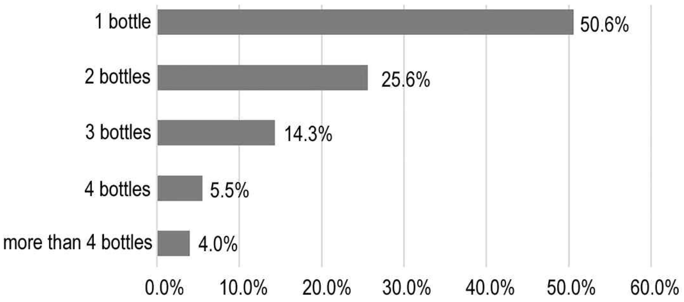

Figure 2. Bottles of wine purchased per weak

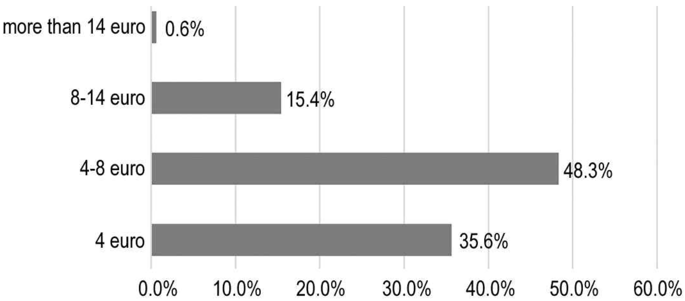

Figure 3. Average prices paid per bottle (0.75cl)

Regarding certified wines, the interviewees showed having a good knowledge of the main labels of certifications available on the market; a large part of the sample, i.e. 63.3%, claimed to know PDO and organic wines, while for PGI wines the level of knowledge was slightly lower (56.9%). A limited part of the sample (30%) knew some particular production methods, i.e. integrated and biodynamic farming (Figure 4).

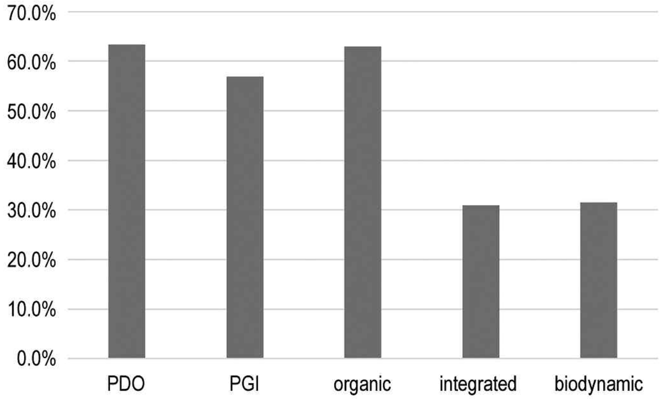

Figure 4. Level of knowledge about wine production methodologies and labels (%)

Then, interviewees were asked which process, product and environmental certifications they considered important for a wine. Also in this case, the origin of the wine was the most renowned, with DOCG, DOC and PGI certifications with the highest level of consideration (Tab. 6). Less significant but still appreciable was also the interest towards the certification of the organic production method. The other forms certifications, such as environmental sustainability of production processes, energy saving, fair trade marks, etc., obtained little or no significance for interviewees.

Finally, the questionnaire investigated those aspects related to consumers' environmental consciousness in order to identify their possible propensity to purchase products made with a limited impact on the environment (Tab.7).

In general, it emerged a fair environmental awareness of the interviewees. Personal health was perceived as a priority motivation, followed by the preservation of the environment, more at a global scale than at the local one. This result seems to confirm the emergence of a twofold, only apparently antithetical, motivational component, partly linked to the individual sphere and partly environmental conscious.

	DOC	DOCG	IGT	Organic	Integrated	Biodinamic	Environmental sustainability	Energy saving	Fair trade
mean	5.2	5.3	4.7	4.4	3.3	2.9	3.4	3.3	3.9
mode	5	6	5	5	3	3	3	3	4
median	7	7	5	7	1	1	1	1	1
stand. dev.	1.67	1.71	4.25	2.03	1.92	1.91	1.93	1.96	2.07

Table 6. Level of importance of different typologies of wine certifications

	Health	Local environment	Global environment
mean	4.7	4.2	4.4
mode	5	4	4
median	7	4	7
stand. dev.	1.90	1.98	1.98

Table 7. Motivations for purchasing low environmental impacts products

The so-called "sustainable wines" include wines produced according to the criteria of sustainable viticulture and, to a lesser extent, organic wines. Consumers were asked their preference concerning different production techniques and wine aging. Environmental friendly full-bodied red wines represented the most preferred typology, followed by white sparkling wines.

	rosé wine	red new	red sparkling	red full-bodies	white dry	white sparkling	sweet wines
mean	3.1	3.8	3.7	4.7	3.9	4.1	3.8
mode	3	4	4	5	4	4	4
median	1	4	1	6	5	5	1
stand. dev.	1.83	1.85	1.94	1.90	1.95	1.86	2.01

Table 8. Willingness to purchase environmental sustainable wines

The third section of the questionnaire explored the attitudes and beliefs that consumers manifested about the most common attributes of wine. Table 9 shows the main experience and sensory attributes, i.e. those related to taste, olfactory, and visual perceptions.

Body, taste and flavours are the most appreciated characteristics, while regarding the colour, red wine appears on average the most appreciated.

	body	taste	acidity	flavours	white	red	rosé
mean	4.9	5.2	3.6	4.6	3.7	4.6	3.4
mode	5	5	4	5	4	5	3
median	5	5	4	5	4	6	4
stand. dev.	1.60	1.42	1.81	1.69	1.85	1.86	1.85

Table 9. Preferences about the intrinsic characteristics of wine

The general level of appreciation for extrinsic attributes appears slightly lower than for intrinsic characteristics. The price is one of the most influencing characteristics, followed by the certification of geographical origin, the reputation of the producer and the use of local grape varieties. The other attributes, such as labelling and organic certification, play an important but secondary role (Tab. 10).

The analysis investigated the preferences of interviewees about the main varieties used for the production of red and white wines (Figure 5), using a scale going from most preferred (7) to least preferred (1). Only 52% of the sample admitted to know the name of the grape varieties used for the production of a red or white wine. These results showed that only four varieties are the best known to the interviewees, i.e. Barbera, Nebbiolo, Dolcetto and Nero d'Avola, followed by Merlot, Cabernet and some Italian varieties widely used in the central-northern regions such as Sangiovese and Montepulciano d'Abruzzo.

The Calabrian grape Gaglioppo was the less known, confirming how Calabrian wines just occupy particular niches of market.

	producer	local varieties	international varieties	certification of origin	organic cetification	packaging	low impacts	price	label	prizes
mean	4.7	4.5	3.7	4.8	4.2	3.4	4.1	5.1	4.4	3.1
mode	5	5	4	5	4	4	4	5	5	3
median	5	6	4	5	5	1	4	5	5	1
stand. dev.	1.83	1.79	1.68	1.72	1.89	1.82	1.88	1.59	1.85	1.91

Table 10. Extrinsic attributes of wine

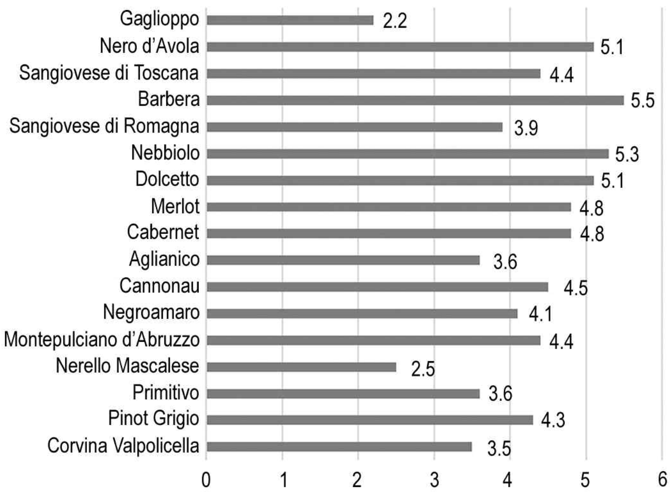

Figure 5. Average preferences about red grapes varieties

Concerning white grapes (7: most preferred, 1: least preferred), the best appreciated are the following varieties, in descending order (Fig. 6): Prosecco, Chardonnay and Muller Thurgau. Concerning the grape variety grown in Calabria, Greco, it had in a medium-low position, although it is more famous than its red counterpart (Gaglioppo).

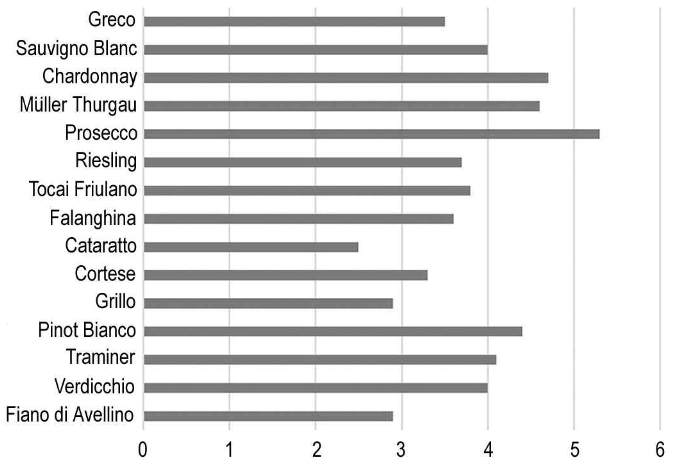

Figure 6. Average preferences of white grapes varieties

Figure 7 below shows the levels of appreciation for some of the most renowned and prestigious Italian wines (7: most appreciated, 1: least appreciated), which are higher for Barolo, Brunello di Montalcino and Chianti. Southern wines are less renowned, that is quite normal, as the interviewees are from northern Italy.

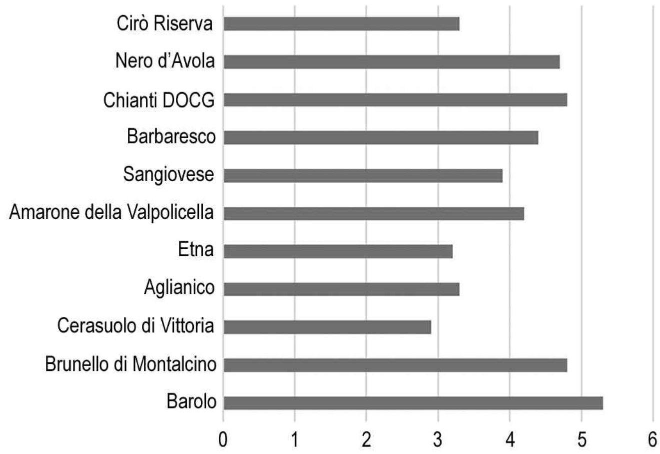

Figure 7. Levels of appreciations for the most renowned Italian wines

Finally, table 11 shows the results about the perceptions of different winemaking methods: red, white, rosé and sparkling wine.

Overall taste, fruity taste, flavour, alcohol content and aromas, and the presence of antioxidants appeared to be the predominant prerogatives of red wines and to a lesser extent of white wines, while only the attribute "acidity" had a higher relative frequency among white wines. There are no significant differences between rosé wines and sparkling wines, which represent wines with less sensory appeal. With regard to the potential effects on the health of the consumer, red wine is considered to be the richest in antioxidants, while rosé wines are perceived as the least gifted ones. Finally, concerning the perceptions about the presence of sulphites, the data obtained show almost similar results for all four categories of wine considered.

	WHITE	RED	ROSÉ	SPARKLING
Taste				
mean	3.6	4.1	3.1	3.1
median	4	4	3	3
mode	4	5	3	3
stand. dev.	1.18	1.07	1.33	1.31

	WHITE	RED	ROSÉ	SPARKLING
Acidity				
mean	2.7	2.7	2.4	2.5
median	3	3	2	2
mode	1	1	1	1
stand. dev.	1.37	1.37	1.26	1.27
Fruity				
mean	3.5	3.7	3.2	3.1
median	4	4	3	3
mode	5	5	3	3
stand. dev.	1.31	1.27	1.37	1.34
Flavorfulness				
mean	2.9	3.2	2.7	2.7
median	3	3	3	3
mode	3	4	3	2
stand. dev.	1.25	1.26	1.24	1.27
Alcoholic degree				
mean	3.2	3.6	2.9	2.9
median	3	4	3	3
mode	4	4	3	3
stand. dev.	1.21	1.24	1.27	1.27
Sweet taste				
mean	3.0	2.9	2.8	2.9
median	3	3	3	3
mode	3	3	3	3
stand. dev.	1.32	1.32	1.34	1.37
Perfumes				
mean	3.9	4.1	3.4	3.4
median	4	4	4	4
mode	5	5	5	4
stand. dev.	1.17	1.07	1.37	1.30
Antioxidants				
mean	3.3	3.5	3.2	3.1
median	3	4	3	3
mode	5	5	3	5
stand. dev.	1.40	1.36	1.42	1.43
Presence of sulphites				
mean	3.5	3.6	3.4	3.4
median	4	4	4	4
mode	5	5	5	5
stand. dev.	1.45	1.43	1.46	1.45

Table 11. Flavours taste comparison between different types of wine

4. Conclusions

The general objective of this study about the consumption of Calabrian wines was to investigate the interest of consumers in this product, and to identify any potential for development for the Calabrian wine industry in the national market.

In general, the survey highlighted the great importance attributed to the geographical origin of wine, which has a much greater impact than other variables. Factors such as certification of origin are considered a priority when choosing a wine.

Overall, there is a good environmental awareness among the interviewees. Personal health benefits are perceived as a priority motivation, although there is also a slight tendency to preserve the environment more on a global scale than in the local area alone.

Concerning Calabrian production, the local varieties Gaglioppo and Greco are less known to consumers in northern Italy, while the Cirò PDO seems to have a fair level of notoriety and reputation.

Moreover, the red wine is confirmed as the most appreciated in terms of taste, aromas, flavour, alcohol content and aromas, and is also considered the type of product with the highest antioxidant potential.

Further research and more refined analyses seem to be necessary to better define the degrees of correlation between the different variables examined.

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