

An analysis of consumers' perception of the quality of DOC Etna wine*

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1. Introduction

In advanced societies the behaviour of consumers becomes varied and produces continuous change. The causes of this can be traced both to changes that are socio-economic in nature and to changes in modern styles of living. These evolutionary processes have brought about a different “approach” to the consumption of alcoholic drinks, particularly wine. With reference to this last, two diametrically opposed phenomena have been observed over the last decade. Indeed, if on the one hand there has been a reduction in consumption of table wine, on the other there has been greater demand for quality wines. Over the years, indeed, there has been increasing attention for DOC, DOCG and IGT wines, bringing together elements of quality and of regional specificity.

Wine, therefore, becomes a source of pleasure with a high hedonistic content that is increasingly geared towards producing “emotions”.

In the context of the new tendencies in food consumption, the educated, aware, informed, careful and selective consumer seeks quality, intended as an instrument of differentiation, and the traditions that only a “quality” product, coming from areas of limited dimensions, is able to produce.

In Sicily too, over the last decade, there has been increasing interest in the quality wine industry and consumers have paid more attention to wines produced in the areas in the foothills of the volcano Etna, where Etna DOC wine is produced. The present paper has the objective of analyzing the perception of the quality of the wine (Etna DOC) through the application of a conjoint analysis.

2. Method of research

The present research, with reference to Etna DOC wine, was carried out between May and July 2004. The research was carried out by extracting from “the universe” of Sicilian consumers a sample consisting of 500 units. For the interview an ad hoc pre-prepared questionnaire was used.

The research was conducted using the face to face method, with the aim of acquiring information both on the various socio-economic and cultural aspects of the subjects

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interviewed, on their behaviour during purchase, on the perception that they have of quality and the price of the product, as well as on the characteristics of commercial distribution.

By means of the questionnaire information of a qualitative and quantitative nature regarding the various aspects the research aimed to analyse was gathered. The questions in the questionnaire were “closed” or multiple-choice, thus offering the respondent a series of codified options among which they were called up to choose the most suitable for his or her position, opinion or way of behaving (Berni, Begalli, 1995). Administration of the above-mentioned questionnaires was carried out in a hypermarket belonging to the “Auchan” (Gruppo Rinascente) chain and at the “Le Zagare” shopping mall, both in Catania.

The questionnaire was organized in four sections, the first of which was dedicated to the general characteristics of wine consumption (frequency, type of wine consumed, quantities consumed, when consumed, factors that influence at the moment wine is purchased, attributes associated with the wine); to the specific characteristics (preference regarding the area of provenance, knowledge of the certifying bodies, etc.) and the level of knowledge of and consumption of Etna DOC wine.

The second part of the questionnaire allowed us to obtain information regarding the characteristics of the commercial distribution of the wine (place of purchase, expense that the consumer is prepared to bear for the purchase of a litre of DOC wine, differences in the prices of DOC wine compared to common table wines).

The third section allowed us to obtain information on the socio-economic characteristics of the respondent. The analysis thus provided a profile of the Catanese wine consumer (age, number of members in the family, level of education, profession and income of the family unit).

The fourth section was dedicated to analysis of the perception of quality, making use of conjoint analysis. The objective of conjoint analysis is to identify the attributes of goods that generate maximum utility and to establish what is the incidence of each (utility) with respect to the total utility attributed by the consumer.

3. The perception of the qualità of “Etna DOC” wine

One of the multivariate techniques of statistical analysis is conjoint analysis, an instrument that allows for an analysis of perception of quality.

This research tool was developed in the early '60s (Luce and Tukey, 1964) in the field of mathematical psychology and psychometrics and has enjoyed greater applied success above all else in the market research (Green, Rao, 1971; Green, Srinivasan, 1978).

In Italy in recent years, this analysis tool for the perception of quality in agricultural food produce has been applied to various products and in particular to produce that is subject to fresh fruits (D'Amico, Pecorino, 2001; D'Amico, La Via, Pecorino, 2002) and industrial processing such as wine, oil, etc. (Loseby, Brinchi, 1996; Cicia, Perla, 2000).

The process behind the perception of quality of a product is a rather complex one, since each individual is subjected daily to a considerable quantity of information. Only part of this information, the part which comes close to the needs and the desires of consumers is involved in the process that leads to the choice of one product over another.

Conjoint analysis has the aim of measuring the preferences of consumers relative to a selected group of attributes of the product that is subject to analysis.

This analysing technique allows to describe through utility and value indicators interviewed consumers' preferences towards product's attributes and levels.

This technique of analysis allows the identification of all (the combination of) features that a product must have in order to maximize the consumer's satisfaction.

Conjoint analysis's main feature is to ask an interviewed sample to carry out their choice at the same wise as it is presumed they do it when purchasing a good, or in other words

comparing different features between them and deciding how far they are willing to give up a certain attribute to get a given quantity of another attribute.

Basis of this analytical process is the individuation of a series of factors, called attributes, which determine consumer's overall utility (De Rosa, 2001).

The individuation of a "relevant"¹ attributes group is the premise to implement a conjoint analysis.

The individuation of such attributes may occur both, through "quantitative" researches on a consumers sample or through "focus groups" involving experts of this sector (Molteni, 1993).

With reference to the present research, regarding the perception of quality that consumers associate with the consumption of Etna DOC wine, the selected features and the corresponding levels, reported in Table 1, had been individuated by means of a focus group involving experts of this sector and have been identified by means of specific research carried out in Catania at the GDO and through a focus group involving experts in the sector .

TAB. 1 - Features of the wine and corresponding levels

<i>Features</i>	<i>Levels</i>	<i>Features</i>	<i>Levels</i>
Color	Red White Rosé	Method of production	Organic Conventional
Price	< 4,00 euro from 4,00 to 8,00 euro > 8,00 euro	Known brand	Yes No

Such procedures lead usually to obtain an elevated number of attributes being valued as relevant, so the most important moment during this process phase is the reduction of these attributes to avoid any possible valuation gathering and model estimation problem.

Using this methodology it is possible to estimate for each subject as well as for the whole sample the relative importance of any attribute being present in alternative types of products, their partial utility being associated to any diverse level through which products show themselves and any single product's total utility (Cattin, Wittink, 1989).

So a conjoint analysis aims to individuate those attributes of a good that generate the maximum utility and to establish which is the incidence of each one (utility) in relation to the overall utility assigned by the consumer.

It is important that all main attributes are considered, because the exclusion of one key attribute could compromise the veracity of this analysis.

Besides the choice of these attributes it is also necessary to identify their related levels. Levels may be both, quantitative and qualitative and their number influences the length of the data gathering questionnaire chart. Depending on the number of levels being available for each attribute it is possible to get different product profiles.

This choice shall produce combinations of different realistic attributes and shall be able to understand the consumers' way of thinking during its purchase phase.

Regarding the choice of the profiles number the full-profile procedure had been used in this work, in fact, having individuated attributes and their related levels (TAB.1), it had been necessary to use the orthogonalization procedure, being realized using the SPSS 12.0 software for Windows, (Green, Wind, 1975) , which allowed us to obtain an orthogonal array, or a subset of combinations from which it was possible to proceed to an estimation of utility. We thus moved from 36 profiles containing all of the combinations, to a limited number of combinations but fully significant, to be administered to the respondent (TAB. 2).

Concerning the price it is necessary to highlight that the minimum limit of 4.00 € derives from a preliminary price verification of all “Etna DOC” wines being on the market. This control established that on the Sicilian market there is not any wine of the above mentioned typology having lower prices.

Nine charts containing different attributes and levels combinations had been given in total to the interviewed person (TAB. 2).

TAB. 2 - Profili del vino Etna DOC

Combinazione	Prezzo	Colore	Metodo di produzione	Notorietà della marca
1	> di 8.00 euro	Bianco	Biologico	si
2	> di 8.00 euro	Rosato	Biologico	no
3	da 4.00 a 8.00 euro	Rosso	Biologico	no
4	da 4.00 a 8.00 euro	Rosato	Convenzionale	si
5	da 4.00 a 8.00 euro	Bianco	Biologico	si
6	< di 4.00 euro	Rosato	Biologico	si
7	< di 4.00 euro	Rosso	Biologico	si
8	> di 8.00 euro	Rosso	Convenzionale	si
9	< di 4.00 euro	Bianco	Convenzionale	no

The features and the relative levels considered to be significant for the purposes of the research were the colour (red, white, rosé), the price in euros per 0.75 l bottle (< 4.00, from 4.00 to 8.00, > than 8.00), the method of production (organic, conventional) and whether or not it is a known brand (yes, no).

Once the data was gathered, we proceeded to an estimate of the weight assigned by the consumers to the various attributes, and the utility associated with the various levels of these. It was necessary, however, to choose preliminarily the type of functional relationship between utility and preselected levels.

For the aims of the present analysis, the choice was made to use the rule of the additive linear composition, in relation to which, the total utility of a product is equal to the arithmetic sum of the utility that each consumer associates with the attributes considered and which he therefore considers, in the context of the preselected levels, substitutable among each other.

$$U_i = \sum_{k=1}^n \sum_{j=1}^m u_{kj} x_{kj}$$

In this case, U_i represents the utility assigned by the consumer to the combination of attributes i-nth, u_{kj} is the partial utility assigned to the level j-nth of the attribute k-nth, while x_{kj} is a binary variable that assumes the value zero in absence of the attribute and one in its presence.

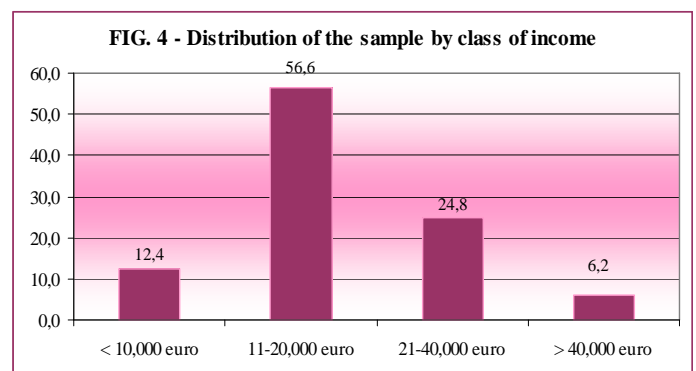
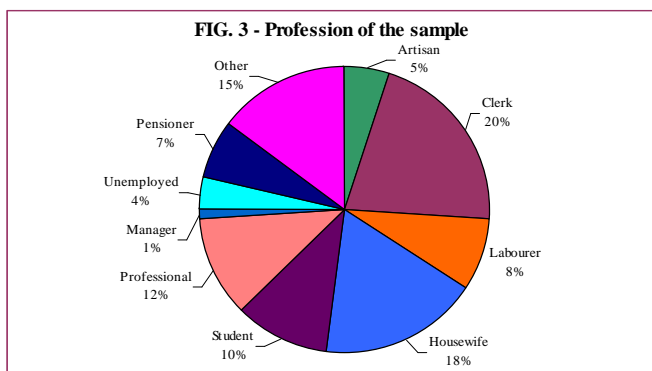
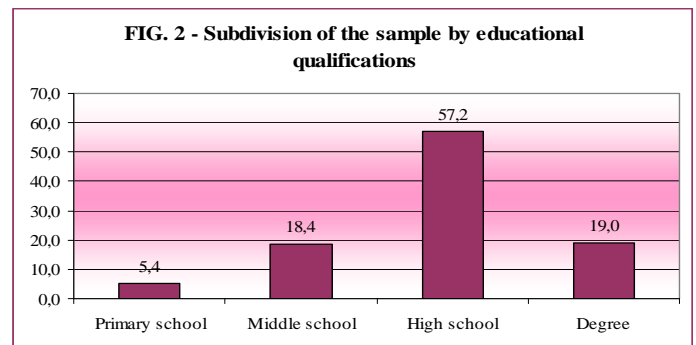
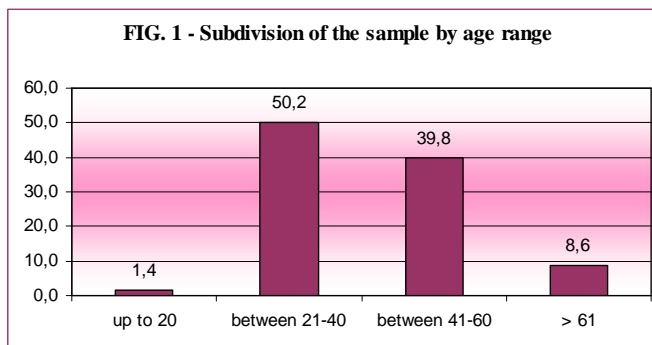
Therefore, the value of a product, in terms of utility, is equal to the arithmetic sum of the utility that the individual consumer associates with the attributes it possesses.

Results obtained applying the OLS method are confirmed by Kendall's ¹ Pearson and Tau's R indicators values giving an indication concerning the model's adjustment degree in relation to observed data, representing so in fact the correlation between estimated and observed preferences.

4. Analysis of the results of the research

4.1 General features of the sample interviewed

In this first phase it was felt to be useful to outline the profile of the consumer highlighting age, sex, education, profession and income of the family unit. Indeed, from the research it emerged that 51.6%, equal to 258 units, are male consumers with 50.2% aged between 21 and 40 and 38.8% aged between 41 and 60 (FIG. 1). With regard to education (FIG. 2) the consumers interviewed have a mid to high cultural level, indeed 19% hold a university degree, 57.2% have a high school qualification, 18.4% middle school and 5.4% primary school. In examining employment of the sample (FIG. 3) we found a varied socio-economic pattern; nine categories were considered (artisan, housewife, manager, unemployed, clerk, self-employed, labourer, pensioner, student) plus the entry "other", which includes those professional activities not ascribable to those listed above. The most popular category was that of clerk with 21.2%, there then follows the category of housewife with 17.8% and those who declared a profession different from those provided in the questionnaire with 14.6%, then come the self-employed with 11.6%, students with 10.4%, labourers with 8.00%, pensioners with 6.8%, artisans with 5.0%, unemployed 3.6% and managers with 1.0%. The final element investigated, which allowed us to complete the reference picture of the sample is the level of family income (FIG. 4). Indeed from the research it emerges that on the whole the sample interviewed has a mid to high income. Only 12.4% have an income below 10 thousand euros, 56.6% have an income of between 11 and 20 thousand euros, 24.8% have an income of between 21 and 40 thousand euros and 6.4% have an income above 40 thousand euros.



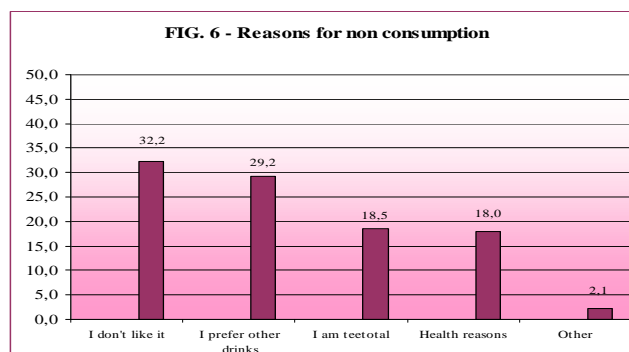
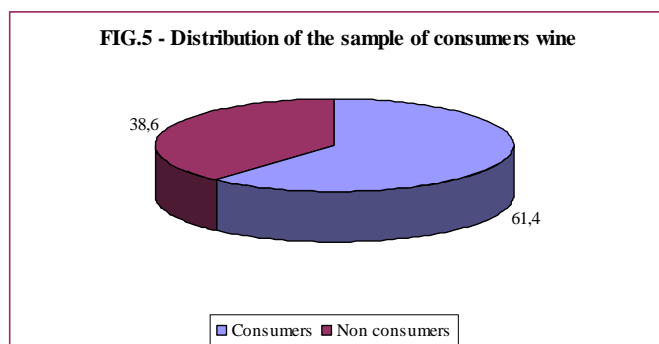
4.2 General features of wine consumption

Through the present research a considerable quantity of information regarding the features of wine consumption in general and Etna DOC in particular has been gathered. Due to two reasons it had been necessary to carry out the survey for this research's purposes considering both aspects, wine consumption in general as well as quality wines consumption: first of all because having carried out a preliminary survey, during which it had been possible to establish that the most part of Etna DOC wines in the Catania province are available prevalently in LD supermarkets, it had been so decided to carry out this survey in above mentioned shopping centres, and being those ones no specialized shops a heterogeneous consumers sample had been interviewed. And having secondly observed the gradual consumption drop registered in the last decade, in Sicily and in Italy, of table wines compared to the increase registered for quality wines – proofing so that consumers pay not only more attention on goods that they consume, but they also recognize in seals (DOC, DOCG, IGT) the quality of a product – it had been possible to determine through the above mentioned research quality wines consumers rate and specifically Etna DOC wines consumers rate compared to the overall consumption.

From an analysis of the data we can see that 61.4% of the consumers interviewed (FIG. 5), equal to 307 out of 500, declared that they drink wine frequently while the remaining 38.6%, equal to 193 interviewees define themselves as non-consumers.

It is however necessary to underline that within the category of the interviewees who define themselves non consumers, 26.9% (52 subjects) declare themselves to be purchasers but not consumers, while 73.1% (141 subjects) declare they have never purchased wine. Therefore the reference sample consists of 359 subjects.

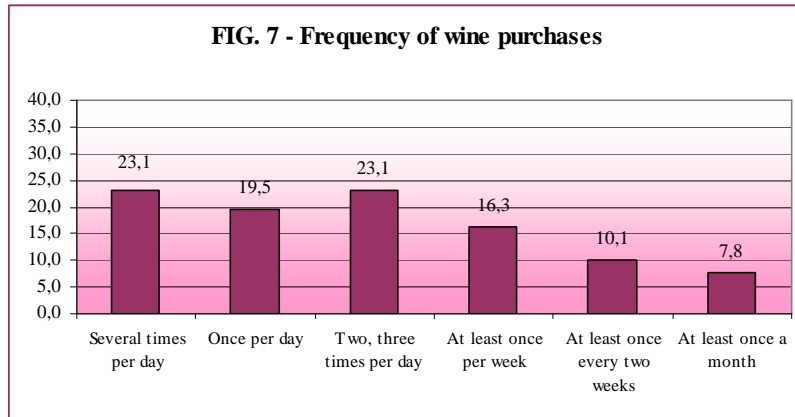
The sample of consumers who declared themselves to be non consumers were asked why (FIG 6) they were led not to consume the product. The response to this question on the part of 32.2% of the non consumers was that they do not appreciate the organoleptic qualities of the wine, 29.2% prefer other drinks, 18.5% are teetotal, while 18% state that they do not drink wine for health reasons.



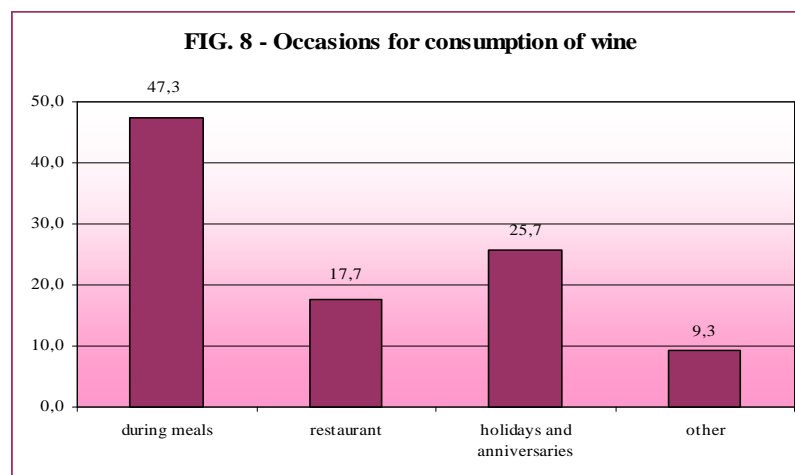
With regard to the frequency of wine consumption (FIG 7), from the analysis carried out it has emerged that 42.6%, equal to 131 interviewees out of 307 consumers, declared they drink

Work in progress

wine “once a day” or even “several times a day” (23.1% declared they drink wine more than once a day, while 19.5% declared they drink wine once a day), 23.1%, equal to 71 interviewees, declared they drink wine “two or three times a week”, 16.3% “at least once a week”, 10.1% “at least once every two weeks”, while only 7.8% of consumers declared that they drink wine “at least once a month”.



This research also aims to identify the main occasions on which wine is consumed (FIG 8) and has allowed us to ascertain that wine maintains an important role during meals, when it is drunk by 47.3% of the consumers interviewed; a percentage equal to 25.7% declare that they drink the product at holidays and 17.7% declare that they drink wine only in restaurants. This result puts on evidence that most likely consumers having declared to consume above mentioned drink during meals prefer to purchase loose wine compared to the other categories, which on the other side are more inclined to consume quality wines.



4.3 Features relating to the area of provenance, the certification and the consumption of Etna DOC wine

With reference to consumers' attention for the area of provenance of the wine (FIG 9), 70.8% of the sample (254 consumers) declared that they are interested in this feature, while the remaining 29.2% (105 consumers) displayed no interest.

Work in progress

Among those who declared themselves interested in the provenance of the wine they buy (FIG 10), 64.2% prefer wine of local production, 29.5% declared that they consume wine of both local production and wine produced in other areas, while the remaining 6.3% declare that they prefer wine produced in other geographical areas or even extra-regional wines. This result confirms the marked bond that a Sicilian consumer has with his territory and his traditions. Besides being wine for Sicilian consumers a mere product, it represents also an emblem of their cultural tradition. In fact consuming a “quality” product means to purchase a product being able to recall *a territory* (which with reference to Sicily compared to the other Regions began only for a short time now to valorise its products), its *traditions* and its *values*. In other words it can be asserted that purchasing products bearing a quality seal he purchases a part of his “provenance” territory. In this double role wine specifies itself and can be used as a motor for the territorial economic development.

FIG. 9 - Interest for the area of provenance

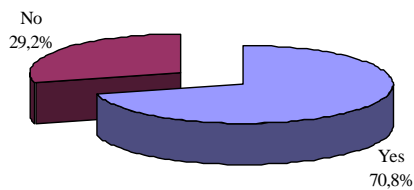


FIG. 10 - Level of consumers' preference between wines produced locally and those produced elsewhere

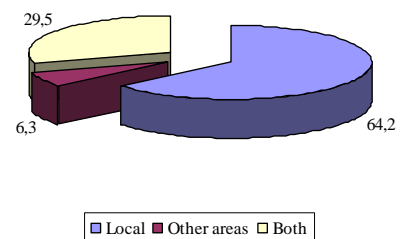
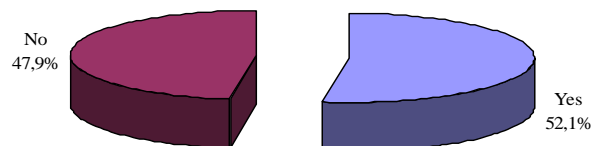


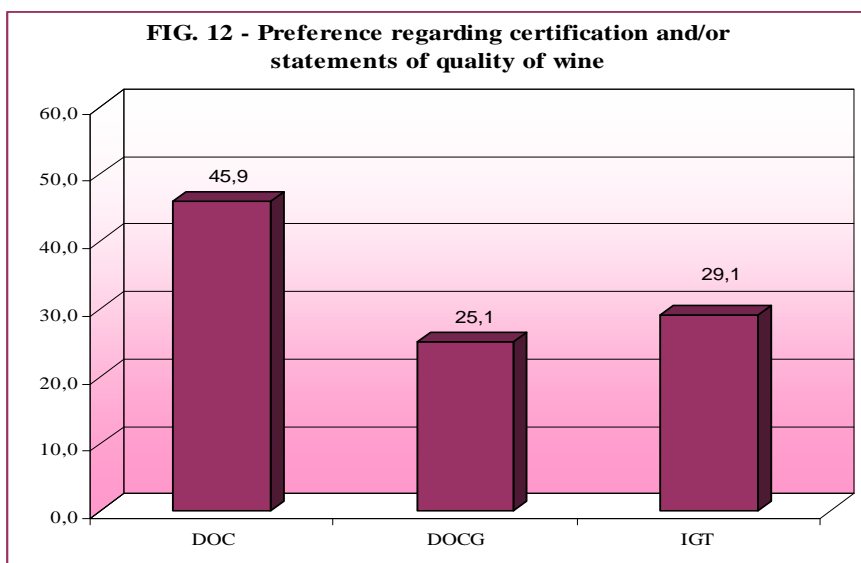
FIG. 11 - Interest in certification and/or statements of quality



Interest in certification and/or statements regarding the quality of the wine is another element considered in that this is considered particularly important for the results of the research. The results obtained (FIG 11) show that 52.1% of the sample interviewed declared themselves interested in quality certification, while 47.9% declared they were not interested, this data leads us to think that the percentage of consumers who declared themselves interested in certification belong to that segment of consumers who are more inclined to purchase bottled rather than on-tap wine.

Another element of important interest regards the level of reliability that consumers grant to the quality certification. From the research it transpires that 91.4% of the consumers interested in the quality certification believe this to be reliable, the remaining 8.6% hold it to be of poor reliability while none of the consumers consider it to be unreliable. From the results of the research it transpires that the certification system preferred by the sample (FIG 12) is DOC, with 45.9% of preferences, followed by the IGT system with 29.1% of preferences and DOCG with 25.1%. This result means we can state that the greater preference

for DOC wines on the consumers' part can be justified both by the greater presence of this type of wine in the large distribution chain compared to other wines with other certification systems, and by the fact that DOCG wines are not produced in Sicily.



The present research also aims to identify the level of knowledge and consumption of “Etna DOC” wines .

In the for the survey used questionnaire chart had been inserted to help the interviewed person the names of all produced Etna DOC wines.

From the carried out survey emerges that (TAB. 3) 46% of the interviewed sample stated to know the name of one o more wines, declaring so to be a consumer of above mentioned wine tipology, while 54% stated that they had never consumed this product.

From the research carried out it emerges (TAB 3) that 46% of the sample interviewed declared themselves to be consumers of this type of wine, while 54% stated they had never consumed this product.

Among the reasons that led the interviewees to the non-consumption of this wine, 37.6% declared they prefer another wine, 48.5% declared they did not know it, 6.7% declared they do not drink it because it costs too much, while the remaining 7.2% said that there were other reasons. This result can be traced back to the small size of the companies involved and the limited expenditure capacity of the wine producers, which affects the above-mentioned companies' possibilities in terms of applying significant marketing strategies.

TAB. 3 - Information concerning the consumption of Etna DOC wine

Indications	N.	%
Consumers of Etna DOC		
Yes	165	46,0
No	194	54,0
Total	359	100,0
Reasons for non consumption		
Prefer other wine	73	37,6
Don't know	94	48,5
Costs too much	13	6,7
Other	14	7,2
Total	194	100,0

Source: our processing of directly gathered data

4.4 Commercial distribution of wines and consumers' attitudes with regard to price

With regard to the preferred places where wine is purchased by the consumers interviewed, from an analysis of the data (FIG 13) it emerged that they favour purchase in supermarkets and hypermarkets (44.6%), an expected result if we consider that the interviews were carried out in points of sale of the large distribution chain. A high proportion of consumers (equal to 21.3%), in search of difference and refinement, declared they purchase from wineries, especially when they wish to buy a wine of particular quality or when they want to enlarge the range of wines consumed.

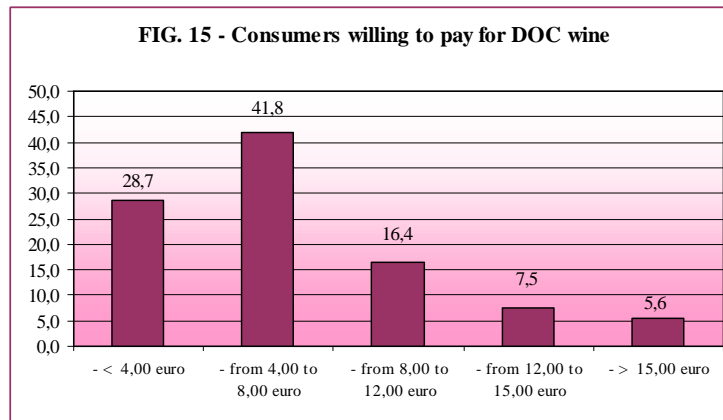
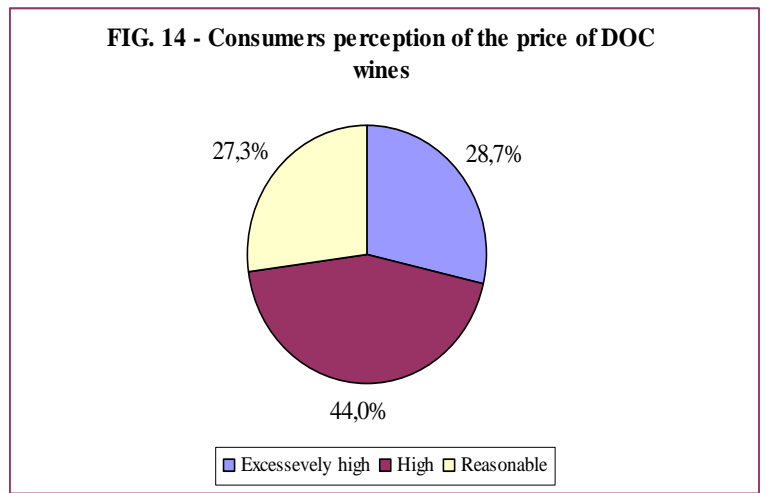
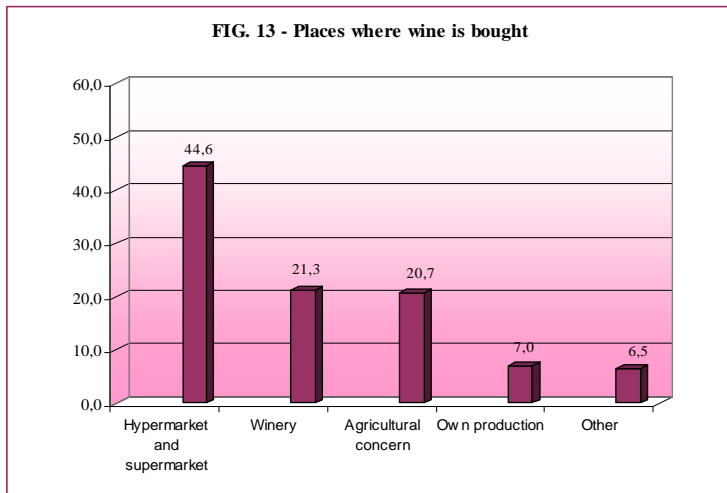
Another category of consumers (equal to 20.7%), consists of those who purchase from agricultural concerns, including in this category the proportion of consumers who declared that they purchase from rural tourism establishments and wine producers.

The percentage of those who declared themselves not interested in the purchase of the product because they produce it themselves was inferior (7%), as was that of those who declared that they purchase in restaurants or from small retailers (6.5%).

As regards perception of the price (FIG 14) of DOC wines on the part of the consumers interviewed, the results of the research have shown that prices are considered to be "excessively high" by 28.7% of consumers, "high" by 44.0% and "reasonable" by 27.3% of the consumers interviewed.

Furthermore, with the aim of testing on which price band the consumer orientates himself at the moment of purchase, a question was inserted regarding the expense they are prepared to bear for the purchase of a litre of DOC wine.

From the processing of the data gathered (FIG 15) it emerges that 28.7% of the sample is prepared to pay up to 4.00 euros, 41.8% are orientated towards the middle band, which corresponds to an expense ranging from 4.00 to 8.00 euros, 16.4% are instead prepared to spend from 8.00 to 12.00 euros. In this case we are dealing with individuals who consider the high price as an element of the quality of the wine, very often these are refined and habitual consumers who often buy in specialized shops in the quest for difference.



4.5 Analysis of the preference for Etna DOC wine through the use of “conjoint analysis”

The use of this technique of analysis has allowed us to present to the interviewees a series of tables carrying different combinations of attributes and relative levels.

Table 4 illustrates conjoint analysis’s main results. From the processing of the data we can observe that all four of the attributes analyzed proved relevant, even though the colour and price have greater importance for the consumer in comparison with the name of the brand and the information regarding the method of production, which proved to be the least relevant element.

From the complete analysis (TAB 4) it emerges that the greatest weight with regard to the features highlighted is held by the colour (44.73%), which influences the consumer more at the moment of purchase with regard to the price (23.76%), the name of the brand (19.08%) and the method of production (12.43%). This result is confirmed by another value gathered during the survey, when it had been asked that the sample indicates its favourite wine typology. In fact interviewed “consumers” declared to prefer red wine, other wine typologies are consumed only in certain occasions, often to accompany particular dishes.

As instead for the utility values for each level, it is possible to note that the consumers at the moment of purchase showed themselves to be particularly careful with regard to colour, showing a clear preference for red wine, followed by white wine.

As for price, we underline that the level favoured by the consumer is represented by the intermediate one, from 4.00 to 8.00 euros, while higher prices lead the consumer to purchase types of wine other than Etna DOC.

It is anyway necessary to put on evidence that this result may depend on the fact that this survey had been carried out in large distribution chains places. In fact in such huge shopping

centres quality wines can be found, but with prices that only unlikely are higher than eight euros.

There does exist a group of interviewees who prefer wines at the higher level, underlining an association between price and poor quality of the wine.

The name of the wine is considered to be a relevant attribute by the consumer. This result is confirmed by previous questions in the questionnaire in which the interviewee was asked to order the five factors (price, name, label and presentation, others' advice and provenance) from the most to the least important of those which influence him at the moment of purchase. The name proved to be one of the factors that the consumer considered very important, to the point of being seen as an element of the quality of the wine. Also in the brand mark's notoriety case it is right to declare that in the chart had been inserted all produced Etna DOC wines' names and all those ones related to the producing winegrowers. It emerged that brand marks being prevailing known are those ones being available in large distribution chains.

Finally, with regard to the method of production, from the research it has emerged that organic methods are considered by consumers to be an element of quality although they nevertheless demonstrate less interest in this aspect with regard to the other attributes.

The results obtained are further confirmed by Pearson's R value, which provides an indication of the degree of adaptation of the model to the data observed.

TAB. 4 - Result of conjoint analysis

<i>Features</i>	<i>Levels</i>	<i>%</i>	<i>Coefficient</i>
Color	Red	44,73	1,3939
	White		0,5152
	Rosé		-1,9091
Mehtod of production Organic	Yes	12,43	0,5439
	No		-0,5439
Price	< 4,00 euro	23,76	-0,3899
	from 4,00 to 8,00 euro		0,4505
	> 8,00 euro		-0,0606
Known names	Yes	19,08	0,8909
	No		-0,8909

Costant = 5,522

Pearson's R = 1,00

So, from the analysis carried out, it emerges that from the various combinations of attributes and levels available to the consumers, the ideal profile consists of a wine red in colour, belonging to a price range of between 4 and 8 euros, obtained from an organic production method and of a known name (TAB 5).

TAB. 5 - Ideal profile

<i>Attributes</i>	<i>Levels</i>
Colour	Red
Price	from 4.00 to 8.00 euros
Method of production	
Organic	Yes
Known name	Yes

5 Conclusion

The research carried out on the perception of quality allows us to make some interesting considerations.

An initial element of reflection regards the growing interest of consumers in quality wines, which explains the trend in consumption over recent decades towards a reduction in consumption of table wine and an increase in consumption of quality wine. We therefore note the tendency of consumers to perceive common wines and quality wines as very different categories, seeing in quality wines a drink that is increasingly destined to particularly important situations in people's lives.

A second element that emerges from the research regards the attention that the consumer grants to the area of provenance of the wine consumed, indeed the consumer interviewed favours the consumption of local or regional wine. This result underlines the link that the Sicilian consumer has with his territory and its traditions. Wine is more than just a product for the Sicilian consumer, it is a symbol and for Sicily represents an emblem of its traditional culture.

With regard to the factors that influence the consumer at the moment of purchase, above and beyond the area of provenance another factor is the price, indeed 41.8% of the interviewees are orientated towards a medium price band, between 4.00 and 8.00 euros.

With regard to the main occasions on which wine is drunk, the research carried out has allowed us to ascertain that wine maintains an important role during meals, especially for the more adult subjects; younger people, instead, are more geared towards consumption especially at holidays and anniversaries.

With regard to certification and or statements of quality of wine, the sample declares its interest in certifications of quality; this result makes us think that the percentage of consumers who have declared an interest in certification belong to that segment of consumers which is more inclined towards the purchase of bottled rather than on-tap wines.

As for the application of the conjoint analysis to the perception of quality, interesting results emerge, indeed the processed data show that we can state that all of the attributes considered proved relevant, even though the colour and the price have greater importance for the consumer compared to the name and the information on the methods of production.

Relative to the values of utility for each level, it is possible to note that the consumer at the moment of purchase proves to be particularly careful with regard to colour, with a clear preference for red wine followed by white wine.

Finally, with regard to price, the analysis allowed us to ascertain that the level favoured by the consumer is the intermediate one, between 4.00 and 8.00 euros, while the consumer is willing to pay a higher price for the purchase of types of wine other than Etna DOC. It would be anyway interesting to verify through another research if the in above work obtained results can be obtained carrying out the same study in other areas.

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