

## Vienna 2019 Abstract Submission

### Title

A survey on the University students' attitude towards wine innovation

### I want to submit an abstract for:

Conference Presentation

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### Keywords

Italian Students; Wine innovation; WNS; Consumption

### Research Question

How is the University students approach to new extrinsic and intrinsic wine attributes? Are they reluctant or willing to try them?

### Methods

Wine Neophobia Scale.

Exploratory factor analysis with principal component analysis (PCA).

Anova analysis to verify possible differences among different groups of consumers towards wine innovation, depending on socio-demographic variables

### Results

500 questionnaire collected, sample with Italian and foreign students. The majority of the students are interested in wine innovation (WNS) but they maintain a negative perception of new wine attributes.

### Abstract

Introduction and objectives

In the last years wine market has changed rapidly. Traditionally wine market, in terms of production and export, was dominated mostly by Italy, France and Spain overall) but recently other European and Extra-European countries started producing wine and introducing some innovative attributes (communication, packaging and intrinsic characteristics like innovative flavour and taste). Currently wine market presents a heterogeneous scenario of participants, which are used to be grouped in Old World and New World countries (Australia, New Zealand, Argentina, Chile, South Africa and USA). It should be also considered that in 2016, United States are confirmed as the main global wine consumer country, followed by France and Italy (both countries registered a negative trend) and by China. The level of consumption in China is steadily increasing since 2011 (2016/2011 +29.90%) (Global state of condition report: development and trends, OIV, 2016; Wine Monitor, Nomisma, 2016).

Given an increasingly competitive environment in wine industry, a lot of wine producers are looking to innovation strategies in order to attract the wider number of consumers. Wine attributes could be divided into extrinsic and intrinsic. Extrinsic wine attributes can be changed without changing the beverage product itself (innovations mainly in price, brand, packaging), while the intrinsic wine attributes are related to the product and the processing method, and they consist in grape variety, alcohol content and wine style (Lockshin, 2003).

This work has considered both extrinsic and intrinsic wine innovative attributes such as packaging, distribution, communication, health properties, taste, flavours and colour of wine. Packaging includes front and back label, bottle and its shape, cask, package and awards. Packaging and labelling have a significant influence on the price, on the wine purchase and on consumption choice (Combris et al., 1997; Batt et al, 1998, 2000). Beyond the functional and logistic role, packaging is considered as an important communication tool because it communicates words, images, shapes and colours (De Luca and Penco, 2006). Label delivers key information to the consumers about the benefits offered by wine (Jennings and Wood, 1994); usually, back labels refer to the winemaker, company, wine bouquet or flavour and the type of food or occasion that could be matched with that wine (Shaw et al, 1999). Wine packaging could also include closures. As far as the distribution is concerned, since wine became a lifestyle beverage with more people drinking wine, particularly women, retailers are widening their range of distribution channels in response (Bruwer and Wood, 2005). In the last years the modern retailing (hypermarket and supermarket) became the main reference point for consumers because this kind of distribution could offer also high quality wines that before were found only in specialized wine shops (Pomarici et al., 2012). Also Internet is becoming an important channel of retailing.

Wine has been considered as a product consumed for hedonistic reason, but in the last years wine has started to be studied from an health-oriented perspective, even though there is a debate about wine healthy benefits derived from a moderate consumption (Samoggia, 2016; Saliba et al., 2013). Furthermore the consumer's perception about wine healthy benefits is different according the socio-demographic characteristics: Millennials are more interested in their health compared with Generation X and Baby Boomers, even though the health consciousness increases with age (Macias and McMillan, 2008). Due to an increase of health consciousness about wine, in recent years wine producers have started to produce some particular wines such as wines with a lower alcohol content and wine with low calories. The main reasons why a consumer is interested in buying a low alcohol wines are different: at first, the desire to be able to stay within the blood alcohol limit to drive after drinking alcohol; secondly, consumers would avoid the negative health effects of alcohol. Another common reason is being able to drink more wine without the effects that higher alcohol wine produces. Finally, from the study of Saliba et al., 2013, also emerges that women are the most concerned in purchase low alcohol wines. Innovation strategies in the wine market are also based on an intrinsic attribute like the colour of the product. A blue wine is recently appears on the market: it is called Gik, is produced in Spain with a mixture of red and white grapes (Sirah, Airen and Garnacha) but in the EU is not recognised as a wine due to its strange colour.

Thus the aim of this study is to explore the University students' approach to wine innovation by evaluating their relationship with new wine attributes as packaging (bottle shape and materials), distribution channels (supermarket, winery, wine shop, e-commerce), information on labels as a new form of communication. The survey has been focused also on innovation like coloured wines and wine with particular spiced flavours.

This study represents a prosecution of a previous research dealing with the Italian Millennials' attitude and perception towards wine innovative attributes (Castellini and Samoggia, 2018). In the present work the focus is on University students, the youngest group of Millennial cohort.

## Method

The methodological tools adopted in the current study included the Wine Neophobia Scale (Ristic et al., 2016) aimed at perceiving the student's inclination towards innovative wine products, an exploratory factor analysis with principal component analysis (PCA) to identify the latent variables behind the wine consumption perception of the sample. Anova analysis allowed to verify possible differences among different groups of consumers towards wine innovation, depending on socio-demographic variables.

The study continued with a more detailed data analysis using socio-demographic variables in order to understand if there are some different attitudes towards new wine attributes in terms of gender, Millennials' age, citizenship, study subject area and education and income level. A students' convenient sample from the University of Bologna has been selected to investigate students' attitude to purchase wine with less traditional features.

The instrument used to make this research was a questionnaire submitted through an online platform called Qualtrics; a QR code has been created in order to favour the diffusion of the questionnaire. A paper copy has been distributed to students not having smartphone or laptop. During the design-phase of the survey, the following

topics have been considered and included in the questionnaire: consumption behaviour; opinion on what a student thinks about a given item; perception that focuses on what person feels rather than what he/she thinks; knowledge about the topic; socio-demographic data. The questionnaire includes five sections and two initial filter questions aimed at selecting only the consumers who are student and wine drinkers. Data were gathered from November 2017 to April 2018 in Bologna. An initial test of the questionnaire has been conducted submitting it to a cohort of students attending the courses of the Dept. of Agricultural and Food Sciences (University of Bologna).

### Preliminary Results

The survey has been submitted to 558 respondents but the interviews that could be used in the data analysis amount to 500. However, the number of respondents for each question may vary with a mean number of respondents equal to 496. Most of respondents are born between 1994 and 1998 (81%), but there is also a quite important percentage of interviewees who are born between 1982 and 1993 (19%). The majority of respondents are women (52%) and Italian (92%). The education level shows an equality between those who have a High School Graduation (50%) and the other half has a University Degree (50%). The main study subject area concerns Agricultural Science and Veterinary Medicine (28%), followed by other departments.

As far as the wine consumption frequency is concerned nearly two third of the respondents drink wine more than once a week. Most of the students perceive wine as an interesting product (71%), trendy (58%) and pleasant to drink (74%), while another share of them consider wine as boring (29%), not trendy (42%) and not enjoyable (26%). In terms of health, wine is considered unhealthy by the majority of students (68%).

The application of the WNS reveals that the large majority of the students are interested in wine innovation and in wine from foreign countries. This result is not supported by the other analyses; in fact when other questions have been analysed, the results are different and overturned. Considering this results and the insights derived from the previous work about Millennials (Castellini and Samoggia, 2018) some doubts arise about the need to adapt the WNS to countries where consumers have a long tradition of wine consumption. This would lead to a more accurate measure of the willingness/reluctance to wine innovation. This may represent a future step of the research.

As far as the students' perception towards specific innovative wine product attributes is concerned, results show that consumers have a negative perception. A quite positive inclination has been registered for particular innovative attributes, such as artistic label or containing information about food pairings in terms of communication; regarding the packaging, the bottle is the only admitted even if they have new shapes or reduced dimensions. An unexpected result points out that the perception to wine with added flavours (cinnamon, ginger or pepper) registered a refusal weaker than that towards innovative packaging. Could wine with added flavour represent a new market niche in the wine sector addressed to student's consumption? The Authors believe that further surveys must be carry on to confirm this position.

The socio-demographic information gathered through the questionnaire have been crossed with each question about wine innovation in order to find significant characterizations of the respondents. Women appear to be more innovative than males in their wine consumption approach. Another result underlines the different inclination between Italian and foreign students who are more willing to try wines with a more creative names, artistic wine labels, canned wines, shake and squeeze product and other innovative wines.

### References

- Batt, P., (1998), The value of wine medals in the Western Australian wine industry, *The Australian Grapegrower and Wine maker*, No. 414a, June, p. 139
- Batt, P.J., & Dean, A., (2000), Factors influencing the consumer's decision, *Australia and New Zealand Wine Industry Journal Marketing Supplement*, Vol. 15 (4), pp. 34- 41
- Bruwer, J., Wood, G., (2005), The Australian online wine-buying consumer : Motivational and behavioural perspectives, *Journal of Wine Research*, 16:3, 193-211, DOI: 10.1080/09571260600556666
- Castellini, A., Samoggia, A., (2018), Millennial consumers' wine consumption and purchasing habits and attitude towards wine innovation, *Wine Economics and Policy*, Available online 12 December 2018, <https://doi.org/10.1016/j.wep.2018.11.001>
- Combris, P., Lecocq, S. and Visser, M., (1997). Estimation of a Hedonic Price Equation for Bordeaux Wine: Does Quality Matter?, *Economic Journal*, Vol. 107, pp. 390-402
- De Luca, P, Penco, P., (2006), The Role of Packaging in Marketing Communication : an Explorative Study of the Italian Wine Business. 3rd International Wine Business Research Conference, (September 2014), 6-7.
- Jennings, D., Wood, C., (1994), Wine: Achieving competitive advantage through design, *International Journal of Wine Marketing*, vol. 6 (1), pp. 49-61

Lockshin, L., (2003), Consumer purchasing behavior for wine: what we know and where we are going, *Marches et Marketing du Vin*, Bordeaux Ecole de Management n57-03, Aout

Macias, W., McMillan, S., (2008). The return of the house call: the role of internet-based interactivity in bringing health information home to older adults, *Health Commun.* 23, 34-44

Pomarici, E., Boccia, F., & Catapano, D. (2012). The wine distribution systems over the world: An explorative survey. *New Medit*, 11(4), 23-32

Ristic, R., Johnson, T.E., Meiselman, H.L., Hoek, A.C., Bastian, S.E.P., (2016), Towards development of a Wine Neophobia Scale (WNS): measuring consumer wine neophobia using an adaptation of the Food Neophobia Scale (FNS). *Food Qual. Prefer.*, 49 (2016), pp. 161-167, 10.1016/j.foodqual.2015.12.005

Saliba A., Ovington L., Moran C.C., (2013), Consumer demand for low-alcohol wine in an Australian sample, *Int. J. Wine Res*, 2013 (5) (2013), pp. 1-8

Samoggia, A., (2016), Wine and health: faraway concepts?, *Br. Food J.*, 118 (4) (2016), 10.1108/BFJ-07-2015-0267

Shaw, M., Keeghan, P., Hall, J., (1999), Consumers judge wine by its label, study shows, *Australian and New Zealand Wine Industry Journal*, 14(1), 84-87

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- Batt, P.J., & Dean, A., (2000), *Factors influencing the consumer's decision*, Australia and New Zealand Wine Industry Journal Marketing Supplement, Vol. 15 (4), pp. 34- 41
- Bruwer, J., Wood, G., (2005), *The Australian online wine-buying consumer : Motivational and behavioural perspectives*, Journal of Wine Research, 16:3, 193-211, DOI: 10.1080/09571260600556666
- Castellini, A., Samoggia, A., (2018), *Millennial consumers' wine consumption and purchasing habits and attitude towards wine innovation*, Wine Economics and Policy, Available online 12 December 2018, <https://doi.org/10.1016/j.wep.2018.11.001>
- Combris, P., Lecocq, S. and Visser, M., (1997). *Estimation of a Hedonic Price Equation for Bordeaux Wine: Does Quality Matter?*, Economic Journal, Vol. 107, pp. 390-402
- De Luca, P, Penco, P., (2006), *The Role of Packaging in Marketing Communication : an Explorative Study of the Italian Wine Business*. 3rd International Wine Business Research Conference, (September 2014), 6–7.
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- Lockshin, L., (2003), *Consumer purchasing behavior for wine: what we know and where we are going*, Marches et Marketing du Vin, Bordeaux Ecole de Management n57-03, Aout
- Macias, W., McMillan, S., (2008). *The return of the house call: the role of internet-based interactivity in bringing health information home to older adults*, Health Commun. 23, 34–44
- Pomarici, E., Boccia, F., & Catapano, D. (2012). *The wine distribution systems over the world: An explorative survey*. *New Medit*, 11(4), 23–32
- Ristic, R., Johnson, T.E., Meiselman, H.L., Hoek, A.C., Bastian, S.E.P., (2016), *Towards development of a Wine Neophobia Scale (WNS): measuring consumer wine neophobia using an adaptation of the Food Neophobia Scale (FNS)*. *Food Qual. Prefer.*, 49 (2016), pp. 161-167, [10.1016/j.foodqual.2015.12.005](https://doi.org/10.1016/j.foodqual.2015.12.005)
- Saliba A., Ovington L., Moran C.C., (2013), *Consumer demand for low-alcohol wine in an Australian sample*, *Int. J. Wine Res*, 2013 (5) (2013), pp. 1-8
- Samoggia, A., (2016), *Wine and health: faraway concepts?*, *Br. Food J.*, 118 (4) (2016), [10.1108/BFJ-07-2015-0267](https://doi.org/10.1108/BFJ-07-2015-0267)
- Shaw, M., Keeghan, P., Hall, J., (1999), *Consumers judge wine by its label, study shows*, *Australian and New Zealand Wine Industry Journal*, 14(1), 84–87

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