

Generation Y, Wine and Alcohol: a Semantic Differential Approach to Consumption Analysis in Tuscany

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◦*Purpose:* The aim of the study is the elicitation of the consumer's semantic perception of different beverages in order to provide information for the definition of communication strategies for both the private sector (and specifically the wine industry) and the public decision maker. Such information can be seen as the basis of a wider social marketing construct aimed at the promotion of responsible drinking among young consumers.

◦*Methodology:* The semantic differential approach was used in this study. The data collection was based on a survey to 430 consumers between 18 and 35 years old. The database was organized in a three-way structure, indexing the data in a multiway matrix. The data were processed using a Multiple Factor Analysis (MFA). Moreover, homogeneous clusters of consumers were identified using a Hierarchical Clustering on Principal Components (HCPC) approach.

◦*Findings:* The results of the study highlight that beer and spirits are mainly perceived as “Young”, “Social”, “Euphoric”, “Happy”, “Appealing” and “Trendy” beverages, while wine is associated mostly with terms such as “Pleasure”, “Quality” and “Comfortable”. Furthermore, the cluster analysis allowed for the identification of three groups of individuals with different approaches to alcohol drinking.

◦*Practical implications:* The results of the study supply a useful information framework for the elaboration of specific communication strategies that, based on the drinking habits of young consumers and their perception of different beverages, can use a language that is very close to the consumer typologies. Such information can be helpful for both private and public communication strategies.

Keywords: Generation Y, Wine, Consumption, Semantic Differential, Communication

1. INTRODUCTION

The studies related to social changes and new dynamics of behavioral patterns have shown, in Italy, a diachronic scenario characterized by a decrease in per capita alcohol consumption, mainly due to the reduction in the consumption of wine (Allamani et al., 2006, Scafato et al. 2010). At the same time, in contrast to the downward curve of wine - the traditional beverage typical of Mediterranean countries - it is possible to highlight the increase in consumption of beer and spirits, driven mainly by the younger generations, a phenomenon that reflects the growing international integration of cultural models (Tur et al., 2004; Marchini and Pieroni, 2009, Smith and Mitry, 2007).

The Italian scenario shows that young people (18 to 24 year-olds) express consumption patterns that stray further and further apart from the Mediterranean model, marked by moderation and the association of wine with meals; such patterns move towards a “north-western” model, characterized by the high incidence of binge drinking and high consumption of beer and spirits outside of meals (Menghini et al. 2011).

This particular trend in the behavior of young consumers, in relation of both what and how to drink, involves territories in which, as it is the case of the Tuscany region (Voller et al., 2011), the wine sector has always played an important socio-economic and cultural role, being in various ways associated with positive values of territorial identity and economic vitality. In a market characterized by increasing competitiveness and ever wider boundaries, it becomes necessary to inspire a positive interest in wine, a product that new consumers and especially young people lack knowledge of (Barber et al., 2008; Agnoli et al., 2011); this is particularly relevant in countries where the traditional characteristics of local consumption, far from current excesses, are losing appeal.

In addition, as part of the public management of the phenomenon of alcohol abuse, there is no marked discrimination between wine and the beverages that are mainly responsible for drinking abuse behaviors; thus, the wine sector often finds itself in a somewhat “uncomfortable” position in terms of competitiveness, also facing the effects of a suboptimal information management (Marinelli, 2010).

Understanding purchasing attitudes for wine in relation to other alcoholic beverages becomes important for the wine industry in both the markets which still show potential for further growth, as is the case of the USA, and mature markets, as is the case of Mediterranean countries, where the consumption of wine has declined compared to other beverages.

In a society characterized by the strong role of image and message exchange, consumer preferences for wine are more and more influenced by a set of intangible attributes, and the use value of the product makes room for the its symbolic value. In the collective imaginary, a sort of semantic dictionary for goods exists, and consumption becomes a “code of communication” (Fabris 2003); in this context, the product itself becomes an element of social exchange among individuals.

The aim of this paper is to explore the semantic value of wine and other alcoholic beverages generally perceived by consumers, according to a multidimensional approach that allows for the definition of the conceptual space occupied by the products. The collection of data was carried out in Tuscany using a survey aimed at analyzing young consumers semantic perception of five categories of beverages: wine, beer, spirits, FABs (Flavored Alcoholic Beverages or “alcopops”) and soft drinks. This allowed us to identify which semantic variables are associated with the different products and how their levels change in relation to the socio-demographic and behavioral characteristics of the consumers.

To achieve this goal, the semantic differential approach was used as an exploratory tool; such a methodology allows to detect the perceived attributes in relation to the different products and to bring out their meanings in the imagination of the consumer. The information supplied by the study provide an insight on the purchase intentions for the various product categories; such information can be used in the implementation of communication strategies that can prove to be more effective because they use terminologies and cognitive models that are closer to the consumer’s perception

(Bilman et al., 2010). This communication activity has a benefit both in the private area, in terms of regaining of competitiveness for the wine sector, and in the public one, in terms of public health protection and reduction of social costs.

2. MATERIALS AND METHODS

2.1 Generation Y

Many international studies have shown an increase in alcohol consumption among young people (Ahlstrom and Osterberg, 2008; Cheriptel et al., 2009), often characterized by binge drinking behavior (Kuntsche et al., 2004), fed by the “getting drunk” culture. In this perspective, alcohol is increasingly perceived as a substance used to “escape”, legal and quite cheap, which acts as a “bridge drug” to illegal drugs in contexts of young people aggregation (Degenhardt et al., 2010)¹.

Negative externalities caused by this kind of consumption lead to high social costs related to health, accident rates, crime and the labor market (Collins and Lapsley, 2002; Anderson and Baumberg, 2006; Wahl et al. 2010).

In the last twenty years, numerous researches on consumption behavior of Generation Y² (Ebenkamp and Marciniak, 2002; Noble and Schewe, 2003; Noble et al., 2009; Huang and Petrick, 2010) have been conducted, with particular reference to the consumption of wine (Novak et al., 2006; Thach and Olsen, 2004, 2006; Olsen et al., 2007; Ritchie et al., 2009). The concern for this specific age range is linked with more and more accurate market researches based on market segmentation into generational cohorts: the studies show that consumer preferences are expressions of social behaviors that are increasingly associated with habits and lifestyles shared within the same generation (Pendergast, 2010). However, cross-national studies indicate that this generation behaves differently in different countries (Durvasula and Lysonsky, 2008), and in particular in relation to the consumption of alcoholic beverages (Charters et al., 2011, De Magistris et al., 2011; Mueller et al., 2011). This demonstrates how the context - the political, social, economic and cultural environment of each individual country - influences attitudes and consumption patterns (Charters et al., 2006). As a matter of fact, Generation Y in the U.S. has a positive attitude towards wine (Nielsen, 2007): the taste of wine is appreciated and the product suits formal occasions (Thach, 2005; Atkin and Thach, 2012) but not parties, where spirits and beer are preferred (Olsen et al., 2007). Studies on Generation Y in Australia (Fountain and Fish, 2010) and New Zealand (Fountain and Lamb, 2011) show that the behavior towards wine consumption by young people is positive, too. On the other hand, studies show that in the Mediterranean countries wine consumption in this cohort is decreasing (Kevany, 2008; Agnoli et al., 2011, De Magistris et al., 2011) for the shift in the preferences towards other products such as beer and spirits.

The non-homogeneity of the cohort is also related to the “age” variable (Ritchie et al., 2009). As a matter of fact, the wide age range of the cohort makes the extending of the results to the entire generation very risky and difficult. Therefore, various studies focused on a narrower age range in the cohort, as is the case of the studies on College-Age Generation Y (Wolburg and Pokrywczynski, 2001, Martin and Turley, 2004; Noble et al., 2009).

In an increasingly competitive and saturated market, the study of Generation Y becomes very important since the study of this cohort, besides highlighting the current issues, is also pivotal in forecasting the trends of wine and alcohol consumption in the near future (De Magistris, 2011). Longitudinal studies have shown how the drinking habits change with aging, recording an increase in wine consumption in contrast to the reduction of beer and other alcoholic beverages, such as spirits and FABs (Mishra et al., 2006, Olsen et al., 2007; Melo et al., 2010). However, the degree

¹ Another example of extreme behavior among young people is the recently developing use of “eyeballing”, i.e. the intake of spirits by pouring drops in the eyes.

² According to the classification into generational cohorts of Lancaster and Stillaman (2003), Generation Y includes people born between 1977 and 1999.

of these changes is influenced by the current habits and by current marketing and consumer education strategies. In fact, many studies have focused on the category of young adults because of their importance for the implementation of nutritional education programs and for the development of prevention strategies; the importance of such strategies is also related to their additional benefits in terms of positively influencing the next generation: it is within this age range that many start families, passing their habits on to their children (Richards et al., 2006).

2.2 Semantic differential

The exploration of the meanings that alcoholic beverages have for consumers finds its theoretical premises in the semantic differential technique, developed in the 50s (Osgood, 1952; Osgood et al., 1957). This tool allows the researcher to measure the meaning given to a stimulus through a standardized measurement procedure and it is used to detect the structure of the attitudes that play an important role in the explanation of consumer behavior (Fishben and Ajzen, 1975; Ajzen, 2002, Ajzen and Fishbein, 2005). The semantic differential approach is characterized by the fact that no direct questions concerning the meaning of the object of the research are asked; the meaning is detected by the association that the respondent establishes between the object itself and the attributes suggested in a standardized way to all the interviewees (Nunnally, 1959).

In food consumer researches, the semantic differential approach is applied, for various purposes, in order to detect the attitudes of consumers and the results can be useful for both food producers and policy makers. Such a technique can be used to help in the ex-ante understanding of the intention to consume new products (Olsen et al., 2008) or to analyze the possible consumer response to specific product categories that are relevant within the new food consumption patterns, such as Genetically Modified foods (Townsend et al. 2004, Spence and Townsend, 2006), functional foods (Verbake, 2006; Verbake et al., 2009), snacks (Bilman et al., 2010) and traditional food products (Almli et al., 2011). Moreover, as the food market is proving increasingly sensitive to the healthy characteristics of products (Theodore, 2008), many studies applied the semantic differential as an attitude scaling procedure (Conner et al., 2002) in relation to “wellness beverages” (Pohjanheimo and Sandell, 2009), to detect the effects of health related information (Stein et al., 2003; Tudoran et al., 2009) on the expectations and perceptions of consumers. Other studies applied this methodology to explore the emotional response generated by the sensory attributes, such as the perceived image of the product in relation to price, brand and packaging (Guinard et al., 2001; Seo et al., 2009; Shifferstein, 2009); other authors studied the link between attitudes and eating habits (Honkanen et al., 2005) in order to explore how ambivalent attitudes towards a product, characterized by a conflict between health and pleasure, affect consumer behavior (Berndsen and van der Pligt, 2004).

2.3 Research design

This study is based on a direct survey to 430 Tuscan young adults aged 18 to 35. The age range is similar to that of Generation Y; however, people under 18 were not interviewed because of the difficulty of obtaining permission to interview minors and the fact that, in Italy, the consumption of alcoholic beverages is prohibited for anyone under 16. The questionnaire was divided into three sections: the first referring to the elicitation of the socio-demographic variables of the interviewee, the second to the recording of the behavior related to the use of alcoholic beverages, the third to the exploration of the cognitive meanings of the products.

The sample, given the wide age range under consideration, has been segmented into four age groups (18-20, 21-24, 25-29 and 30-35). In addition, to assess behavioral habits, the questionnaire considered mainly questions with 4-point scales and, to a lesser extent, politomic questions.

2.3.1 Semantic differential

The last section of the questionnaire supplied, for each product, a list of seventeen antithetical attributes with a rating scale of seven positions, coded from 1 to 7. For the choice of the attributes,

the following criteria were applied: the relevance to the subject of the investigation, the lexical familiarity of the respondents with the target and the neutrality from value judgments (Maggino and Mola, 2007). The selection of adjectives for this work is based on the list of pairs of attributes used by Osgood (Osgood et al., 1957) and integrated with other existing sources in the literature (Ferrarini et al., 2010); the selection was further verified with a direct discussion with academy and industry experts. The list of adjectives also includes those commonly used in food related studies (Armitage and Conner, 1999).

In detail, the dyads of attributes are: cheap-expensive, happy-sad, young-old, comfortable-uncomfortable, intimate-collective; sophisticated-ordinary, pleasant-unpleasant; usual-occasional, classic-modern, relaxing-exciting, not-socializing-socializing, sacred-profane; euphoric-depressing; quality-poor quality, status symbol-not status symbol; appealing-not appealing, trendy-not trendy.

2.3.2 The ThreeWay Data Analysis

The database obtained with the questionnaires was organized in a Three Way Dataset, indexing the collected data in a three-way matrix according to three criteria or ways: interviewed individuals ($i=1,2,\dots, I$), variables detected by the semantic differential method ($j=1,2,\dots, J$) and consumption occasions ($k=1,2,\dots, K$). In other words, the three-way matrix can be seen as a set of two-way matrices called “slices” divided into “frontal” (K matrices of order $I \times J$), “horizontal” (I matrices of order $J \times K$) and “lateral” (J matrices of order $I \times K$). In our case the three-way matrix can be represented in formal terms by the following structure:

$$i,j,k = \{i = 1, \dots, 430; j = 1, \dots, 17; k = 1, \dots, 5\}.(1)$$

To describe and interpret the information provided by a multiway matrix, the statistical methodology has recently developed a number of approaches within the so-called Multiway Analysis (Kiers, 1988; Bolasco and Coppi, 1989; Kroonenberg, 1992; Rizzi and Vichi, 1995). The techniques that have been used in this study are almost exclusively exploratory (not probabilistic), and work with a model based on the decomposition of the variability of the available information. In the literature, this decomposition model involves two different orders of techniques: a first one allows the analysis of the three basic objectives described above in a single phase (for example, multi-linear models of Tucker (1966)), while a second one analyzes these objectives in separated phases.

This study applies the Multiple Factor Analysis (FMA) (Escofier and Pagès, 1984) in order to get information on the overall comparison of the occasions and on the structural configuration, both “average”, and “fine”. The first aspect is based on the comparison of the structures of the matrices of the single opportunities and allows the detection of any differences or similarities between the occasions, the average structure refers to the deep relationship among the units and among the variables regardless of the single occasions; the “fine” analysis allows a detailed examination of differences in the evaluation among the single units or among the single variables for different occasions.

In the last phase, the identification of homogeneous groups of individuals on the factorial design through a hierarchical clustering on principal components (HCPC) was carried out. The objective of the analysis was to provide a descriptive framework to investigate the structure of preferences of young people in relation to the different alcohol products.

3. RESULTS

The descriptive analysis of the sample (Tab. 1) shows that 57% of it is represented by males; about 50% of the interviewees is in the 21-24 age range, while the most represented activity is that of student (as it is easily expected from an under 35 sample).

Tab. 1: socio-demographic characteristics of the sample

| <i>Gender</i> | |
|-------------------|-------|
| Male | 57.0% |
| Female | 43.0% |
| <i>Age</i> | |
| 18-20 | 18.8% |
| 21-24 | 50.2% |
| 25-29 | 18.6% |
| 30-35 | 12.4% |
| <i>Profession</i> | |
| manager | 1.6% |
| entrepreneur | 6.7% |
| employee | 25.8% |
| student | 56.8% |
| other | 9.1% |

Source: our elaboration on survey data

The analysis of drinking behavior (Tab. 2) shows two consumption typologies: one indoor, with preferences towards wine and beer, and one outdoor, where beer is strongly preferred to wine and spirits are consumed in an average/high quantity by 30% of the sample. In relation to age, beer and wine show antithetical trends, as beer consumption decreases for higher age groups while wine consumption increases.

Tab. 2: consumption behaviour

| | indoor | | | | Outdoor | | | |
|-------------|--------|------|---------|------|---------|------|---------|------|
| | wine | beer | spirits | FABs | wine | beer | spirits | FABs |
| never | 21% | 26% | 61% | 76% | 20% | 14% | 21% | 59% |
| sometimes | 48% | 46% | 31% | 21% | 46% | 31% | 49% | 34% |
| quite often | 21% | 19% | 7% | 3% | 23% | 33% | 19% | 5% |
| often | 10% | 9% | 2% | 0% | 11% | 22% | 11% | 1% |

Source: our elaboration on survey data

Wine is mostly consumed during meals, with 40% of the sample stating that they drink medium/high amounts of it in these occasions; on the other hand, beer and spirits are mostly consumed outdoor, in the evening and during the weekend, with respectively 57% and 39% of the sample drinking medium/high quantities. Regarding the preferred purchase locations, wine is mostly bought in restaurants/pizzerias and supermarkets (43% of the sample buys there quite often/often), beer is mainly purchased in bars/pubs/beer houses (66%), supermarkets (53%) and restaurants/pizzerias (50%) and, lastly, spirits are commonly bought in discos and dance clubs (45%).

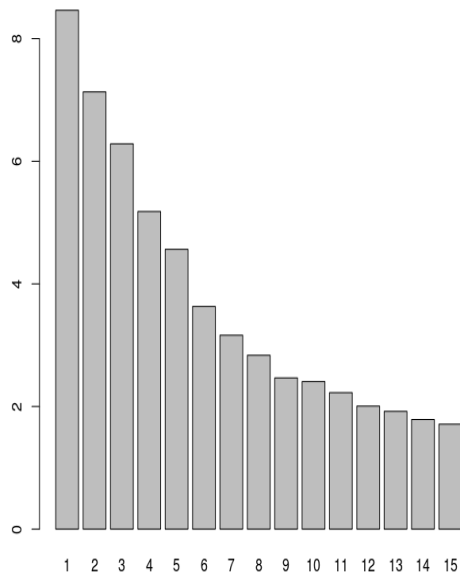
The motivations behind the consumption of alcoholic beverages can be summarized as follows: 65% of the sample gives medium/high importance to “pleasant taste”, 61% to “having fun with friends”, while 35% perceives “getting drunk” as a medium/high motivation.

The observation of binge drinking and excessive consumption behaviors in the last two months leads to the identification of three different consumption categories: “responsible drinkers” (31.4%), “drinkers with a risky behavior” (33%) and “non responsible drinkers” (35.6%).

Regarding the analysis of data with the semantic differential approach, the bar chart in Fig. 1 shows the percentage of variance explained by each dimension provided by a Principal Components Analysis (PCA). The first two main factors of variability summarize about 15.6% of the total inertia

represented by the first plane. The importance of this percentage should not be evaluated without taking into account the number of individuals (430) and the total number of active variables (85). It may be interesting to compare this percentage with the 0.95 quantile of the distribution of the percentages obtained by simulating 1,000 data tables of equivalent size on the basis of normal distribution. The result of the simulation is worth 4.8%: even if a percentage of 15.6% seems low, it indicates a significantly structure of data.

Fig. 1: inertia associated with each dimension



Source: our elaboration on survey data

The graph of consumption occasions (Fig. 2) shows different groups of products: wine, beer and spirits are strongly related to the first dimension, while FABs and soft drinks are related to the second (see also Appendix).

The graph of variables (Fig. 3 and Appendix) confirms this classification adding new details. Beer and spirits are related to the first dimension especially because of the evaluation of terms like “Young”, “Social”, “Euphoric”, “Happy”, “Appealing” and “Trendy”. The difference between the two products is given by a higher projection of spirits on the second dimension. Wine is still related to the first dimension, but with lower coefficients and a partially different set of variables, as terms like “Pleasure”, “Quality” and “Comfortable” have higher values. Soft drinks and FABs, on the other hand, are related to the other dimension as previously stated: the variables that have a higher impact on this are only partially overlapping: “Appealing”, “Quality”, “Happy”, “Pleasant”, “Euphoric”, “Status” and “Trendy”.

Fig. 2: graph of the occasions

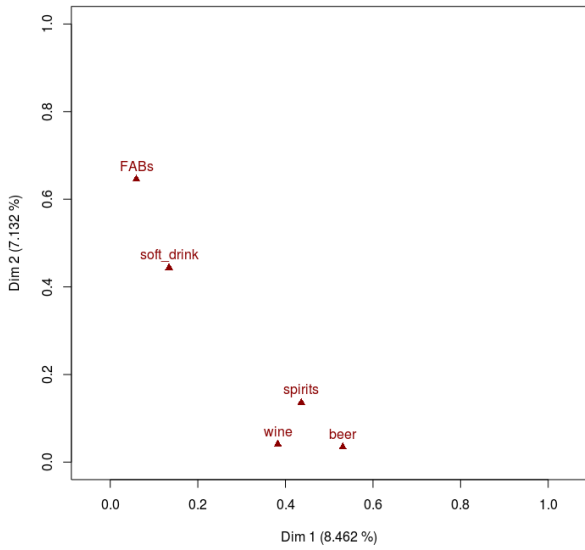
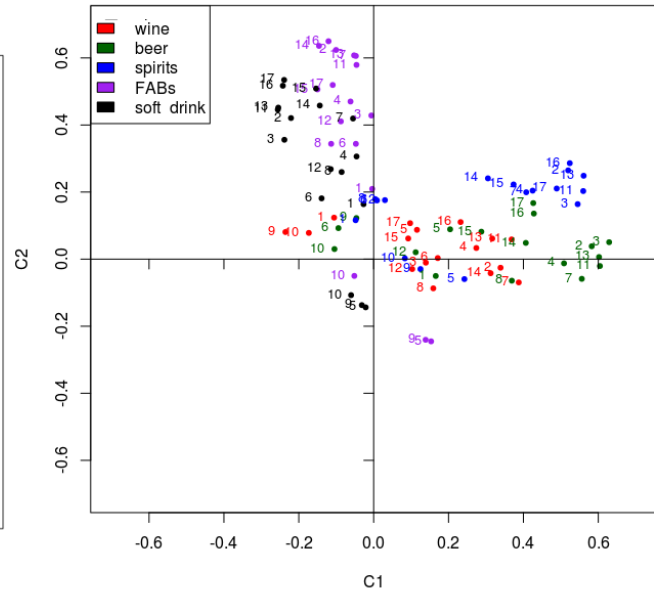


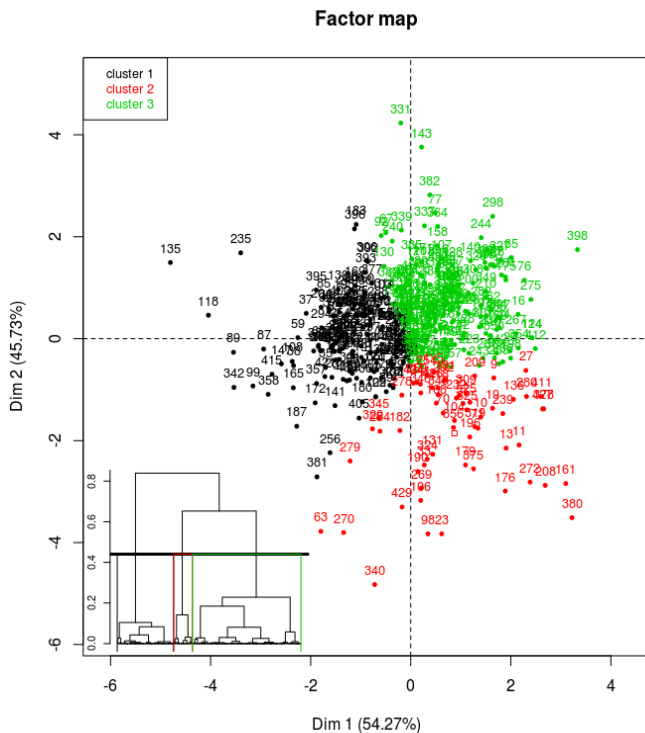
Fig. 3: graph of variables



Source: our elaboration on survey data

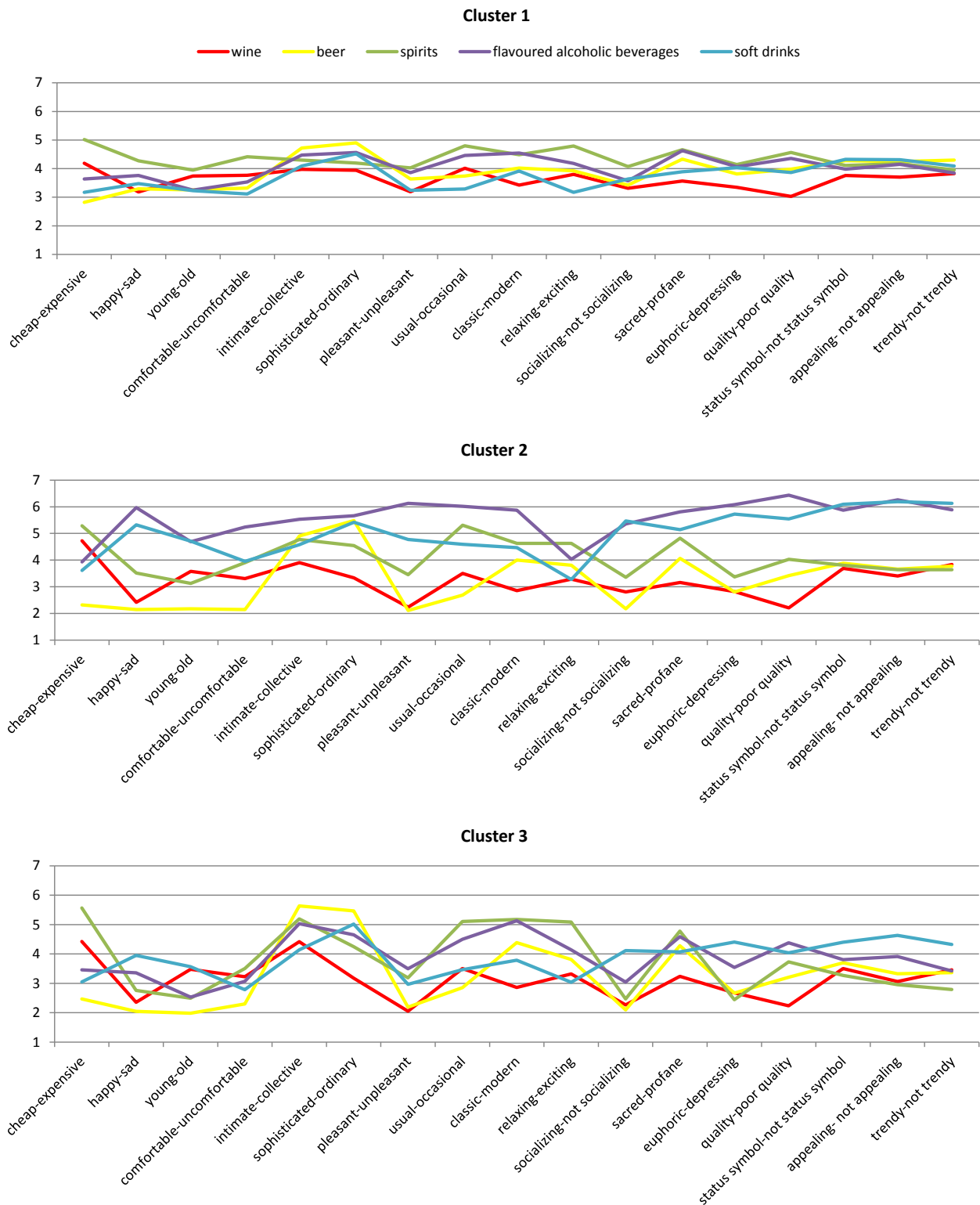
Lastly, figures 4 and 5 show the groups of individuals obtained using the HCPC on the space of the components (Fig. 4) and the average evaluations of semantic differential pairs of terms (Fig. 5). Cluster 1 is negatively correlated with the first component and, to a lesser extent, to the second; coherently, all evaluation variables show a quite low value. Cluster 2, on the other hand, is characterized by a positive correlation with the first component and a negative correlation with the second (Fig. 4), showing relatively high values for wine and beer, intermediate values for spirits and lower values for soft drinks and FABs. Cluster 3 is correlated to both components and shows higher values for all products.

Fig. 4: clusters of consumers on the space of the components



Source: our elaboration on survey data

Fig. 5: semantic differential average evaluations for the Clusters of consumers



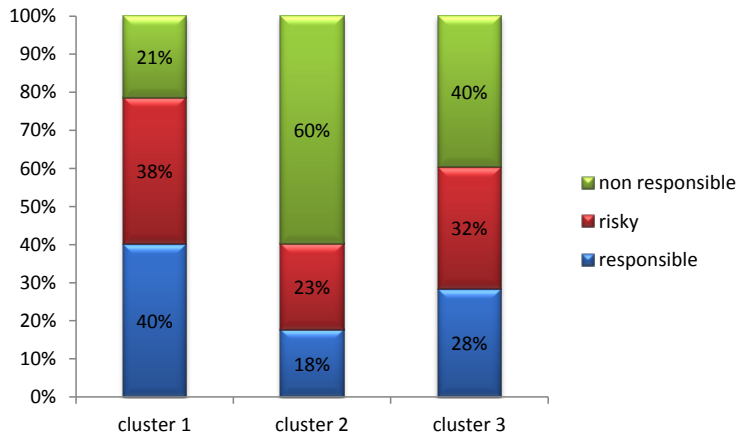
Source: our elaboration on survey data

The difference in the perception of beverages among the clusters is mirrored by the difference in the socio-economic characteristics and behaviors of the consumers.

As a matter of fact, analyzing the three clusters using the socio-demographic variables, it is possible to observe that under 25 consumers mostly belong to Cluster 3, while over 25 consumers mostly belong to Cluster 1. There is no substantial difference between males and females in Clusters 1 and 3, but Cluster 2 is mainly composed by males. Regarding consumption modalities (Fig. 6), Cluster

1 is characterized by a responsible consumption behavior, while Clusters 2 and 3 are characterized by a riskier behavior tending towards non responsible drinking. These data are confirmed by the analysis of “getting drunk” as a drinking motivation: in Cluster 1 such a motivation is marginal for 75% of the consumers, while for Clusters 2 and 3 it is of higher importance for more than 50% of consumers.

Fig. 6: clusters and consumption behavior



Source: our elaboration on survey data

The three clusters show no particular difference regarding indoor consumption of alcoholic beverages, while clusters 2 and 3 show higher outdoor consumption levels of beer and, to a lesser extent, spirits.

4. DISCUSSION AND CONCLUSIONS

This study has analyzed the attitude towards different beverages by young consumers, a category that often expresses preferences towards products other than wine and often indulge in risky consumption behaviors. By highlighting how consumer perceive different beverages, a first set of attributes that determine purchase behaviour is supplied. The analysis that was carried out in this study allows for the identification of three groups of consumers with different perceptions of the provided semantic variables; this is an important knowledge basis for both private companies and the public decision maker in order to implement specific communication strategies – with target characteristics provided by the cluster analysis – using the “lexicon of the consumer” (Reynolds and Rochon, 1991; Bech-Larsen et al., 1996).

Regarding wine, it is clear that all the groups show a similar perception of it: wine is perceived as a sophisticated, classic, sacred, pleasant and quality product, all characteristics that are related to intimate gratification and contribute to creating a “psychological subjection” feeling in the consumer towards an “elite” product.

Even though it is impossible to identify a single cause, the lack of wine knowledge by young consumers is of primary importance for the identification of it as an “elite” product (Barber et al., 2008) that does not allow them to get close to it without feeling inappropriate and unable to choose properly. This means that the message that wine producers will have to work against in order to gain a wider access to this category of consumers is that of the “nobility” of wine and its “non collective” perception (“wine does not draw people together because not everybody is able to appreciate it”).

On the other hand, young people perceive beer as a collective and socializing drink, suitable for groups (i.e. the importance given to semantic attributes such as “young”, “happy” and, on the economic side, “cheap”). These characteristics are heavily present in Clusters 2 and 3, sharing a common perception of beer and spirits which is very different from the one shown by Cluster 1. The

fact that spirits are perceived as “exciting” and “trendy” suggests a communication intervention by the public sector in order to redefine the approach to these products in an attempt to reverse the attitude towards “external gratification” attributes. Such a task needs to consider the predominant emulative behavior typical of younger consumers and their need to conform to the group’s conduct in order to be accepted by it and to fuel their sense of belonging.

For FABs and soft drinks, Cluster 2 shows a higher intensity in the negative perception of external gratification attributes such as “status symbol”, “appealing” or “trendy”, indicating that such products are not part of the sample’s preferences.

The use of multivariate models highlighted the opportunity to implement such methodologies in order to elicit the semantic perception of the attributes of different beverages with regard to the consumer’s behavioral aspects. As a matter of fact, associating clusters deriving from different attitudes towards beverages to consumption habits highlights that Clusters 2 and 3 are more connected to risky and non responsible alcohol consumption behaviors, with beer and spirits as the beverages that differentiate such behaviors from responsible ones; this confirms that the preferences for wine increase with age and lead to more responsible drinking habits.

The sample used for this study includes only young Tuscan consumers. This limits the possibility to extend the results of the study to different scenarios and all the causality results must be interpreted with caution. However, the study can be the starting point for a large scale analysis in order to explain the attitudes towards alcoholic beverages both in different age cohorts and in different areas. The Tuscan case study, on the other hand, can serve as an emblematic example of how such issues are perceived in a territory where wine has a long production and consumption history and tradition: the psychological subjection of young consumers towards wine might indeed be related to the traditionally high involvement in the purchasing process that might amplify the sense of inadequacy; this scenario becomes even more complex as the relation between the older (tied to Mediterranean consumption patterns) and the younger generations (where globalisation and emulation play a predominant role in shaping their behavior) grow further and further apart.

A future development of the research could be the in-depth motivational analysis of the choices of young consumers that links the products – as carriers of attributes – and the individuals (as carriers or values). Such a study might help in elicit semantic associations and cognitive networks that are very useful in the design of communication strategies. Building a message on the semantic perception variables is extremely useful from a public sector point of view when the aim is the increase of public health and the reduction of social costs deriving from a progressive departure from Mediterranean consumption patterns, as communication strategies are destined to be more successful if strongly adherent to the language of the consumers.

REFERENCES

- Agnoli, L., Begalli, D. and Capitello, R. (2011), "Generation Y's perception of wine and consumption situations in a traditional wine-producing region", *International Journal of Wine Business Research*, Vol. 23 No. 2, pp. 176-92.
- Ahlstrom, S.K. and Osterberg, E.L. (2008), "International perspectives on adolescent and young adult drinking", *Addiction*, Vol. 103, pp. 258-268.
- Ajzen, I. (2002), "Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior", *Journal of Applied Social Psychology*, Vol. 32, pp. 665-683.
- Ajzen, I. and Fishbein, M. (2008), "Scaling and testing multiplicative combinations in the expectancy-value model of attitudes", *Journal of Applied Social Psychology*, Vol. 38 No 9, pp. 2222-2247.
- Allamani, A., Cipriani, F. and Prina, F. (Eds.) (2006), *I cambiamenti nei consumi di bevande alcoliche in Italia. Una stima esplorativa sul decremento dei consumi negli anni 1970-2000*, Osservatorio Permanente sui Giovani e l'Alcol, Casa EditriceLitos, Roma.
- Almli, V.L., Verbeke, W., Vanhonacker, F., Naes, T. and Hersleth, M. (2011), "General image and attribute perceptions of traditional food in six European countries", *Food Quality and Preference*, Vol. 22, pp. 129-138.
- Anderson, P. and Baumberg, B. (2006), *Alcohol in Europe: a Public Health Perspective*, Institute of Alcohol Studies, London.
- Armitage, C. J. and Conner, M. (1999), "The theory of planned behaviour: Assessment of predictive validity and perceived control", *British Journal of Social Psychology*, Vol. 38, pp. 35-54.
- Atkin, T., Thach, L. (2012) "Millennial wine consumers: Risk perception and information search", *Wine Economics and Policy*, Available online 23 September 2012, ISSN 2212-9774, 10.1016/j.wep.2012.08.002. <http://www.sciencedirect.com/science/article/pii/S2212977412000038>
- Barber, N., Dodd, T. and Ghiselli, R. (2008), "Capturing the younger wine consumer", *Journal of Wine Research*, Vol. 19 No. 2, pp. 123-41.
- Bech-Larsen, T., Nielsen, N.A., Grunert, K.G. and Sorensen, E. (1996), "Means-end chains for low involvement food products-A study of Danish cognition regarding different application of vegetable oil", working paper 41, The Aarhus School of Business, Aarhus.
- Berndsen, M. and van der Pligt, J. (2004), "Ambivalence towards meat", *Appetite*, Vol. 42, pp. 71-78.
- Bilman, E.M., Van Trijp, J.C.M. and Renes, R.J. (2010), "Consumer perceptions of satiety-related snack food decision making", *Appetite*, Vol.55, pp. 639-647.
- Bolasco, S. and Coppi, R. (Eds) (1989), *Analysis of multiway data matrices*, Elsevier Science Publishers, Amsterdam.

- Charters, S. (2006), *Wine and Society: The Social and Cultural Context of a Drink*, Elsevier Butterworth-Heinemann, Oxford.
- Charters, S., Fountain, J., Kolyesnikova, N., Ritchie, C., Thach, L., Dodd, T., Fish, N., Herbst, F. and Terblanche, N. (2011), "Generation Y and sparkling wines: a cross-cultural perspective", *International Journal of Wine Business Research*, Vol. 23 No. 2, pp. 161-75.
- Cherpitel, C.J., Borges, G., Giesbrecht, N., Hungerford, D., Peden, M., Poznyak, V., Room, R., and Stockwell, T. (2009), *Alcohol and Injuries. Emergency Department Studies in an International Perspective*, World Health Organization.
- Collins, D.J., Lapsley, H.M., (2002), *Counting the cost: estimates of the social costs of drug abuse in Australia 1998-1999. National Drug Strategy Monograph*, Commonwealth Department of Health and Ageing, Canberra.
- Conner, M., Norman, P. and Bell, R. (2002), "The theory of planned behaviour and healthy eating", *Health Psychology*, Vol. 21 No.2, pp. 194–201.
- Degenhardt, L., Dierker, L., Chiu, W.T., Medina-Mora, M.E., Neumark, Y., Sampson, N., Alonso, J., Angermeyer, M., Anthony, J.C., Bruffaerts, R., De Girolamo, G., De Graaf, R., Gureye, O., Karam, A. N., Kostyuchenko, S., Lee, S., Lepine, J.P., Levinson, D., Nakamura, Y., Posada-Villa, J., Stein, D., Wells, J.E. and Kessler, R.C. (2010), "Evaluating the drug use "gateway" theory using cross national data: consistency and associations of the order of initiation of drug use among participants in the WHO World Mental Health Surveys", *Drug and Alcohol Dependence*, Vol. 108 No. 1, pp. 84–97.
- De Magistris, T., Groot, E., Gracia, A. and Albisu, L.M. (2011), "Do Millennial generation's wine preferences of the 'New World' differ from the 'Old World' – a pilot study", *International Journal of Wine Business Research*, Vol. 23 No. 2, pp. 145-60.
- Durvasula, S. and Lysonski, S. (2008), "A double-edged sword: understanding vanity across cultures", *Journal of Consumer Marketing*, Vol. 25 No. 4, pp. 230-44.
- Ebenkamp, B., and Marciniak, J. (2002), " Why aren't they worried?", *Brandweek* , Vol. 43, pp. 29-32.
- Escofier, B. and Pagès, J. (1984), *L'analyse factorielle multiple*, in *Cahiers du Bureau Univ. Recherche Operat., Série Recherche* 423.
- Fabris, G. (2003), *Il nuovo consumatore: verso il postmoderno*, Franco Angeli, Milano.
- Ferrarini, R., Carbognin, C., Casarotti, E.M., Nicolis, E., Nencini, A. and Meneghini, A.M. (2010), "The emotional response to wine consumption", *Food Quality and Preference*, Vol. 21 No. 7, pp. 720-725.
- Fishbein, M. and Ajzen, I. (1975), *Belief, attitude, intention, and behavior: An introduction to theory and research*, Reading, MA: Addison- Wesley.
- Fountain, J. and Fish, N. (2010), "It's a happy drink: Australasian Generation Y's experiences and perception of sparkling wine", *Proceedings 5th International Academy of Wine Business Research Conference*, Auckland.

- Fountain, J. and Lamb, C. (2011), "Generation Y as young wine consumers in New Zealand: how do they differ from Generation X", *International Journal of Wine Business Research*, Vol. 23 No. 2, pp. 107-24.
- Guinard, J.X., Uotani, B., Schlich, P. (2001), "Internal and external mapping of preferences for commercial lager beers: comparison of pedoni ratings by consumers blind versus with knowledge of brand and price", *Food Quality and Preference*, Vol.12, pp. 243-255.
- Honkanen, P., Olsen, S.O. and Verplanken B. (2005), "Intention to consume seafood-the importance of habit", *Appetite*, Vol. 45, pp. 161-168.
- Huang, Y. C., and Petrick, J. F. (2010), "Generation Y's Travel Behaviours: a Comparison with Baby Boomers and Generation X", in Benckendorff, P., Moscardo, G. and Pendergast, D. (Eds.), *Tourism and Generation Y*, CABI, Wallingford, pp. 27-37.
- Kevany, S. (2008), "French millennials drinking less, Americans more", *Meninger's Wine Business International*, Vol. 3, pp. 13-17.
- Kiers, H.A.L. (1988), "Principal Components Analysis on a mixture of quantitative and qualitative data based on generalized correlation coefficients", in Jansen, M.G.H. and van Schuur, W.H. (Eds), *The many faces of multivariate analysis (Vol.I)*, Proceedings of the SMABS-88 Conference in Groningen, pp. 67-81.
- Kroonenberg, P.M. (1992), PARAFAC in three-way land. Comment on Leurgans and Ross, *Statistical Science*, Vol. 7, pp. 312-314.
- Kuntsche, E., Rehm, J. and Gmel, G. (2004), "Characteristics of binge drinkers in Europe", *Social Science & Medicine*, Vol. 59, pp. 113-127.
- Lancaster, L.C. and Stillman, D. (2003), *When Generations Collide: Who They Are. Why They Clash. How to Solve the Generational Puzzle at Work*, Harperbusiness, New York, NY.
- Maggino, F. and Mola, T. (2007), *Il differenziale semantico per la misura degli atteggiamenti: costruzione, applicazione e analisi. Presentazione di uno studio*, Firenze University Press, Archivio E-Prints, Firenze.
- Marchini, A., and Pieroni, L. (2009), "Dinamiche intergenerazionali nei modelli di consumo alimentare: il caso della dieta mediterranea in Italia", XLIV Convegno Sidea, Franco Angeli, Milano.
- Marinelli, N. (2010), *Asimmetrie informative e sicurezza alimentare nei diritti del consumatore e nella competitività dei sistemi produttivi*, *Italian Journal of Agronomy*, Vol. 4 Suppl., pp. 13-21.
- Martin C.A. and Turley, L.W. (2004), "Malls and consumption motivation: an exploratory examination of older Generation Y consumers", *International Journal of Retail Distribution Management*, Vol. 32 No 10, pp. 464-75.
- Melo, L., Cox, D.N., Delahunty, C. and Forde, C. (2010), "Alcohol and wine consumptions' patterns over consumers' lifetimes", *Proceedings 5th International Conference of the Academy of Wine Business Research*, Auckland.

- Menghini, S., Marinelli, N. and Fabbrizzi, S. (2011), "Il consumo responsabile di alcol dei giovani in Toscana: analisi delle caratteristiche del consumatore e studio sulla fattibilità di una strategia di marketing sociale", in Marinelli, A. (Eds), *Alcol e giovani. Disagio sociale, salute e competitività*, Franco Angeli, Milano, pp. 105-170.
- Mishra, G.D., McNaughton, S.A., Bramwell, G.D. and Wadsworth, M.E. (2006), "Longitudinal changes in dietary patterns during adult life", *British Journal of Nutrition*, Vol. 96, pp.735–744.
- Mueller, S., Remaud, H. and Chabin, Y. (2011), "How strong and generalisable is the Generation Y phenomenon? A cross-cultural study for wine", *International Journal of Wine Business Research*, Vol. 23 No. 2, pp. 125-44.
- Nielsen (2007), "Millennial consumers seek new tastes, willing to pay a premium for alcoholic beverages", News release from the Nielsen Company, available at: www.nielsen.com
- Noble, S.M. and Schewe, C.D. (2003), "Cohort segmentation: an exploration of its validity", *Journal of Business Research*, Vol. 56, pp. 979-87.
- Noble, S. M., Haytko, D. L., and Phillips, J. (2009) "What drives college-age Generation Y consumers?", *Journal of Business Research*, Vol. 62, pp. 617-628.
- Nowak, L., Thach, L. and Olsen, J.E. (2006), "Wowing the Millennials: creating brand equity in the wine industry", *Journal of Product & Brand Management*, Vol. 15 No. 5, pp. 316-23.
- Nunnally, J.C. (1959), *Test and Measurement: Assessment and Prediction*, McGraw-Hill, New York.
- Olsen, J.E., Thach, L. and Nowak, L. (2007), "Wine for my generation: exploring how US wine consumers are socialized to wine", *Journal of Wine Research*, Vol. 18, pp. 1-18.
- Olsen, S.O., Heide, M., Dopico, D.C., and Toften, K. (2008), " Explaining intention to consume a new fish product: a cross-generational and cross-cultural comparison", *Food Quality and Preference*, Vol. 19, pp. 618–627.
- Osgood, C.E. (1952), "The Nature and measurement of Meaning", *Psychological Bulletin*, Vol. 49, pp. 197-237.
- Osgood, C.E., Suci, G.J. and Tannenbaum, P.H. (1957). *The measurement of Meaning*. University of Illinois Press, Urbana.
- Pendergast, D. (2010), "Getting to know the Y Generation", in Benckendorff, P., Moscardo, G. and Pendergast, D. (Eds), *Tourism and Generation Y*, CABI, Wallingford, pp. 1-15.
- Pohjanheimo, T.A. and Sandell, M.A. (2009), "Headspace volatiles contributing to flavor and consumer liking of wellness beverages", *Food Chemistry*, Vol. 115, pp. 843-851.
- Reynolds, T.J. and Rochon, J.D. (1991), "Means-end based advertising research: Copy testing is not strategy assessment", *Journal of Business Research*, Vol. 22 No.4, pp. 131-142.

- Richards, A., Kattelman, K.K., and Ren, C. (2006), "Motivating 18 to 24 year olds to increase their fruit and vegetable consumption", *Journal of the American Dietetic Association*, Vol. 106 No. 9, pp. 1405-1411.
- Ritchie, C., Ritchie, F. and Ward, R. (2009), "A good night out: alcohol-related behaviour in young adults", *Worldwide Hospitality & Tourism Themes*, Vol. 1 No. 2, pp. 69-93.
- Rizzi, A. and Vichi, M. (1995), *Three-way data set analysis su Some relations Between Matrices and Structures of Multidimensional Data Analysis*, Giardinieditori, Pisa.
- Scafato, E., Gandin, C., Ghirini, S., Galluzzo, L., Rossi, A., Gruppo di lavoro CSDA (2010), *Rapporti ISTISAN: Epidemiologia e monitoraggio alcol-correlato in Italia, Rapporto 2010*, Istituto Superiore di Sanità.
- Seo, H.S., Lee, Y., Yoon, Y.R., Song, J.M., Shin, J.M., Lee, S.Y. and Hwang, I. (2009), "Impacts of sensory attributes and emotional responses on the hedonic ratings of odors in dairy products", *Appetite*, Vol. 53, pp. 50-55.
- Shifferstein, H.N.J (2009), "The drinking experience: cup or content?", *Food Quality and Preference*, Vol. 20, pp.268-276.
- Smith, D.E. and Mitry, D.J. (2007), "Cultural convergence: consumer behavioral changes in European markets", *Journal of Wine Research*, Vol. 18 No. 2, pp. 107-112.
- Spence, A. and Townsend, E. (2006), "Implicit attitudes towards genetically modified (GM) foods: a comparison of context-free and context-dependent evaluations", *Appetite*, Vol. 46, pp.67-74.
- Stein, L.J., Nagai, H., Nakagawa, M., and Beauchamp, G.K. (2003), "Effects of repeated exposure and health-related information on hedonic evaluation and acceptance of a bitter beverage", *Appetite*, Vol. 40, pp. 119–129.
- Thach, L. and Olsen, J.E. (2004), "The search for new wine consumers: marketing focus on consumer life Style or life Cycle", *International Journal of Wine Marketing*, Vol. 16, pp. 44-57.
- Thach, L. (2005), "Millennial Wine Marketing", *Wine Business Monthly*, Vol. 12 No. 12.
- Thach, L. and Olsen, J.E. (2006), "Market segment analysis to target young adult wine drinkers", *Agribusiness*, Vol. 22 No. 3, pp. 307-22.
- Theodore, S. (2008), *Beverage R&D: Banking on boomers*, Beverage Industry, posted 15.07.08. www.bevindustry.com
- Townsend, E., Clarke, D., and Travis, B. (2004), "Effects of context and feelings on perceptions of genetically modified food", *Risk Analysis*, Vol. 24 No. 5, pp.1369–1384.
- Tucker, L.R. (1966), "Some mathematical notes on three-mode factor analysis", *Psychometrika*, Vol. 31, pp. 279-311.
- Tudoran, A., Ottar Olsen, S. and Dopico, D.C. (2009), "The effect of health benefit information on consumer health value, attitudes and intentions", *Appetite*, Vol.52, pp. 568-579.

- Tur, J.A., Romaguera, D., and Pons, A. (2004), "Food consumption patterns in a Mediterranean Region : does the Mediterranean diet still exist ?", *Annals of Nutrition and Metabolism*, Vol. 48 No.3, pp. 193-201.
- Verbeke, W. (2006). Functional foods: consumer willingness to compromise on taste for health? *Food Quality and Preference*, Vol. 17, pp. 126–131.
- Verbeke, W., Scholderer, J. and Lahteenmaki, L. (2009), "Consumer appeal of nutrition and health claims in three existing product concepts", *Appetite*, Vol. 52, pp.684-692.
- Voller, F., Orsini, C. and Berti, A. (2010), *I consumi e le conseguenze dell'uso e abuso di alcol in cifre*, ARS Toscana.
- Wahl, S., Kriston, L. and Berner, M. (2010), "Drinking before going out—A predictor of negative nightlife experiences in a German inner city area", *International Journal of Drug Policy*, Vol. 21, pp. 251-254.
- Wolburg J.M. and Pokrywczynski, J. (2001), "A psychographic analysis of Generation Y college students", *Journal of Advertising Research*, Vol. 41 No. 5, pp. 33–53.

APPENDIX

Table of coefficients – 95% significance

| Dimension 1 | | | Dimension 2 | | |
|-------------|-------------|-------------|--------------|-------------|-------------|
| Variable | Coefficient | Probability | Variable | Coefficient | Probability |
| SOCIAL_B | 0,585554 | 0,00% | APPEAL_FAB | 0,62300 | 0,00% |
| YOUNG_B | 0,581020 | 0,00% | HAPPY_FAB | 0,62150 | 0,00% |
| EUPHORIC_B | 0,549181 | 0,00% | PLEAS_FAB | 0,60359 | 0,00% |
| HAPPY_B | 0,531619 | 0,00% | EUPHORIC_FAB | 0,59771 | 0,00% |
| SOCIAL_SP | 0,529605 | 0,00% | QUALITY_FAB | 0,59049 | 0,00% |
| EUPHORIC_SP | 0,526811 | 0,00% | SOCIAL_FAB | 0,58011 | 0,00% |
| YOUNG_SP | 0,514708 | 0,00% | TRENDY_SD | 0,52604 | 0,00% |
| PLEAS_B | 0,512458 | 0,00% | TRENDY_FAB | 0,51147 | 0,00% |
| PLEAS_W | 0,485303 | 0,00% | APPEAL_SD | 0,51060 | 0,00% |
| COMFORT_B | 0,470213 | 0,00% | STATUS_SD | 0,49628 | 0,00% |
| HAPPY_SP | 0,466631 | 0,00% | COMFORT_FAB | 0,48980 | 0,00% |
| SOCIAL_W | 0,450429 | 0,00% | QUALITY_SD | 0,47210 | 0,00% |
| APPEAL_SP | 0,443190 | 0,00% | STATUS_FAB | 0,47049 | 0,00% |
| TRENDY_SP | 0,436114 | 0,00% | PLEAS_SD | 0,47021 | 0,00% |
| HAPPY_W | 0,416109 | 0,00% | YOUNG_FAB | 0,45762 | 0,00% |
| QUALITY_W | 0,397821 | 0,00% | EUPHORIC_SD | 0,44379 | 0,00% |
| EUPHORIC_W | 0,381629 | 0,00% | HAPPY_SD | 0,44001 | 0,00% |
| COMFORT_SP | 0,371519 | 0,00% | SOCIAL_SD | 0,43238 | 0,00% |
| TRENDY_B | 0,370398 | 0,00% | YOUNG_SD | 0,38147 | 0,00% |
| APPEAL_B | 0,361418 | 0,00% | COMFORT_SD | 0,37061 | 0,00% |
| PLEAS_SP | 0,359508 | 0,00% | SACRED_FAB | 0,36552 | 0,00% |
| COMFORT_W | 0,339800 | 0,00% | USUAL_FAB | 0,31536 | 0,00% |
| USUAL_B | 0,332064 | 0,00% | SOPHIST_FAB | 0,29074 | 0,00% |
| QUALITY_B | 0,329359 | 0,00% | EUPHORIC_SP | 0,28791 | 0,00% |
| STATUS_SP | 0,323073 | 0,00% | APPEAL_SP | 0,28583 | 0,00% |
| APPEAL_W | 0,294347 | 0,00% | USUAL_SD | 0,28580 | 0,00% |
| INTIM_SP | 0,273033 | 0,00% | HAPPY_SP | 0,27863 | 0,00% |
| QUALITY_SP | 0,257879 | 0,00% | SACRED_SD | 0,26122 | 0,00% |
| STATUS_B | 0,233641 | 0,00% | SOCIAL_SP | 0,24654 | 0,00% |
| INTIM_B | 0,222244 | 0,00% | QUALITY_SP | 0,22921 | 0,00% |
| SOPHIST_W | 0,219649 | 0,00% | CHEAP_FAB | 0,22692 | 0,00% |
| INTIM_FAB | 0,210192 | 0,00% | TRENDY_SP | 0,22683 | 0,00% |
| USUAL_W | 0,208563 | 0,00% | STATUS_SP | 0,22438 | 0,00% |
| YOUNG_W | 0,208117 | 0,00% | YOUNG_SP | 0,21112 | 0,00% |
| CLASSIC_FAB | 0,202476 | 0,00% | COMFORT_SP | 0,19964 | 0,00% |
| CHEAP_B | 0,166390 | 0,05% | TRENDY_B | 0,19741 | 0,00% |
| TRENDY_W | 0,158218 | 0,10% | CHEAP_SD | 0,19549 | 0,00% |
| CLASSIC_SP | 0,152987 | 0,15% | APPEAL_W | 0,18326 | 0,01% |
| SACRED_W | 0,149651 | 0,19% | PLEAS_SP | 0,18305 | 0,01% |
| STATUS_W | 0,148935 | 0,20% | TRENDY_W | 0,16845 | 0,05% |
| RELAX_SP | 0,106692 | 2,69% | INTIM_B | 0,16710 | 0,05% |
| PLEAS_SD | -0,095422 | 4,80% | SOCIAL_W | 0,15343 | 0,14% |
| SOPHIST_FAB | -0,109804 | 2,28% | APPEAL_B | 0,15340 | 0,14% |
| USUAL_SD | -0,113915 | 1,81% | EUPHORIC_W | 0,13750 | 0,43% |
| USUAL_FAB | -0,138519 | 0,40% | SOPHIST_SD | 0,13621 | 0,47% |
| CHEAP_W | -0,139184 | 0,38% | CLASSIC_B | 0,13143 | 0,63% |
| HAPPY_FAB | -0,140361 | 0,35% | SOPHIST_SP | 0,12596 | 0,89% |
| TRENDY_FAB | -0,146243 | 0,24% | YOUNG_B | 0,12136 | 1,18% |
| SOPHIST_B | -0,147792 | 0,21% | STATUS_W | 0,10720 | 2,62% |
| SACRED_FAB | -0,148479 | 0,20% | SACRED_SP | 0,10539 | 2,89% |
| SACRED_SD | -0,157426 | 0,11% | COMFORT_W | 0,10409 | 3,09% |
| APPEAL_FAB | -0,181938 | 0,01% | USUAL_SP | 0,10328 | 3,23% |
| SOPHIST_SD | -0,194865 | 0,00% | HAPPY_B | 0,09888 | 4,04% |
| QUALITY_SD | -0,197416 | 0,00% | INTIM_SD | -0,11851 | 1,39% |
| STATUS_FAB | -0,201343 | 0,00% | RELAX_SD | -0,14248 | 0,31% |
| QUALITY_FAB | -0,210740 | 0,00% | CLASSIC_SD | -0,14779 | 0,21% |
| RELAX_W | -0,219775 | 0,00% | CLASSIC_FAB | -0,17914 | 0,02% |
| STATUS_SD | -0,228088 | 0,00% | INTIM_FAB | -0,18185 | 0,01% |
| CLASSIC_W | -0,249882 | 0,00% | | | |
| YOUNG_SD | -0,261739 | 0,00% | | | |
| HAPPY_SD | -0,267856 | 0,00% | | | |
| TRENDY_SD | -0,303172 | 0,00% | | | |
| APPEAL_SD | -0,308767 | 0,00% | | | |
| EUPHORIC_SD | -0,316089 | 0,00% | | | |
| SOCIAL_SD | -0,317589 | 0,00% | | | |