Consumer perceptions of eco-friendly vs. conventional wines in Australia

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Abstract

Previous research has extensively studied consumer perceptions of organic food, but little is known about consumer perceptions of organic wine. Moreover, most studies focus on organic products, without any comparison with other eco-friendly products. This paper proposes to partially fill this gap by comparing consumer perceptions of conventional and different eco-friendly wines in Australia.

Keywords

Wine perception, Perceptual mapping, Australia.

Topic areas

'Wine consumers perceptions'

Introduction

Since the early 1990s, markets have witnessed the growing popularity of goods that seek to embody 'sustainable consumption' – socially responsible practices that do not jeopardise the needs of future generations. While these concerns were first oriented towards environmental issues, a growing group of consumers have embraced wider ethical issues, including fair trade, animal welfare, workers' welfare, and more globally, with carbon footprints (Codron et al., 2006; Pirotte, 2007). The rising importance of these concerns represents a challenge for many stakeholders.

For many years, Governmental agencies supported organic practices. Global demand for organic products has remained robust, with sales increasing by over 5 billion US\$ a year in the recent years. However, organic food does not tackle all of the concerns of consumers with regards to food production and consumption. More recently, promoted first by some small food industry players, other attributes and claims have been used to characterise a product. Such attributes and claims include fair trade, locally sourced, low carbon footprint, natural, bio-dynamic, and other claims related to 'sustainable consumption'.

Little is known about consumer perception of these different sustainable labels and claims for wines. By conducting a qualitative study with wine consumers in Australia the purpose of this research is to provide first answers to this question. The remainder of the contribution is organized as follows. The next section presents some relevant literature on consumer perceptions of organic or sustainable food and more precisely, wine and organic or eco-friendly wine. The second section presents the methodology. Results are laid out in section 3 and, discussed in section 4 with the theoretical and managerial implications and perspectives.

Literature review

Consumer perceptions of organic or sustainable food

Previous studies investigating consumers' motivations to buy organic, environmental friendly ¹ or Fair Trade products, as well as the values embedded in these motivations, revealed that the values associated with these products are various and heterogeneous (Storstad and Bjorkhaug, 2003; Sirieix et al., 2005; Tagbata and Sirieix, 2008). Various studies focusing on consumer perceptions and/or purchase of 'sustainable consumption' products, have generated heterogeneous results regarding the attention paid by consumers to these labels (see McEachern and McClean (2002) for organic products, McEachern et al., (2007) for animal-welfare labelling and Teisl et al. (2002) for a Dolphin-safe labelling in the market of canned tuna). Several authors (Teisl et al., 2008; Poelman et al., 2008) point out the importance of well-designed labelling practices, as they significantly impact on individuals' perceptions of the eco-friendliness of products.

¹ In this paper we use the term eco-friendly or environmental friendly to characterize products that claim not to be harmful to the environment

Consumer perceptions of (eco-friendly) wine

There is currently no definition for eco-friendly wine. Because of its popularity, organic wine can be associated to such a wine. In the recent years, more and more wine companies have claimed their bio-dynamic orientation when producing and marketing wines. In the meantime, more and more wineries have conducted carbon footprint audit and consumers in most markets could experience wine that are 'carbon neutral' or with an indication of the winery carbon emission.

Very few studies focus specifically on organic wine. Only Brugarolas Molla-Bauza et *al.* (2005) directly investigated the price premium that consumers would be willing to pay for an organic wine. Barreiro-Hurlé et *al.* (2007) also estimated WTP of organic wine while investigating consumers' preferences and WTP for functional wines. Krystallis, Fotopoulos and Zotos (2006) also included organic wines in their study, but the +63.7% WTP for an organic wine seems quite unrealistic.

Other studies comparing organic and conventional wine tend to show that positive attitudes and buying intentions consumers have about organic food in general do not seem to extend to organic wine. Olsen et al. (2006) provide possible explanations for consumers' resistance to purchasing organic wine. Specifically, they consider the role that hedonic consumption plays in altering consumers' willingness to support organic agriculture: wine is associated with taste and pleasure in consumer's mind, but organic wine is associated with bad taste and therefore less pleasure. Besides, most organic products are chosen because of their expected benefits on health and in the wine case, pleasure is more important than health, which does not seem to be a motive for choice. Indeed for wine, the hedonic aspect of consumption has been found to have a greater influence on the purchase decision than the utilitarian aspect (Edwards, 1990). Finally, all wines are considered as "natural", so the "organic" mention is not a strong element of differentiation as it is for other product categories.

If some studies focus on organic wine, to our knowledge, only one study explores the relative importance given to different eco-labels on wine. Remaud et al. (2008) measured the importance that is given to the organic attribute vs. another eco-friendly claim (Carbon Neutral or Environmentally Responsible) by Australian wine consumers compared to two other attributes: price and region of origin. A choice experiment was used to test the importance and the utility attached to each level of each attribute. The results indicate that organic, as an attribute, is valued very little by the 'average' Australian wine consumer, but a minority of wine consumers (one segment) do value eco-friendly wines and are willing to pay a price premium for them. Nevertheless, this study does not describe the perceptions that consumers could have for different (eco-friendly) wines.

Research question

Positive attitudes and buying intentions consumers have about organic food in general do not seem to extend to organic wine. Besides, very little is known about other eco-friendly wines. Thus there is a need to explore and compare consumer perceptions of conventional and different eco-friendly wines. Do consumer perceptions of different eco-friendly claims such as organic, preservative free, bio-dynamic differ from each other and from conventional wine and how?

Research method: Correspondence analysis between attributes and wines

The approach adopted in this study is called 'perceptual mapping' where perceived differences and similarities between competing wine styles in relation to a list of attributes is examined. A two-dimension map is generated using Correspondence Analysis statistical technique. Respondents are asked which wine (between conventional, bio-dynamic, organic and preservative-free wines) they associate with a list of attributes: 'To drink at a restaurant', 'Good value for money', 'Trendy', 'Good for my health', 'Need education to appreciate', 'Does not cause headache', 'Low quality', 'For a family dinner/lunch', 'Distinctive taste', 'More expensive', 'Innovative', 'Harmless for the environment', 'Genuine taste', 'Good to give as a gift', 'Support local production', 'For my daily consumption', 'To share with friends'.

The survey was conducted on-line in February 2009 with a sample of 151 persons living in Adelaide (Australia). Respondents who have been recruited by an on-line panel provider include people from various age, income and background. 52% of the respondents are female and 70% have already tasted some organic products. 52% of the respondents drink some wine at least once a week and 29% once to twice a month.

Results

The Pmap is a visual tool allowing the reader to quickly observe which attributes are related to which type of wine (see Figure 1). A first look at the map indicates that all four wines are perceived as different from each other: they are all located at different spot of the map. Because none of the attributes (except distinctive taste) are located in the centre of the map, it indicates that respondents do attach specific views to each wine. In other words, specific taste could apply to all wines.

This first look at the map should be completed with a 'deviation analysis'. With the deviation analysis, we calculate what is the 'theoretical' expected level of response to the perceptual survey questions, and then compare with responses that have obtained in the survey (Driesener and Romaniuk, 2006). The Deviations Analysis approach is complementary to that of perceptual mapping, as it can highlight certain aspects of the relationships even more clearly.

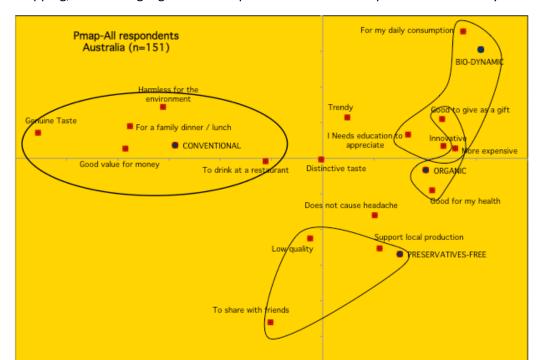


Figure 1:
Perceptual
map – 151
Australian
Table 1:
Deviations

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DEVIATION level is 5%	n= 151			
	Conventional	Bio-dynamic	Preservatives free	Organic
To drink at a restaurant	5.2			
Good value for money	23.4	-7.6	-5.7	-10.1
Trendy				
Good for my health	-15.2			11.7
Need education to appreciate	-8.7	6.2		
Does not cause headache	-6.5			
Low quality			5.4	
For a family dinner / lunch	23.4		-5.7	-12.7
Distinctive taste				
More expensive	-16.4	5.1		10.6
Innovative	-14.5	8.0		
Harmless for the environment	18.5	-5.2	-10.2	e.
Genuine taste	27.1	-9.3	-8.8	-9.0
Good to give as a gift	-14.7	7.0		9.4
Support local production	-9.3		8.3	
For my daily consumption	-12.1	15.5		
To share with friends		-6.8	10.2	-5.4

Based on both the Pmap and the deviations table, we can state that:

- Conventional wines are associated with the following (positive) attributes: 'Genuine taste',
 'Good value for money', 'For a family dinner/lunch', 'Harmless for the environment', and to
 a less extent, 'To drink at a restaurant'. On the other hand, this wine is not seen as 'More
 expensive', 'For my daily consumption', 'Good to give as a gift', 'Innovative', 'Good for my
 health'.
- Organic wine is seen as 'Good for my health', 'More expensive', 'Good to give as a gift'. On the other hand, organic wines are not viewed as 'Good value for money', 'For a family dinner / lunch', and with a 'Genuine taste'.
- Bio-dynamic wine is clearly associated with 'For my daily consumption' and then, to a lower extent, with 'Good to give as a gift', 'Innovative', 'Need education to appreciate', 'More expensive'. It is not seen as 'good value for money', 'Harmless for the environment', 'Genuine taste', and 'To share with friends'².
- Preservative-free wine is perceived as 'To share with friends', 'Support local production',
 'Low quality'. This wine is not seen as 'Good value for money', 'For a family dinner/lunch',
 'Harmless for the environment', 'genuine taste'.

Implications and conclusion

The key implications of this perceptual analysis relate to the positioning of these wines and the way these wines can communicate their distinctiveness. A quick look back to the deviations table indicates that very few attributes are 'free' to be used to promote one of these wines. 'Trendy' and 'Distinctive taste' are not locked in people's mind with a specific wine. In other words, the Bio-dynamic wine industry would gain to promote its wines by adding these aspects as another

² These surprising results may be explained by the fact that most consumers do not know what bio-dynamic wine is and based their answers just on the words.

hook for people's mind. It would help them to counter balance the perception that bio-dynamic wines are not of 'Genuine taste'.

Organic, which is the most important production method alternative compared with conventional wines would take advantage to gain more popularity with restaurateurs, and communicate much more the idea that organic wines are more in line with nature. Based on these findings, the organic wine industry would gain to also communicate its better viticulture practices towards the environment, and reinforce the idea that organic wine (with moderation) is 'good' for health.

Because the conventional wine category possesses the biggest market share of all wine sales, it is not surprising for these wines to also possess greater attributes' relationships in people's mind. In other words, one 'natural' way for the other categories to increase the number of hooks to attract consumers' mind is to grow their market share.

Because wines compete on shelves for people's mind, we believe that the greater the number of hooks or connections consumers can have with a wine brand or a wine category (organic vs. bio-dynamic, etc), the greater the chance for that type of wine to be noticed therefore to be purchased. In brief, the organic (bio-dynamic, and preservative-free) wine industry would gain to adopt a collective approach to communicate its distinctiveness to the consumers.

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