

Lockshin, Lawrence S.; Corsi, Armando Maria

Article

Consumer behaviour for wine 2.0: A review since 2003 and future directions

Wine Economics and Policy

Provided in Cooperation with:

UniCeSV - Centro Universitario di Ricerca per lo Sviluppo Competitivo del Settore Vitivinicolo,
University of Florence

Suggested Citation: Lockshin, Lawrence S.; Corsi, Armando Maria (2012) : Consumer behaviour for wine 2.0: A review since 2003 and future directions, Wine Economics and Policy, ISSN 2212-9774, Elsevier, Amsterdam, Vol. 1, Iss. 1, pp. 2-23,
<https://doi.org/10.1016/j.wep.2012.11.003>

This Version is available at:

<https://hdl.handle.net/10419/194460>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/4.0/>



Review

Consumer behaviour for wine 2.0: A review since 2003 and future directions

Larry Lockshin^{a,*}, Armando Maria Corsi^{b,1}

^a*Ehrenberg Bass Institute of Marketing Science, University of South Australia, 70 North Terrace, 5000 Adelaide, South Australia, Australia*

^b*School of Marketing, University of South Australia, 70 North Terrace, 5000 Adelaide, South Australia, Australia*

Received 16 July 2012; received in revised form 16 November 2012; accepted 16 November 2012

Available online 29 November 2012

Abstract

This paper summarises the main findings concerning consumer behaviour for wine published in academic journals in the last ten years and provides some suggestions about strategic research directions to take in the next few years. One major finding was that few new or novel findings are occurring in some areas: the role of price, brand, region, grape variety, awards; comparisons of Old and New World; segmentation of wine consumers; the value of sustainable or 'green' wine practices to consumers. Another finding was the predominance of one-off convenience sample studies that are difficult to interpret for generalisable results. Some areas with greatest research needs are: retail marketing and consumer response to the variety of techniques retailers use; on-premise consumer behaviour; online and social media influences on consumers; premium and luxury wine behaviour and successful marketing practices; consumer behaviour in emerging markets; the value of wine tourism and marketing for value; the relationship between grape/wine quality and consumer behaviour; consumer response to wine and health issues.

© 2012 UniCeSV, University of Florence. Production and hosting by Elsevier B.V. Open access under [CC BY-NC-ND license](#).

Keywords: Wine; Marketing; Consumer Behaviour; Literature Review

1. Introduction

In 2003 Larry Lockshin and John Hall wrote an article on the state of knowledge in wine consumer behaviour (Lockshin and Hall, 2003). It provided a literature review and status report about what we knew at the time. This article updates the state of understanding of consumer behaviour for wine and adds some commentary about the way forward and a discussion of the methods of investigation likely to yield the most usable results for the development of marketing in the wine sector globally. The objective of this review is not only to organise and review

the large number of articles in the recent wine consumer behaviour literature, but also to critically examine what we have learned that is of value. This is clearly one way of writing a review article. Not all researchers would agree that the focus should be on the practicality or implications of the published work on wine consumer behaviour. We have chosen this viewpoint, because our personal interest is to help the wine industry grow globally and in doing so better understand and serve its customers.

A search for articles on wine consumer behaviour returned almost 400 entries. These were narrowed by focusing almost entirely on refereed journal articles, which left approximately 100 articles published between 2004 and 2012. This points to the growing popularity of wine as a product category and of growing academic interest in its consumption behaviour. In order to simplify the review, the articles were organised into subject areas. The topics reviewed and a list of references are provided in [Table 1](#). The order of the sections was devised as a logical means to consider wine consumer behaviour. The first section looks at the most common and broadest area of wine consumer

*Corresponding author. Tel.: +61 88302 0261; fax: +61 88302 0442.

E-mail addresses: larry.lockshin@unisa.edu.au (L. Lockshin), armando.corsi@unisa.edu.au (A.M. Corsi).

¹Tel.: +61 88302 0942; fax: +61 88302 0442.

Peer Review under the responsibility of UniCeSV, University of Florence.



Production and hosting by Elsevier

behaviour-purchasing in retail stores. The next sections look at wine purchasing in different contexts outside the store: online, on-premise and at the winery. The next sections look at grouping consumers by segments, lifestyles, social and personal values, or generational cohorts. The review then moves to more specific influences on purchasing, such as packaging and labelling, region of origin, country and comparisons between countries, sensory factors (wine taste), sustainable or environmental factors, and finally social media influences on consumer behaviour.

Table 1 provides a summary of the topics, the references, and a brief description of the area. All articles are discussed in each section, with similarities and patterns among the most significant ones in each area provided. After the reviews by topic, we discuss the implications of the areas under study for wine industry practice. We then expand our commentary to look into the future, commenting on areas, which should prove fruitful for future research and those that perhaps are no longer useful.

We hope this review and outlook paper will provide some guidelines and direction for future research in wine marketing to be useful in helping the wine sector develop globally.

2. Literature review

2.1. Retail wine purchasing

Studies on how consumers purchase wine in stores and specifically what affects their purchasing are the broadest areas reviewed here. In the earlier (Lockshin and Hall, 2003) there were several studies focusing on the concept of wine involvement and its impact on how consumers purchase wines. Since 2004, only two papers specifically measured and used wine involvement as the key element in their analysis of wine purchasing behaviour (Hollebeek et al., 2007; Lockshin et al., 2006). Another paper (Casini et al., 2009) found differences between high and low involvement consumers, but it was not the main focus of the paper. Hollebeek et al. (2007) used purchase intention as the outcome based on price, price discount and region. Region was more important for high involvement consumers and price more important for low involvement consumers. Lockshin et al. (2006) used simulated choices to measure the importance of price, region, brand, and awards. Low involvement consumers more commonly used price and awards to make their decision compared to high involvement consumers, who used region and also combined attributes in more complex decision-making process. The Casini et al. (2009) paper looked at choice attributes for wine using Best-Worst Scaling in Italy. The most important attributes were previous experience, personal recommendations, and the taste of the wine. The authors also found some differences in respondents' preferences based on age, involvement level, and the geographical part of Italy they were from.

Two other papers used simulated purchasing experiments (discrete choice analysis) to measure the impact of different aspects of wine on purchasing behaviour. Mueller et al. (2010a) combined discrete choice and actual sensory tasting to determine the importance of taste compared to packaging elements in choice. They found that packaging, lower price, and market share, influenced choice, while higher price and sensory characteristics, such as fruity and sweet influenced hedonic liking. Mueller et al. (2010b) looked at the influence of back label statements on choice. Winery history and elaborate taste descriptions were found to be the most positive influences on choice, while ingredient labelling was the only negative influence on choice.

Ritchie et al. (2010) also looked at price as an important element in wine purchasing. They used focus groups to try and understand the ability for wineries to get consumers to trade up in UK supermarkets, where wine is typically sold using price promotions. Their interest is the low involvement, supermarket shopper, typically buying wine like other grocery items. They found that the way supermarkets communicated wine and focused on price discounting caused the focus to be on price and not on other attributes.

Barber (2012) looked at the influence of environmentally safe wines on the attitude towards purchasing. He found there is a small segment of environmentally knowledgeable consumers willing to purchase wines with such a designation, though he points out this is merely an intention to purchase and he did not measure actual purchase behaviour.

Along with price promotions, wines are often offered for tasting, because consumers report they like to know how a wine tastes before buying it. Lockshin and Knott (2009) measured the effect of free wine tastings on sales before, during and after the tasting period. Free tasting improved sales on the day by over 400% compared to before and after the tasting. Only about one third of the consumers surveyed across nine stores in four cities had actually planned to visit the store to taste wines. About 50 consumers were called back one month after the free tasting and most could not remember the wines they had tasted.

One study focused on the difference between in store and online wine purchasing (Quinton and Harridge-March, 2008). This study used a convenience sample of wine buyers to survey the importance of trust between buying wine in store versus online. They found it is important to have an online service mix that instils trust for the first time online buyer.

Finally, Orth and Bourrain (2005) looked at the influence of ambient scent on wine buying behaviour. They found that more pleasant scents increased variety seeking and curiosity-motivated behaviour. This had effects on the importance of the standard elements consumers use in deciding which wine to buy, such as label colour, taste and grape variety.

To sum up, consumers' purchasing behaviour is affected by a range of different factors, which lead to differences in the way consumers approach wines. Socio-demographic differences are not very important, except to distinguish

Table 1
Summary of areas and articles reviewed.

Retail wine purchasing: articles focused on retail stores measuring intended purchasing as influenced by personal characteristics (involvement), or purchasing contexts (price or tasting promotions)	Casini et al. (2009), Barber (2012), Hollebeek et al. (2007), Lockshin et al. (2006), Lockshin and Hall (2003), Mueller et al. (2010a, 2010b), Ritchie et al. (2010), Lockshin and Knott (2009), Quinton and Harridge-March (2008) and Orth and Bourrain (2005)
Online wine purchasing: articles focused on online purchasing behaviour, including segmentation, or barriers to purchasing online	Stening and Lockshin (2001), Quinton and Harridge-March (2003), Harridge-March and Quinton (2005), Van Zanten (2005), Bruwer and Wood (2005), Quinton and Harridge-March (2008), Bressolles and Durrieu (2010), Thach (2009), Sheridan et al. (2009), and Kolyesnikova et al. (2010) Cohen et al. (2009), Casini et al. (2009), Jaeger et al. (2010), Martinez et al. (2006), Mccutcheon et al. (2009), Lacey et al. (2009), Bruwer and Nam (2009), Bruwer and Rawbone-Viljoen (2012), Corsi et al. (2012), Wansink et al. (2006), and Durham et al. (2004)
On-premise purchasing: focuses on papers where on-premise (restaurants, pubs, cafés) wine consumption behaviour and preferences are the primary purpose of the study	Alebaki and Iakovidou (2011), Gill et al. (2007), Kolyesnikova and Dodd (2008), and Bruwer and Lesschaeve (2012)
Wine tourism: a recent summary and review of papers in wine tourism is cited, so no major review was performed. Three papers focusing on attitudes and perceptions of winery visitors not included in the above study are reviewed	
Segmentation: articles surveying respondents and classifying them in groups based on similar attitudes and demographics	Brunner and Siegrist (2011), Bruwer et al. (2011), Bruwer and Li (2007), Olsen et al. (2007), Ritchie (2007), Charters and Pettigrew (2007), Thach and Olsen (2004), Bruwer and Wood (2005), Van Zanten (2005), Johnson and Bruwer (2004), and Johnson and Bruwer (2003)
Wine lifestyle: articles measuring or grouping consumers into those that have a lifestyle/activities related to wine versus those that do not. This is categorised as a subset of segmentation, because it uses a broader classification than segments	Bruwer et al. (2011, 2002), Bruwer and Li (2007), Bruwer and Wood (2005), Smith and Mitry (2007), Brunner and Siegrist (2011), Olsen et al. (2007), Thach and Olsen (2004), Ritchie (2007), Charters and Pettigrew (2007), and Van Zanten (2005)
Values and social psychology: articles concerning the influence of personal values and social psychological constructs on consumer wine preference or choice	Orth (2005), Orth and Kahle (2008), and Terrien and Steichen (2008)
Generation Y and comparisons: articles comparing wine preferences and/or behaviour between the younger generation and older generations	Agnoli et al. (2011), Ritchie (2011), Fountain and Lamb (2011), de Magistris et al. (2011), Charters et al. (2011), Mueller et al. (2011), Qenani-Petrela et al. (2007), and Wolf et al. (2005)
Packaging and labelling: articles focusing on the effects of packaging attributes and labelling information on consumer preference and choice	Mueller et al. (2011), Goodman (2009), Mueller loose and Szolnoki (2012), Barber and Almanza (2006), Barber et al. (2007, 2006), Boudreaux and Palmer (2007), Orth and Malkewitz (2008), Sherman and Tuten (2011), Jarvis et al. (2010), Chrea et al. (2011), Mueller et al. (2010a), Rocchi and Stefani (2005), and Dimara and Skuras (2005)
Region: articles focusing on the effect of region, some with other attributes included, on wine preference and choice	Perrouy et al. (2006), Adinolfi et al. (2011), Santos et al. (2006), Espejel et al. (2011), Espejel and Fandos (2009), Mccutcheon et al. (2009), Famularo et al. (2010), Remaud and Lockshin (2009), Easingwood et al. (2011), Brown and O'cass (2006), Atkin and Johnson (2010), Balestrini and Gamble (2006), Hu et al. (2008), Heslop et al. (2010), Felzensztein and Dinnie (2006), Johnson and Bruwer (2007), and Bruwer and Johnson (2010)
Country specific surveys: articles where the data collection and focus is on understanding the basics of consumer behaviour in one country	Ma (2008), Liu and Murphy (2007), Yu et al. (2009), Gjonbalaj et al. (2009), Casini et al. (2008), and St. James and Christodoulidou (2011)
Cross-national studies: articles where more than one country are compared in terms of wine preference and purchasing behaviour	de Magistris et al. (2011), Goodman (2009), Lockshin and Cohen (2011), Orth et al. (2011), Casini et al. (2009), Cohen et al. (2009), and Mueller and Rungie (2009)
Sensory studies: articles focusing on the effect of taste on consumer preference and choice	Eves (1994), Lesschaeve (2007), Bruwer et al. (2011), Lee and Lee (2008), Yoo et al. (2008), Mueller et al. (2010b), King et al. (2010), and Mueller and Szolnoki (2010)
Environment and sustainability: articles focusing on the effect environmental and sustainability claims and certification, e.g. organic, biodynamic have on consumer preference and choice	Fotopoulos et al. (2003), Barber et al. (2009), Forbes et al. (2009), Olsen et al. (2007), Brugarolas Mollá-Bauzá et al. (2005), Mueller and Remaud (2010), Remaud et al. (2008), Barreiro-Hurlé et al. (2008), Olsen et al. (2012), Stolz and Schmid (2008), and Delmas and Grant (2008)
Social media: articles about the use and effects of social media on consumer wine preference and behaviour	Reyneke et al. (2011), Claster et al. (2010), Pitt et al. (2011), and Nicholls (2012)

new versus longer-term wine buyers. The other two important personal characteristics are wine involvement and sensory preferences towards the products. All the other characteristics (e.g. price, environmental friendliness, etc.) pertain to the product or the environment where the product is located.

2.2. Online wine purchasing

Online wine purchasing would seem to be a new phenomenon. However, there is one paper from 2001, which was not part of the original consumer behaviour for wine literature review. Stening and Lockshin (2001) compared

the online purchasing patterns of 700 customers of a retail store, where purchase records were available for the same people both online and offline. Online wine purchases were of higher priced wines and the size of the shopping basket was larger in the online environment, probably because of the shipping charges per 6 or 12 bottles. A review of the postal codes of the online purchasers compared to a separate sample of in-store purchasers showed the online purchasers tended to live in city centres, where parking and transporting wine would be difficult. The authors speculated that online purchases were aimed at expensive and hard to find wines, whereas in-store purchases were mainly convenience purchases.

The rest of this section is ordered by year of publication to show the development of research in online wine purchasing as the size of this activity grew. Although there are many articles in the trade and popular press concerning online wine purchasing, only 10 articles were found in the academic literature. The majority of these articles looked at either barriers to purchasing online, or at segmenting online purchasers. There were no empirical studies of online buying behaviour.

Early research by [Quinton and Harridge-March \(2003\)](#) looked at several online wine retailers in the UK and analysed their web-based presence against relationship marketing principles. They found that retailers used interactive marketing tactically, but not in a strategic sense to build long term loyalty based on what the literature recommended for building a relationship. The same authors ([Harridge-March and Quinton, 2005](#)) held structured focus groups in five locations across the UK to examine the link between trust and risk in building online relationships for wine purchasing. They found that retailers could encourage online relationships with consumers in three ways: site design, marketing communications, and how the e-tailing functions performed.

[Van Zanten \(2005\)](#) also conducted qualitative research around the same period in Australia investigating the enabling and inhibiting factors for online wine purchasing. Convenience was considered the most important factor to enable online purchasing, and credit card fraud the most inhibiting factor. Secondary inhibiting factors were the inability to taste wine online and the lack of a retail shopping experience online. [Bruwer and Wood \(2005\)](#) looked at similar factors using a large online sample of Australian wine consumers. The buyers were mainly well-educated and high-income 35–44 year old males. The problems with online buying were similar to those found in the qualitative research: security of online financial information and website navigability. Contrary to the findings of [Stening and Lockshin \(2001\)](#) these buyers purchased online to obtain bargains, but also were interested in the extra information provided online.

[Quinton and Harridge-March \(2008\)](#) added to their previous research, showing that trust and increased risk were still higher for online wine purchasers than for bricks and mortar wine purchasers. [Bressolles and Durrieu \(2010\)](#)

surveyed more than 2800 wine buyers from 28 different online wine websites using the five dimensions of service quality (tangible elements, reliability, reactivity, assurance, and empathy). They used these to segment online wine buyers into six segments: the “secure seeker”, the “opportunist”, the “novice”, the “customer service seeker”, the “browser” and the “rational browser”. These segments were classified according to their behaviour and attitudes. Clearly there are differences among online wine buyers, where some are very comfortable buying online and others are not. Also, there are different motivations to purchase online. [Durrieu and Bouzdine-Chameeva \(2008\)](#) looked at stopping behaviour in online wine purchasing using 38 participants and a specific website. Stopping rules (at what point consumers stop looking and decide to purchase) provide an insight into what aspects are driving the actual purchase. Different stopping rules applied to experts compared to non-experts in wine.

[Thach \(2009\)](#) investigated how wineries use their websites to sell to consumers online. Even though there is much written about interaction and engagement, she found wineries were still pushing information out to consumers and had not adopted Web 2.0 methods. This was the only paper to look at winery activities, rather than consumers or online retail stores. However, [Sheridan et al. \(2009\)](#) looked at the technical difficulties in selling wine online in the US market, where state-based alcohol laws make it impossible to have a simple online sales method across the country. They found that first time wine buyers had a number of problems trying to buy online due to the legal and technical differences across the different states. Finally, [Kolyesnikova et al. \(2010\)](#) compared the purchase intentions of different types of wine consumers in online compared to physical stores or other outlets. Consumers with higher objective knowledge (e.g. number of regions or grape varieties known) preferred physical outlets, whereas consumers with higher subjective knowledge (e.g. self-rated knowledge) preferred online wine outlets.

In conclusion, there are different segments of consumers in the on-line environment, with different levels of skills and trust towards this form of retailing. Convenience and the price comparisons are attractive, but people still do not like the fact that wines cannot be tasted and they are worried about the security of the transactions. This may change, but recent research still finds risk an issue. Online purchasing represents about 5% of the total wine market in developed countries.

2.3. On-premise purchasing

The literature review of on-premise consumer behaviour is somewhat confused, because in most research looking at wine consumers' consumption habits, there are some questions about out-of-home consumption. So, the purpose of this section is to review the papers, which had on-premise wine consumption as the primary research objective.

The International Journal of Wine Business Research was the journal where the most of the papers (3) have been published. The Cornell Hospitality Quarterly, Food Quality and Preference, and the International Journal of Hospitality Management follow with two each, while one other paper has been published in the Journal of Agricultural and Resource Economics and the Journal of Wine Research. In terms of countries, most of the research has been conducted in Australia (5), two in the US, while France, Italy, New Zealand, Spain and UK account for one publication.

The research about on-premise consumption can be divided into two main sections: general consumers' preferences in an on-premise venue (5), and risk reduction strategies (RRS) in on-premise wine selection (3).

Three out of the seven papers published on the first topic collected data via a Best-Worst experiment conducted between 2007 and 2009 using the same questionnaire across five countries, thus making the results comparable. Cohen et al. (2009) present the results of the data collected in Australia ($n=283$), France ($n=147$) and the UK ($n=304$). Having a good match between wine and food and having tried a wine before, are considered the most important criteria in all three countries. However, the French give less importance to previous tasting than Australian and UK consumers. English consumers weight the previous information they read about a wine less than Australian and French, but they are more inclined to choose a wine if suggested by someone at the table. On average, the three least important attributes are the alcohol content of a wine, suggestions on the menu, and availability in half bottles. French consumers give importance to ordering wine by the glass and to the recommendation of the waiter. Anglo-Saxon consumers prefer to try something different when choosing a wine, and give more importance to the region of origin and the grape variety compared to French consumers. Data from Italy (Casini et al., 2009) closely follow these results. Food matching suggestions, having tried a wine before, and having read about a wine are the three most important elements, while the alcohol content and the availability in half bottles are two of the three least importance choice drivers. The biggest difference is the use of promotion cards, as this way of promotion wines does not exist in Italy. Interestingly, New Zealand diverged from the other countries in terms of two of the three most important drivers, with New Zealand consumers agreeing with wine has been tried before, but differently state the grape variety and the availability by the glass as the most (Jaeger et al., 2010).

A different methodology was used to determine wine choice drivers among Spanish consumers. Martinez et al. (2006) conducted a discrete choice experiment on 439 respondents from Alicante (Spain) to measure the impact of a designation of origin, type of wine, price and occasion. The most important attribute was the origin, followed by the type of wine, the price and the occasion in which the wine is purchased for. The last study was conducted in

Australia and adopted a range of multiple-choice, open-ended and Likert-scale questions to investigate the importance of the region of origin (Mccutcheon et al., 2009). Mccutcheon et al. (2009) (see "region" section) revealed that the region of origin is not the most important choice driver, as quality, price, and wine style score higher.

Three papers focused on the risk reduction strategies consumers adopt to minimize the risk of making a bad choice. Lacey et al. (2009) interviewed 105 respondents in a fine dining Adelaide (Australia) restaurant, discovering an overall low level of perceived risk among restaurant patrons. The elements most able to reduce the perceived risk are the reputation of the restaurant, suggestions from staff, and the incidence of previous visits and wine consumed at the restaurant. Two other studies looked at a typical phenomenon in Australian restaurants: bring-your-own-bottle (BYOB). Most of the restaurants in the country allow consumers to bring their wines from home, often charging a price per bottle opened, or by the number of people at the table. The results of the study by Bruwer and Nam (2009) on 826 respondents revealed that 26% of diners brought their wine from home the last time they dined out, and females tend to engage in BYOB more than men. In addition, Bruwer and Rawbone-Viljoen (2012) identified the main reasons why Australian consumers do BYOB are to (a) celebrate a special occasion, (b) please a dining group, (c) avoid the high wine list prices, (d) reduce the effort and waiting time at the on-premise venue.

Finally, we report three papers, which could not be aggregated into the two research areas above, but are still important in order to understand the recent findings in on-premise consumer behaviour. The first study looked at the impact that menu items and menu designs had in wine choice selection, and the existence of possible segments based on how consumers respond to different types of information provided on the menu. Corsi et al. (2012) conducted a discrete choice experiment using a representative sample of 1258 Australian wine consumers. The results showed that grape varieties are key choice drivers, followed by the awards obtained by a wine and its price. About equal in weight and less important were a wine's region of origin and tasting notes (a description of its sensory characteristics). The least important choice factor was food-matching suggestions.

The second study looked at the impact that wine promotions have in stimulating or cannibalising sales of other beverages (Wansink et al., 2006). A controlled experiment was conducted over a period of twelve weeks in two casual seafood restaurants located in Houston, where one, three, or five new or relatively new wines were put on promotion with or without a food suggestion. The results revealed that wine recommendation increased sales by 12%, food-wine pairing recommendations increased sales by 7.6%, and wine tastings increased sales by 48%. It was also noted that 69% to 87% of the increase in wine sales came from diners, who would have ordered a non-promoted wine, meaning that wine sales generate some

cannibalisation of other alcoholic beverages. [Durham et al. \(2004\)](#) applied a hedonic quantity model to estimate the impact of objective characteristics, sensory descriptors and price on wine choice by analysing the wines purchased from a restaurant wine list during a 19-week period. [Durham et al. \(2004\)](#) found that a wine available by the glass increases the probability to be chosen. Moreover, they observed that the information on grapes and origin are of interest to consumers, as well as some “colour” specific sensory characteristics.

To sum up, consumers seem to be less confident when purchasing wine in a restaurant than in a store. Consumers generally look for recommendations, and when they do not receive them from the waiter/sommelier or other people at the table, they try to remember what was tried in the past or read about. In choosing a wine, price and region are the two most important drivers, while the role of food-matching suggestions is still debatable. On-premise consumption is important and under researched, especially in developing countries.

2.4. Wine tourism

Wine tourism research represents one of the newest and only partly explored areas of wine marketing research. We could not find any papers about consumer behaviour in relation to wine tourism prior 1995 and most of the studies published afterwards focused on two areas of research: (a) understanding the socio-demographic characteristics of the wine tourist and (b) understanding wine tourist's psychographics.

With the exception of a recent study published by [Bruwer and Lesschaeve \(2012\)](#) about the socio-demographic profile of Canadian wine tourists, a summary of all the studies published on the two research areas listed above until the end of 2010 can be found in a paper by [Alebaki and Iakovidou \(2011\)](#) published in *Tourismos: An International Multidisciplinary Journal Of Tourism*, which is freely available on-line. We therefore invite interested authors to read this paper. We only report in this paper that almost two-third of all the studies published in wine tourism consumer behaviour has been conducted in Australia, New Zealand, Canada and the US. Differently from other research areas, the *International Journal of Wine Business Research* is not the most preferred outlet for this type of publication, which, tend to find a home in more generic tourism journals (e.g. *Tourism*, *Tourism Management*, *International Journal of Contemporary Hospitality Management*, etc.).

The only research area which was not considered by [Alebaki and Iakovidou \(2011\)](#) is the attitudes and perceptions of tourists at the winery. [Gill et al. \(2007\)](#) investigated differences between the winery experiences of domestic and international winery visitors, finding significant differences between the two groups. [Kolyesnikova and Dodd \(2008\)](#) explored whether wine tourists feel a need to buy wine at tasting rooms due to a perceived need to reciprocate for services received. They found that the more the consumer

feels grateful to the winery for the time spent there, the bigger their expenditures. This sense of gratitude is increased when consumers travel in small rather than large groups.

The main drawback to wine tourism research is that all the research published so far used convenience samples of respondents. It is therefore hard to claim that the results are representative to the population of wine tourists. There is evidence, of course, that tourism benefits the winery substantially, but attracting tourists is similar to attracting any other type of buyer: higher involvement and heavier buyers are more likely to visit and buy wine. There is not much evidence that the typical tourist changes his/her behaviour very much in regard to which brands they buy, however, signing tourists up to email lists or wine clubs does increase sales.

2.5. Segmentation

There were only eight articles focusing on segmentation in the wine industry during the time period 2004–2011. Previously a larger number were published, mainly based on the Spawton typology ([Spawton, 1991](#)). For this section, we only review articles that surveyed respondents and created segments. We also differentiate between those that focused on wine lifestyles, where a few of the papers had more than one wine lifestyle. We felt that lifestyle was a broader construct, extending beyond just grouping wine buyers by demographic and attitudinal variables.

Two articles described differences between men and women wine buyers ([Barber, 2009](#); [Atkin et al., 2007](#)). Both studies found that women were willing to use more sources of information in making their wine purchase decisions than men. [Barber \(2009\)](#) found men had both greater objective and self-assessed wine knowledge compared to women, but use more limited sources of information. [Atkin et al. \(2007\)](#) found that if a consumer was unsure about what wine to buy, women were more likely to seek information from store or restaurant personnel and were more likely to rely on medals and awards than men.

Two articles developed segments through very different means. [Thomas and Pickering \(2005\)](#) used a random mail survey in New Zealand to segment wine consumers by reported level of purchasing, finding differences between light, medium and heavy purchasers of wine. They did not collect information regarding motivation, but suggested this would add to the understanding of wine consumers. [Seghieri et al. \(2007\)](#) surveyed Italian wine consumers outside of wine stores. They used several measures of motivation and purchasing and found four segments: habitual consumers, rational wine buyers, interested consumers, and promotional wine buyers.

[Kolyesnikova et al. \(2008\)](#) focused on segmentation based on attitudes towards local wines in various developing wine markets in the US. The paper by [Mueller and Rungie \(2009\)](#) advocated a new way to find segments using covariance modelling of choice data, rather than the

traditional clustering techniques based on survey questions. Attributes with higher covariance point to differences in behaviour and are used to define segments, which are then characterised by socio-demographic information.

One other paper segmented wine consumers, but this one used conjoint analysis to understand how consumers choose wine, focusing on descriptions of sensory characteristics (Hughson et al., 2004). They presented stimuli as sets of wine attributes for both red and white wine and then segmented the consumers based on what descriptions and information they preferred.

It seems that traditional segmentation studies in the wine market have reached maturity. Few new studies were conducted in this time period and those that used traditional attitude based surveys found similar segments to those identified by Spawton 20 years ago. The studies comparing men and women also found similar results to other studies comparing gender-based choice. Finally, a new method for segmentation based on stated choice behaviour was put forward, however the context of the study in restaurant wine choice, makes it difficult to compare the results with previous studies.

2.6. Wine consumer lifestyle

This section is a subset of segmentation, focusing on consumers, who see or use wine as part of their lifestyle activities. Twelve articles were published on wine consumer lifestyle, since the seminal paper by Bruwer et al. (2002). All but one of the articles used surveys of people in developed wine drinking countries: the US, UK, Europe, Australia. In most cases a convenience sample of either university-area respondents or people visiting wineries was used. Only one article (Smith and Mitry, 2007) used secondary data to look at the changes in alcoholic beverage consumption across the European Union. The other articles seem to converge on the finding that regular wine consumers develop a focus within their lifestyle on wine and its complexity. Several studies found that consumers did not drink wine for the health benefits, but for enjoyment of the flavours. A group of the studies (Brunner and Siegrist, 2011; Bruwer et al., 2011; Bruwer and Li, 2007; Olsen et al., 2007; Ritchie, 2007; Charters and Pettigrew, 2007; Thach and Olsen, 2004; Bruwer and Wood, 2005; Van Zanten, 2005; Johnson and Bruwer, 2003, 2004) each identified lifestyle groups, but found regular wine drinkers had higher than average incomes, like wine with food, and enjoyed giving and receiving wine as gifts. This seems to indicate that in developed wine drinking countries a certain lifestyle of wine enjoyment has emerged.

2.7. Values and social psychology

Three articles using social psychology constructs and consumer values were found in the wine consumer behaviour literature since 2003. Orth was the author of two of these (Orth and Kahle, 2008; Orth, 2005). The first article

examined drivers of intrapersonal variation in brand choice across consumption occasions. Orth found quality and social benefits were more important when hosting friends or giving wine as a gift, and that value for money and emotional benefits were more important in self-consumption occasions. He also found links to consumer personality traits, such as risk taking, variety seeking, curiosity and susceptibility to interpersonal influence and brand choice. Orth and Kahle (2008) looked at susceptibility to normative influence, social identity complexity, and individual values in wine choice. Individuals with higher values and more complex social identities were less susceptible to normative influence.

Terrien and Steichen (2008) developed models of wine demand based on the phenomena of imitation or opposition between different social groups to explain changes in wine demand. The models showed either the existence or absence of stable equilibriums in the demand for wine. However, these models are merely theoretical and did not utilise actual consumption data.

2.8. Generation Y and Comparisons

There has been more interest in Generation Y and their wine buying propensities in the popular and trade literature than in the academic journals. Eight articles studying Generation Y's wine preferences and buying habits were published between 2004 and 2011, five of them in a special issue of the *International Journal of Wine Business Research*.

Three papers focus on Gen Y consumers in specific countries: Italy, the UK, and NZ. Agnoli et al. (2011) used choice analysis to understand Gen Y's alcohol purchase behaviour across different consumption situations. They found that wine is the preferred drink in social situations, such as in bars and restaurants. Other alcoholic beverages were preferred in discos and at home. Ritchie (2011) studied Gen Y drinkers using seven focus groups in the UK. She found wine was used mainly in groups, because a bottle was too large to drink alone. She also found that Gen Y drinkers used wine in heavy drinking situations, and not as typically thought of as a cultured beverage to consume with food. Although older drinkers were not part of the study, the behaviours found were different than those assumed for older generations. Fountain and Lamb (2011) conducted a longitudinal study of Gen Y and X in Christchurch, New Zealand, using a random sample of residents 10 years apart. Gen Y consumers drink wine more often and in more contexts than Gen X in this particular city. This supports claims in the trade literature that Gen Y are more likely to be wine consumers than Gen X.

Three other articles compared Gen Y consumers across different countries. De Magistris et al. (2011) compared Gen Y drinkers from two university towns, one in Spain and one in the US. Charters et al. (2011) compared Gen Y's engagement with Champagne across five Anglophone countries: the US, UK, Australia, New Zealand, and

South Africa, while [Mueller et al. \(2011\)](#) compared Generation Y across five countries: Germany, France, US, UK, and Canada.

[De Magistris et al. \(2011\)](#) used Best-Worst Scaling to compare convenience samples of university students and found some similarities, but mainly the two groups had different importance weights for how they chose wine. The US students were more focused on tasting the wine previously, while the Spanish Gen Y students cared more about the origin of the wine. [Charters et al. \(2011\)](#) used focus groups in each country to compare and contrast their engagement with Champagne. There were similarities in classing Champagne as a woman's drink and one for celebrations, but also differences in how the status of Champagne was perceived, which would change the marketing to Gen Y in the different countries. The [Mueller et al. \(2011\)](#) study used online panels to collect a sample of over 11,000 wine consumers across all generations in the five countries. This allowed a comparison of the generation effect and the country effect. The national effect of country was greater across the samples than the effect of generation. Gen Y did appear to be more oriented to hedonic success and status than the other generations, and drank a wider range of alcoholic beverages. They found involvement levels, amount of wine consumed and environmental concerns differed more between the countries than between the generations.

Finally, two papers attempted to compare Gen Y with Gen X and the Baby Boomers ([Qenani-Petrela et al., 2007](#); [Wolf et al., 2005](#)). Both studies used interviews in a single city in central California, so the generalisability of the results must be questioned, even if San Luis Obispo County is a recognised test market in the US. The proximity of a sizeable wine sector might skew the results compared to areas in the US without a wine sector. The 2005 study found Gen Y consumers preferred cheaper wines to the other generations and also preferred California more strongly as an origin than the older generations. Baby Boomers and Gen X consumers thought more highly of Old World wine producing regions and focused more on brand name and quality than Gen Y. The 2007 version of the survey found similar results regarding the low price preferences of Gen Y consumers and their preference for Old World wines when looking for quality wines, especially Italian wines. Baby Boomers and Gen X also had a greater focus on the health benefits of wine, while Gen Y was more focused on the social outcomes.

To sum up, young consumers tend to drink wine more for pleasure than to appreciate differences between styles and regions. The approach to wine may be different from older generations, but this knowledge is only based on stated, not revealed preferences. Actual behaviour studies of Gen Y consumers in western countries show them to be similar to new wine consumers of any age. In addition, younger generations have a wider repertoire of alcoholic beverages they choose from. Some country-based differences similar to those evidenced by [Goodman \(2009\)](#) were

evident, and they tend to be stronger than differences between different generations across countries.

2.9. Packaging and labelling

Wine labels carry and communicate all the information relative to the extrinsic characteristics (e.g. grape variety, region, country, vintage, etc.) of a wine. At the same time, consumers can obtain much of this information through other means, such as wine guides, magazines, or sommeliers, thus making the literature review on label importance more complicated than other areas.

From general perspective, a cross-country comparison of the most important wine choice drivers in the retail sector ([Goodman, 2009](#)) showed that having an attractive front label is one of the least important elements consumers take into account when choosing a wine. However, these findings should be tempered by [Mueller et al. \(2011\)](#), who showed that consumers' response to labels is mainly subconscious and therefore, not likely to be reported under direct questioning. Back labels tend to be slightly more important in direct surveys, with only German, English and Australian consumers positively evaluating this element. Old World countries give importance to grape varieties and regions, while Brazil and China, together with Australian, New Zealand and English consumers positively value the name of the brand ([Goodman, 2009](#)). [Goodman \(2009\)](#) also reveals that the attractiveness of the front label is the third least important attribute across the twelve countries, thus showing that researchers have to be careful in defining what they mean by label, as it is difficult to disentangle the importance of the label from the product information labels carry.

The most interesting aspect of the literature published in the last ten years on wine labelling and packaging is that seven papers collected data in the US, three papers used Australian wine consumers, while only two papers come from Europe. Within this classification, it is also important to notice that all but one of the US papers – [Mueller and Szolnoki \(2012\)](#) – adopted stated preference surveys as the method to measure and evaluate label information, while two out of the three Australian papers adopted discrete choice experiments. This difference is not marginal, as it is well acknowledged in the literature that attitudinal measures often tend to provide biased estimates of true preferences, as consumers tend to overstate the importance of product characteristics when they are not evaluated in a competitive set. Conversely, choice experiments provide a methodological tool for a holistic product evaluation and force respondents to trade-off several attributes against another. Also, as noted above, direct response surveys (including attitudinal and Best-Worst) are not able to measure subconscious influences on preference or choice.

Starting with the American publications, [Barber et al. \(2006\)](#) distributed a questionnaire to a convenience sample of consumers located at two retail shops and five wineries to explore the role that wine packaging attributes have in

influencing choices. The results revealed the importance label design and bottle closure have in consumers' choices. This outcome was confirmed in a subsequent study published by Barber et al. (2007), who added the role that self-confidence play in label preferences, with low self-confidence consumers tending to prefer modern colours and classic label information. The use of Likert scales also characterises the works of Boudreaux and Palmer (2007) and Orth and Malkewitz (2008). The first measured the effect of wine label image, label colour and label layout on purchase intent and product personality for US west coast consumers, while the second examined the associations consumers have with different holistic packaging designs. Boudreaux and Palmer (2007) observed that label image had the strongest effect and wine related images such as grape or chateaux graphics received the highest valuation, while unusual animals were least preferred. Warm colours (red, orange) and neutral colours (white, black) had a positive effect on purchase intent. Orth and Malkewitz (2008) found that natural and delicate wine designs were perceived to be of higher quality, while massive and contrasting designs were most strongly associated with being inexpensive and natural designs were related with higher value for money than nondescript designs. However, label designs cannot be evaluated separately from brand names, as they physically cover a considerable part of a label. This relationship has been explored by Sherman and Tuten (2011), through research conducted on 527 US consumers. The authors set up a 3×3 full factorial design, thus generating all possible combinations of visual designs and naming conventions (traditional, contemporary and novelty), asking consumers to rate the influence of these two factors in terms of wine perceptions, purchase intent by occasion and the relative importance of wine choice drivers. In line with Orth and Malkewitz (2008), participants preferred traditional labels and names, and label designs were found to be not as influential as wine type, brand familiarity and price. The last US paper using Likert scale is that of Henley et al. (2011). However, the methodology adopted in this paper is different from those presented before. The authors set up a wine tasting with 97 US Millennial consumers, asking them to evaluate several packaging characteristics including closure, font type, label design, and information provided on the label. The findings revealed that wine perceptions changed from the first blind tasting to the second when product packaging and labelling information were disclosed to participants. In particular, when producers provide specific fruit characteristics, consumers perceived them much more than without this information in the blind tasting.

Most of the results obtained with stated preference methods were confirmed by Mueller and Szolnoki (2012), who employed a hedonic pricing model to investigate the relationship between wine packaging characteristics and market price differences. The authors used scanner datasets for red wines purchased in Illinois and Florida, classifying them by region of origin, grape variety, front

label information, label type and colour, bottle form and closure. Separate models were estimated giving first each product the same weight and then weighting them by unit sales. In addition, different models were run for domestic and imported wines in order to guarantee the generalisability of results. The results showed that packaging attributes account for 28% of estimated implicit price differences, with origin, grape variety, label type and design being more important than bottle form and closure. These values were confirmed when sales are taken into account, as products with higher demand are more differentiated in product packaging across different price tiers, particularly for US wines. Yet, some divergences emerge between domestic and imported products, with the latter generating higher price differences due to label colour than label design type.

The three studies conducted in Australia investigated the importance consumers give to front and back wine labels. Jarvis et al. (2010) conducted an experiment with Gen Y (18–30 year old) consumers, asking them to choose among different wine labels for a dinner at home with friends. The labels offered different combinations of verbal and graphic elements, going from more traditional to more exotic wine regions, varieties and messages, from more classic to more modern images. The choices were then segmented through a latent class analysis, revealing the existence of three cohorts in the sample. In general, images and statements are considered more important than the traditional cues of grape variety and region. In addition, images and words that describe a product perform better than metaphorical expressions.

The second study on front labels did not provide useful results from a managerial point of view, but it worth citing it for its methodological approach. Chrea et al. (2011) asked respondents to conduct three complementary tasks to assess the pros and cons of different ways to measure preferences for extrinsic product attributes for Australian wines. The three tasks consisted in (a) a conjoint assessment of wine product concepts (derived from a free sorting task); (b) the use of Likert-scales to measure preferences for commercial wine labels; and (c) a real-choice study where the same wine bottles were presented to the consumer to choose their preferred wine based on the label. The results showed that the conjoint assessment produced different results from the other two tasks, with the real choice task and wine label rating generating more similar responses.

The third study on Australian consumers focused on wine back label statements (Mueller et al., 2010a). Back labels contain different types of information, e.g. taste descriptions, manufacturing and history related statements, cellaring advice, website information, and food matching suggestions. The authors tested different statements containing these elements and different prices on 331 regular wine drinkers. The aggregate results showed that winery history, taste descriptions and food pairings were the most important back label statement, while ingredient information had a large negative impact. The use of a latent class analysis revealed the existence

of five segments distinct in relation to price, price sensitivity, and acceptance of the ingredient list on the back label.

Of the two studies published in Europe in the last decade, only one focuses specifically on wine – Rocchi and Stefani (2005) – while the second – Dimara and Skuras (2005) – discussed wine within a study on origin-based quality food and drinks. Rocchi and Stefani (2005) applied a repertory grid approach to elicit the dimensions through which consumers perceive and describe differences between bottles of wine. The study was conducted on 30 respondents, who had to analyse differences across 11 bottles and summarise them in descriptive bipolar constructs. The results showed that consumers choose “with the eyes”, as the attributes of bottles and labels are the first signals consumers use to define more abstract constructs, such as distinction or tradition. Dimara and Skuras (2005) interviewed 640 consumers of designated origin wines in order to examine the information consumers seek on designation-based quality food and drink labels. Information on place of origin was considered the most important information sought on labels. However, socio-demographic characteristics of individuals had different willingness to acquire information from labels and consumers who spend more on wine demand more information.

In conclusion, traditional labels and colours are preferred over complicated designs and strange colour combinations. Differences in importance emerge depending on the way in which the research question is asked. When consumers are directly asked to evaluate the importance of a label, this element becomes one of the least important. However, when the value is assessed indirectly in a purchase situation (e.g., discrete choice experiments), labels become more critical. It is important to find ways in which labels can stand out on the shelf. Awards and medals, expert scores, and other on package information all contribute to increasing the probability of choice. There are indications that back labels are meaningful too, but there have not been any comparative studies between front and back labels, so we cannot yet draw a conclusion.

2.10. Region

Studies on the effects of the region of origin and, by extension, appellations of origin represent one of the most prolific research streams in the last decade. We counted a total of 17 papers published specifically on this topic, six of which appeared in the *International Journal of Wine Business Research*. An interesting element to observe is that the majority (12) of these studies have been conducted in countries (Australia, USA, UK, Canada and China), where the importance of the region of origin has historically been lower, given both the regulatory and legislative framework adopted by these countries and the marketing practices used to brand wines. Three of the studies conducted in Old World countries focused on Spain, while only one paper shows results relative to Italy and one compared the importance of region between countries in Europe.

A common trait between Spanish and Italian consumers is that not everyone cares about the region of origin. Santos et al. (2006) showed consumer’s temporary involvement with wine appellations of origin, similar to what Adinolfi et al. (2011) found during some national wine shows. Both papers revealed the existence of three segments of consumers, with varying levels of involvement in the appellation of origin.

A more quantitative approach characterised the works of Espejel et al. (2011) and Espejel and Fandos (2009). They looked at the influence of wine quality perceived through intrinsic (colour, smell and flavour) and extrinsic (price, brand and region of origin) attributes on customer satisfaction, loyalty, buying intention and trust. Both studies confirmed the positive influence of perceived quality attributes on consumers’ satisfaction. Trust seemed to be influenced by extrinsic product elements, which, however, do not appear to influence loyalty and buying intentions of Spanish consumers.

Perrouy et al. (2006) used a sample of 1162 wine consumers in four countries (France, UK, Germany and Austria) to compare the importance of region of origin in wine choice. The importance of region of origin is moderated by other variables, such as price and awards. These moderating variables were more important for expert consumers than for novice consumers across all four countries.

In relation to New World countries, Australia is the most represented with five publications, followed by USA (3), China (2), Canada (1) and the UK (1).

The studies conducted in Australia were strongly oriented towards an understanding of the importance different segments give to the region of origin. Mccutcheon et al. (2009) conducted a study on 352 respondents belonging to three groups of wine consumers – patrons of a wine bar in Sydney and two online wine communities. The region of origin is an important choice driver, but certainly not the most important one, as it is preceded by quality and price. In addition, females, higher involved wine consumers, and consumers who have participated in wine tourism activities give more importance to the region of origin than others. The link between tourism and region of origin is also discussed by Famularo et al. (2010), who found that the consumer wine decision-making process is positively influenced by a greater understanding of a wine’s region of origin, which is in turn, highly correlated with knowledge and wine involvement. Therefore, consumers who are more willing to dedicate time to tourism activities give more importance to a wine’s region of origin when buying a wine.

Remaud and Lockshin (2009) analysed the elements an Australian wine region (Riverland) should develop to raise the profile and capture wine consumers’ share of mind. Through the use of a 13 attribute Best:Worst Scale (BWS) experiment, the authors found that wine consumers are similar to wine professionals regarding the features used to raise the profile of the region. In particular, geographical names (both country-of-origin and region-of-origin) are

important, but they do not make sense if not linked with other features that encapsulate the salience of the region or brand. In line with these findings, it is worth mentioning the work of Easingwood et al. (2011), who explored the basis of wine regionality in discussions with 20 specialists in Australia, followed by a survey of 89 wine professionals. The 14 potential drivers of regionality were then grouped into three main key drivers: specialisation, much discussed by opinion formers, and a well-defined wine style. Research on region of origin is not only limited to the study of the impact on the consumers living in the same area. For example, Brown and O'cass (2006) examined the willingness of Australian consumers to buy foreign wine products, expressed in terms of consumer ethnocentrism and animosity. The results showed that while some people favour foreign-sourced products, others prefer to purchase goods made in their own country.

Research conducted in the US closely follows the results obtained in Australia. Atkin and Johnson (2010) conducted a study on 409 consumers across the USA finding that brand and place-of-origin information such as region, country and state were the most important attributes in the consumers' choice of a wine, but these elements have a higher impact on frequent and more knowledgeable consumers. However, in order to generate wine region equity, six consumer motivational factors should be considered: quality, price, social acceptance, emotional, environmental value, and humane value. The ability to link these elements to consumer lifestyle, demographic and behavioural variables allows for tailoring marketing communications strategies closely to markets. Johnson and Bruwer (2007) found that the wine region is the most important element to predict the quality of wine labels and that the perceived quality of a wine region influences the perception of the subregion. Similarly, Bruwer and Johnson (2010) found that the addition of regional information on a wine label increased consumer confidence in the quality of the product.

It is interesting to observe that the two papers about the importance of region of origin in China were published three and six years ago, despite the growth trends in Asian markets in the last five years. Balestrini and Gamble (2006) explored Chinese consumers' wine purchasing behaviour to investigate the effect of country-of-origin information on their wine evaluations. Data were collected in a supermarket in Shanghai through an interviewer-administered structured questionnaire. Country-of-Origin (COO) information is a significantly more important quality cue than price for Chinese consumers. However, there appears to be no significant difference in the importance of COO and brand in this regard. Balestrini and Gamble (2006) also found Chinese consumers pay more attention to extrinsic cues than intrinsic ones to evaluate wine quality. In particular, these cues are more important when consumers purchase wine for special occasions, than their own private consumption. The same importance is also confirmed by Hu et al. (2008). The authors, however, disagree with Balestrini and Gamble

(2006) regarding the importance of price. When a multi-cue approach is used, Chinese consumers do not show any significant difference between the importance of COO and price.

Heslop et al. (2010) conducted a study on 1170 students, staff, faculty members, and campus visitors located in major Canadian university campus to examine the direct and interaction effects of a wine brand name and COO on perceptions of the personality image of the wine, expected price, and willingness to engage with the wine. The results showed that the consumer assessment of wine personality is only partially affected by the brand name, while consumers' price perceptions are affected by the brand name, the COO and the congruency between brand name and COO. The hypothesis that price perceptions are also influenced by the wine personality was only partially supported.

Finally, Felzensztein and Dinnie (2006) examined the effects of country of origin in UK consumers' perceptions of imported wines, both traditional and New World. Price, country of origin and grape variety are the most important choice criteria for consumers buying through specialist off-licence stores and respondents preferred new world wines. Perceptual mapping demonstrated that New World wine producers now rival traditional producers in terms of quality and reputation but often surpass them on value for money and brand awareness.

To sum up, the region and, by extension, the country of origin are key wine choice drivers in terms of location reputation or quality designation. The importance of a region is strengthened when this factor is combined appropriately (based on consumer expectations) with other elements such as grape variety, price, or brand. Consumers with higher involvement put more weight on the region in the purchase decision than low involvement buyers.

2.11. Country specific surveys

There were six articles focusing on wine consumer behaviour in a single market, three of which focused on China, one on the British wine market, one on Kosovo, and one on Southern California. The basic premise for each of these studies was the same: to understand the unique characteristics of a specific wine market with little comparison or relation to other wine markets.

The article by Ma (2008) described the state of the Chinese wine market using secondary data; it is not based on surveys of consumers. The article characterised China as a fast growing but immature market, which changed dramatically when China joined the WTO. This event helped China standardise labelling and quality standards, and thus impacted the rapidly growing domestic industry. Liu and Murphy (2007) conducted in depth interviews with 15 Chinese wine consumers in Guangzhou. This approach revealed that wine is a symbolic product and that red wine is the only form of wine considered for purchase. The interviewees had a very high awareness for French wines

and preferred them as gifts, but Chinese wines were preferred for personal consumption. The third article by Yu et al. (2009) surveyed wine consumers and students in Beijing. Many of the attitudes towards wines for personal consumption and as gifts were similar to the Liu and Murphy (2007) study. However, students were the only group to use the Internet for wine purchasing.

The other articles were one-off studies of a single wine market. The study in Kosovo by Gjonbalaj et al. (2009) randomly interviewed over 1000 people. They found about half of those interviewed purchased wine and that men purchased more wine than women. The other findings showed that wine was purchased by higher income and more educated people, which is similar to its consumption audience in most countries. Casini et al. (2008) looked at trends and consumer confusion in the British wine market using secondary data and interviews of 40 members of the wine supply chain. Consumer confusion was stated to be a problem for wine buyers, but little has been done to reduce it. Finally, St. James and Christodoulidou (2011) found that in southern California the health benefits of wine seemed to drive the intention to drink wine. This is different than many other studies that showed taste, price, and origin were the largest influences on wine consumption.

Country specific studies might be useful as a source of literature review for those who want to follow up on either the same country or broader theoretical approach, but unless the country is changing rapidly, these do not offer much insight.

2.12. Cross-national studies

Cross-national studies embrace a wide array of consumer behaviour research areas. The main element characterising these studies is the large sample size needed to compare the results between different countries, but the areas of research are quite different, going from retailing to on-premise analysis, from tourism to generation Y studies. Apart from the De Magistris et al. (2011) on Millennials, the three most significant cross-national papers have been recently published by Goodman (2009), Lockshin and Cohen (2011), and Orth et al. (2011).

Goodman (2009) is a particularly significant study, as it can be considered the first attempt for wine marketing academics to conduct a joint study on consumer behaviour, where the results could be actually comparable across countries. The purpose of the study was to understand what elements influence consumer choice in a retail store. The data were collected in 12 countries (Australia, Austria, Brazil, China, France, Germany, Israel, Italy New Zealand, Taiwan, UK and USA) thanks to the contribution of 15 researchers using Best-Worst Scaling (BWS) with 13 factors relative to the choice of a wine in a retail situation. The results showed that previous trial and recommendation were highly important across most markets, with the exceptions in some markets of influencers such as “brand” (China and Brazil), “food matching”

(France and Italy), “origin” (France) and “grape variety” (Austria).

Lockshin and Cohen (2011) analysed a subset of the data presented by Goodman (2009) to understand how cross-national segments of consumers are formed. The authors conducted a Latent Class Analysis (LCA) on the BWS results mentioned above, finding that differences between consumers are not country specific, but they are based on different ways in which consumers choose wine. The size of each segment varies from country to country, but three main segments can be found in each country: *cognitive-based*, *assurance-based*, and an *in-store promotion-based*.

Orth et al. (2011) adopted a similar recruiting approach to Goodman (2009) by involving 12 researchers, who collected data from 3460 visitors to 15 wine regions around the world, including Bordeaux, Chianti, Napa, Rioja, etc. The aim of the study was to understand tourists’ attachment to place-based brands. In particular the paper formulates hypotheses regarding the mediating role of brand related attributions in the relationships between tourists’ experiences (pleasure, arousal, satisfaction) and their emotional attachments to place-based brands. The results showed that a positive tourism experience, comprised of destination-evoked pleasure, arousal, and satisfaction, enhances brand-related attributions. This, in turn, is positively related to brand attachment. Prior place attachment and the strength of the place to brand associations influence the tourism experience to brand-related attributions, but only in terms of arousal.

It is worth noting that one limitation is common across the three studies: the nature of the sample. All the studies used a convenience-based sample, which is by definition not statistically representative of the population of wine drinkers in each country.

Cross-national studies are not only relative to consumer behaviour in a retail environment. The research project which lead to the publications of Lockshin and Cohen (2011), Casini et al. (2009), Cohen (2009), Goodman (2009), and Mueller and Rungie (2009) collected data on the elements influencing consumers’ choices in an on-premise environment. These papers have been only presented at conferences and have been published in trade journal, but Cohen et al. (2009) give us a taste of what the results looked like (see “on-premise” section).

In conclusion, cross-national studies are extremely useful, as they offer a great base to compare attitudes and behaviours across different situations. However, we need to be cautious when looking at the results, due to a lack of sample representativeness and methodological differences in making direct comparisons.

2.13. Sensory studies

Many of the studies on the importance of various attributes in wine choice find that consumers tend to re-purchase wines they have previously tasted and liked. This

section reviews the relatively few studies examining consumers' wine sensory preferences.

One very early article in the *International Journal of Wine Marketing* (later renamed the *International Journal of Wine Business Research*) recommended that the acceptability of wines be measured using consumers rather than experts (Eves, 1994). She outlined the range of sensory measurement techniques available and the types of analysis and scaling of results needed to report useable information. A similar, but updated article was published by Lesschaeve in 2007. She reviews the techniques for measuring and designing wines that fit consumer taste preferences and links these to business strategies wine companies can use (Lesschaeve, 2007). Bruwer et al. (2011) used consumer surveys to try to understand consumer sensory preferences in Australia using a convenience sample of winery visitors. They found women purchased more white wine than men and stated they preferred sweeter wines. Women also preferred fruity tastes, light to medium-body, vegetative characters, oak and mouth feel. Men preferred more aged characteristics than women.

Lee and Lee (2008) investigated consumers' preferences for different styles of rice wines. They found three segments: the largest preferred sweeter wines with medicinal aromas, the next preferred medicinal herb aromas but low bitterness, and the third group preferred the most fruity flavours. Yoo et al. (2008) used five red wines to determine Korean consumers preferences. They found overall Korean consumers preferred sweet, non-astringent, and fruity wines. Mueller et al. (2010b) segmented consumers in Australia by their preferences for red wines. They also found three segments: one preferring simpler fruity wines, one preferring more oak and astringency, and the third preferring more aged characteristics in their wines. A more technical analysis conducted by King et al. (2010) tested different combinations of yeasts used in fermentation to see if the altered aroma profiles were detectable and then preferred by different groups of consumers. They found four clusters of consumers with different preferences. These above results are not surprising. Human taste preferences are heterogeneous and the wide range of wine aromas and flavours are preferred by some but not all consumers.

Mueller and Szolnoki (2010) conducted a different type of test, where consumers tasted the wines blind and then were provided the same wines in different packaging. They found that label style and brand were the strongest drivers for informed liking, followed by flavour as measured in the blind part of the study. They also found segments, which were made up of younger inexperienced consumers, experienced consumers, and older frequent wine consumers.

Overall, there have been limited studies published on consumer preferences for different wine styles or flavours. This may be partly due to the cost of this research and the fact that some large companies conduct this type of research in-house. The limited number of recent studies found that price, packaging, brand, and origin are stronger influences on liking than the actual flavour of the wine.

Overall, consumers unsurprisingly prefer slightly sweeter, fruitier wines to very dry and aged characteristics. Every consumer study shows that there are groups or segments of preferences; there are some consumers who prefer astringency, heavier, oak, and developed characters; there are even consumers who prefer Brettanomyces and other 'off-flavours' in their wines. These groups, however, are in the minority.

2.14. Environmental friendliness

The studies on the consumer perspective of sustainability in the wine sector mainly focused on two streams of research: on one side the attitudes towards sustainable wines, and, on the other, the consumer behaviour towards these products. More specifically, the first observed consumer's attitudes towards *environmentally friendly* wines, while the second focused attention on the behaviour of consumers towards organic wines.

From a chronological perspective, Fotopoulos et al. (2003) represents the first study belonging to the first group. The authors applied a means-end chain approach and a corresponding laddering interview technique to 49 chief household buyers in the city of Athens in order to compare the wine purchasing attitudes of buyers versus non-buyers of organic wines in Greece. They found that organic wine buyers tend to buy in specialty shops, are more concerned about the healthiness of the products they buy, are more environmentally conscious and are eager to obtain more information about the products. Barber et al. (2009) conducted a study on the influence that knowledge and attitudes about environmentally friendly practices have on US consumers when choosing a wine. Using 820 questionnaires administered to the members of the US Society of Wine Educators, they found that the choice of these products is made because consumers are more interested in helping producers, who adopt these innovations and they believe these wines are more environmentally friendly. This concept is also shared in Forbes et al. (2009), who applied it to a convenience sample of 109 retail shoppers in the city of Christchurch, New Zealand. They found that half of the consumers believe that sustainable techniques do not improve the quality of the wines. About one third believe that the quality of sustainably produced wines is superior. However, more than 80% of all the interviewees stated that, although sustainable wines may cost more than traditional alternatives, they will be willing to pay extra.

Finally, based on previous research that the link between attitudes and buying intentions consumers have about organic product does not seem to extend to wines (Olsen et al., 2007), Sirieix and Remaud (2010) conducted an on-line survey of 151 people living in Adelaide (Australia) about the perceptions of several eco-friendly claims, i.e. organic, preservative free and biodynamic, compared to conventional wines. The results showed that organic wines are associated with being more expensive, but they are not considered good for a dinner with family or friends. They

found that terms such as *trendy* or *distinctive taste* are not associated with any specific wine, so new products, such as biodynamic ones, could try to incorporate them in their communication strategy in order to counter balance the perception that these wines only have a *genuine taste*.

Brugarolas Mollá-Bauzá et al. (2005) used a contingent evaluation analysis with a sample of 400 respondents in order to estimate the premium price Spanish consumers were willing to pay for an organic wine. The results showed the average price premium for an organic wine is 17%, although it ranges from 12% for respondents worried about other factors to 21% for those who care about environmental issues. Remaud et al. (2008) criticised this study as respondents (a) were segmented according to consumption life styles, more than consumption behaviours, (b) did not have to make trade-offs between product attributes, e.g. price points versus organic, (c) the reference price on which respondents formed these premiums was not known, making it impossible to derive a monetary value out of the percentages. Some of these issues were solved by Barreiro-Hurlé et al. (2008) in a study about the potential of functional wines in the Spanish market. The authors designed a choice experiment with six attributes including price. After information about the meaning of resveratrol, respondents faced a series of choice tasks. The results showed that consumers were willing to pay an extra €5.89 for a functional wine (one with resveratrol) and an extra €1.53 for an organic wine. These values represent a 55% and a 15% price premium, respectively, more than the maximum price consumers are prepared to spend for a bottle of wine (€ 10.11).

Remaud et al. (2008) and Mueller and Remaud (2010) conducted two studies on regular wine consumers in Australia in order to estimate their willingness to pay for organic wines. Four attributes were included in both works including price, region of origin, environmental claims (environmentally responsible, carbon neutral), and organic claims (certified organic). Differently from Barreiro-Hurlé et al. (2008), choice alternatives were combined in graphically reproduced wine labels and the claims were chosen according to the Australian Carbon Reduction Institute (environmental claims) and the Australian Certified Organic logo (organic claims). In the first of the two studies, it was found that Australian wine consumers did not value environmental claims, with eco-friendly ones accounting for only 5% of their decision to choose a wine and organic claims only a negligible 0.2%. However, a latent class analysis found a small segment of the population (14%), which valued organic wines. These consumers were willing to pay an extra AUD \$4.99 for an organic wine, a value which represents a +22% price premium compared to a conventional wine. The authors replicated the study conducted two years later (Mueller and Remaud, 2010) and found that the influence of environmental and organic claims increased slightly over time (+2%). Moreover, the segmentation analysis remained stable over time,

thus showing the potential of latent class models for the study of consumer behaviour.

Olsen et al. (2012) published about the role that environmental protection and hedonistic values have in determining consumer acceptance of organic wines. The study, conducted on-line with 321 wine drinkers, found a clear linkage between environmental values and the purchase of organic wines. Some consumers adopt risk reduction strategies to purchase organic wines, but are also willing to pay a premium price, make self-sacrifices and do not associate organic wine consumption with enjoyment.

Finally, there are two works, which sit between these two main approaches. The first one used sixteen focus groups conducted in four different countries (Italy, France, Germany and Switzerland) to study consumers' attitudes and expectations towards organic wines (Stolz and Schmid, 2008). The authors found that organic wines still face some problems in terms of sensory perception, but they benefit from a positive image with regard to grape production, wine processing and healthiness. Due to this, the use of sulphites, other additives and processing aids in organic wine processing is still not completely understood. The second study applied hedonic price analysis to understand the willingness to pay consumers have towards a product that has been eco-certified (Delmas and Grant, 2008). The authors analysed 13,400 wines and found, different from the results of Forbes et al. (2009), that a winery's environmental certification increases the price by a 13%, but, when an environmental logo is included on the label, price reduces by 20%.

To sum up, it is clear that consumers report they are willing to spend more for an organic/sustainable wine than a regular one, but there is no revealed preference data (actual behaviour) to support results obtained with preference survey methods. There is a segment of the population willing to purchase these types of wines, but the size is small and it has not expanded in the last few years. One of the most frequent explanations is that consumers are not willing to trade-off the quality of a wine, for the sake of having an environmental friendly one. Consumers will consider an environmentally friendly wine at the same price as regular wines.

2.15. Social media

There is no doubt that the use of social media in wine marketing is a major topic of discussion. However, for a review paper such as this, there are actually few peer-reviewed articles that cover the use and outcomes of social media for wine marketing. Because of the recency of this area, this one section will include peer-reviewed conference papers to provide more immediacy to the topic, but will not include the numerous publications in the trade press, since these are not considered empirical evidence, merely opinion. Given these restrictions, there are only five peer-reviewed articles on aspects of social media. Certainly

more will appear in the future, but this review is limited to the five studies below.

Thach published the first article in 2010, in which she conducted a content analysis of 222 wine blogs. She found the major topics of discussion were reviews and ratings of wines. She found references to 813 different brands and also found 450 advertisements in the blogs. This illustrates both the private and commercial nature of social media. She concluded by stating wine businesses needed to take into account what is being said or written about their brands in social media space, but provided no particular strategy to do so. Another paper looked at the visibility of wine brands in social media, this time focusing on Bordeaux premier grand crus (Reyneke et al., 2011). Many of the brands studied did not have a social media strategy and seemed to appear in social media merely as a result of individual consumer interest. Both of these articles point to the need for wine companies to get involved and manage the social media interaction with their customers to some degree.

A different approach was taken by Claster et al. (2010). They used data mining to explore over 80 million micro-blogs from Twitter to see if this evidence corroborated actual sales figures plus other information. Their models were able to show differences in consumer knowledge similar to traditional survey methods and were able to extend the kinds of knowledge about consumer thoughts and emotions concerning wine. This was a very basic study using new methods, which have yet to be fully explored. Another analysis of online consumer sentiment was conducted by Pitt et al. (2011). They used the social media tool Social Mention and processed the results from a convenience sample of six Sauternes wine brands using Chernoff faces to represent the overall multivariate nature of the data from social media mentions of each wine brand. This simple trial of both social media measurement software and the presentation of complex results shows one possible way for brand managers to track the perceptions of their brand using social media. This paper provides a method to measure the issues Thach (2010) mentions as necessary for wineries to manage in the social media space.

The final paper views social media as a means for alcohol brands to encourage the overconsumption of alcohol. Nichols (2012) analyses the complete Facebook walls and Twitter timelines for 12 leading alcohol brands in the UK. This work characterises the marketing strategies of these brands in these two social media spaces. Nichols found that these 12 brands were encouraging conversations about the brands and suggestions for times and places to drink. The outcome could be an undermining of policies in place to reduce the overconsumption of alcohol.

There is a growing amount of research and practical activity on social media in regard to wine. Wineries need to be able to understand the activity and try to play a role in managing it. However, this activity is complex and new tools and strategies are necessary to be able to do this.

At this time, there is no empirical research clearly showing the benefits and the mechanisms to achieve them for social media-based marketing. On the other side of the coin, some policy makers see the preponderance of social media as a way alcohol brands encourage excess and unhealthy drinking. It is clear we are at a very early stage in understanding the best way to use social media in wine marketing.

3. Discussion and conclusions

Over 200 wine marketing studies have been published in academic journals in the past 20 years, since the very first publication by Spawton (1991) on his adaptation of the 4Ps of the marketing mix to wine in the *European Journal of Marketing*. Since then, much of the research has focused on applying the constructs developed in other marketing sectors to understanding how consumers buy and consume wine. There is no doubt that most of the research has followed reasonable academic standards of literature review and research methods, but many of the studies, as highlighted in the preceding pages, used small and non-representative samples. At the same time some of studies repeated the same or similar research questions in different countries, regions, or in different time periods. This process was also favoured in terms of funding and diffusion of the results by the increasing number of people interested in wine and the growing attention media dedicated to this topic. This research approach has been useful because we now have evidence in many areas, which are repeatable and not debatable. Even better, this process was fundamental for a young discipline.

This time is over. Researchers now have to re-think the way they approach the discipline in the next few years. After summarising the areas where knowledge has reached some conclusions, we will discuss topics for further research and research methods.

We know the main drivers of wine choice very well and the fact they differ very little between countries. Researchers have repeated many areas of marketing research using wine as the product and found in most cases wine is not that different than other products. Researchers need to think more about the theoretical gaps in the literature beyond just wine. Wine, as a product category, does offer a degree of complexity that not many other categories can claim. Wine is a beverage. Wine is socialisation tool or a way to celebrate an event. Wine tells us about the history and culture of a country. Wine is a symbol of prestige. Each of these features is also inherent in other categories, so we should use that as our starting point.

For example, it is fundamental for wine, as for many other consumer goods, that a brand/product must be physically and mentally available for consumers if we want that bottle to be purchased. Unseen (or unthought-of) is unsold. Research on creating mental awareness is similar across most consumer products, as is research on distribution channels (route to market) and channel management. Market entry, online versus bricks and mortar, differences

between fast moving and prestige goods are all general topics that can be linked to wine.

The most important empirical generalisations on consumer goods, such as large brands have higher loyalty than smaller brands, penetration is more important than purchase frequency for a brand to grow, and price promotions do not bring many new buyers to a brand have all been tested and are applicable to wine. Some of these have been extended with some changes for the wine category. For example, the same as with brands for wine: regions or grape varieties with larger market shares have more loyalty. As a consequence, the real contribution wine marketing researchers can give to both industry and academia is the discovery of new marketing aspects, which could be studied on any consumer product, but when studied in relation to wine are more useful and interesting because of the complexity this category offers in relation to others. Wine can be studied as a fast moving good, a collectors' item, a luxury good, a tourist activity, an online product and more.

Secondly, we have to think about the role wine marketing researchers should play in consumer behaviour R&D in the next few years. The know-how developed in 20 years of wine marketing research should not be wasted, but should be supported in the future. However, the economic and financial issues facing funding bodies should force researchers to understand the areas where we have a solid knowledge, and the areas where more studies are needed.

With these two ideas in mind, we first suggest topics where we believe no more research is necessary, apart from a periodical monitoring of preferences, which is more market research than marketing science. We then give suggestions about the areas where funding bodies and researchers should dedicate more attention in the next five years.

3.1. *Clear accepted knowledge*

- The role of the price, origin, grape variety and brand in wine choice are now clearly established in the literature. We might continue to expect some differences between countries as noted in the next section, but these key attributes are known to be important in wine choice.
- There are many studies comparing differences between Old World (OW) and New World (NW) countries. It is evident that there are differences between these two groupings in general, with the first more focused on the region of origin, designated quality levels and food matching suggestions, and the second more sensitive to region, grape varieties and brand. In the future we should not expect research questions on differences between OW and NW countries. Yet, we strongly recommend that more research questions be answered through data collection in multiple countries, in order to test whether the results of research are due to the one-off nature of the study or can be generalised to different markets and conditions.
- Segmentation of wine consumers is another area with few new revelations. We know there are differences

between low and high involvement consumers, which are similar to those between new and long-term consumers (Spawton, 1991). Various studies aimed at identifying specific groups to target have found only small differences and none that could be included in a focused marketing campaign. There seems to be little practical application for marketing to different segments, even when segments seem to exist in small convenience sample studies.

- Sustainable/organic wines represent another area where wine marketing researchers should not dedicate much energy. It is known that a small segment of the population is willing to buy this type of wine. Segment size has been small and it has not grown much. The same patterns are found in other consumer goods categories. Consumers seem to be unwilling to trade quality for a wine that is organic/sustainable, and will not spend more for these wines compared to regular ones. Conversely, it is important to investigate further how sustainable/organic wine making practices become normal techniques used by wineries, so that all wineries could improve their environmental footprint.

3.2. *Future research areas*

3.2.1. *Retail marketing*

The more wine consumption grows in a country, the more we see a growth in the volume of wine purchased in retail stores. However, there are very few studies providing information about what consumers actually do in the store. We, therefore, believe the following areas of research should be developed:

- **Planned v impulse purchases:** we know shopping behaviour can be categorised as planned, semi-impulse, and impulse and the time available (on a given day) influences the percentage of planned purchases. Yet, we do not know how much these classifications apply to the wine category.
- **Understanding the time spent in the aisle:** 80% of a shopper's time is spent moving from place to place in the store. Yet, the more shoppers move, the less they buy. How can we help consumers choose faster, so that they will have more time to spend on another product to purchase?
- **What consumers notice in store:** we mentioned in the literature review that unseen is unsold. In addition, the complexity of the wine category makes it more difficult for consumers to notice a brand on shelf. We have knowledge developed in other consumer product categories about how shoppers notice brands in store, but we do not know the extent to which these principles apply to the wine category.
- **Position on shelf and shelf-space allocation:** the position of a product on a shelf impacts the shopper's ability to find it, but there is still uncertainty about the role of

end-of-aisle positions and the criteria retailers use to order brands from left to right as well as the number of facings and SKUs for optimal sales.

- **Best shelf positions in store:** wine shelving is often designed according to a *grid pattern* layout. However, it is known that open spaces attract shoppers more than closed spaces. How can we help retailers to design better shelves for accelerating wine sales?
- **Influence of price promotions/added value:** price promotions: (a) do not usually expand category demand; (b) do not tend to have positive long-term effects; (c) erode reference prices; and (d) can hurt profits. Yet, it is hard to convince retailers to stop price-promoting the brands they have on shelves. Can we find alternative ways in which wines can be promoted, without decreasing the price?
- **Cross category buying and purchasing:** in most of the countries wine is sold together with other products. As advertising and promotion in one category tend to enhance sales in the complementary category, it would be useful to explore how wine purchases complement those from other categories and vice-versa.
- **Out-of-Stock Management:** Out-of-stocks (OOS) still cause significant losses of sales and profits. When a product is missing from a shelf, some shoppers buy another brand and others go to another store. How can we reduce wine out-of-stock?

3.2.2. On-premise buying behaviour

Much less research has been conducted in the area of on-premise behaviour compared to in-store behaviour due to the fact that about 80% of wine sales in developed markets are in shops. However, two factors suggest more research is needed. The value of on-premise sales in developed wine drinking countries is high, often 40% or more of total value. In developing markets, on-premise sales are often 60%–80% by volume and higher by value, mainly because the introduction of wine has come through sales in western style restaurants. Consumers seem to learn about wine in these venues and then begin to buy wine in stores for private consumption. Very little is understood about how this process happens. We also, have little evidence of the effects of promotion in restaurants, or wine list size and organisation, recommendations, and the influence of staff.

3.2.3. On-line behaviour and social media

Internet retailing has been the most dynamic distribution channel between 2005 and 2010, although it still accounts for only 2% of global wine sales. However, we do not know whether consumer behaviour in the on-line environment mimics typical off-trade behaviours. It is important to conduct more studies on the differences between on-line and off-line purchasing, as this will improve the strategies retailers should adopt to improve sales, including direct wine sales by wineries. If on-line behaviour appears to be similar to off-line, it will be

possible to use the internet to test the introduction of new products and/or retailing strategies, with a considerable reduction in the costs for in-store simulations.

Social media are a key communication platform for both consumers and businesses. It is estimated that by 2015, social media will engage one-third of the world population. Wine marketing researchers, as well as other researchers, have been trying to understand how social media work and what the best way is for business to use them. The small number of studies so far concludes that wineries should use social media, as this will generate benefits at different levels, but with no empirical evidence. Yet, two recent publications by Nelson-Field and Taylor (2012) and Nelson-Field et al. (2012) strongly oppose these results.

The first paper looked at consumers' engagement towards 200 brands in 18 product categories on Facebook, and found only 0.5% of consumers were engaged, with no significant differences between categories or brands. There were not any differences even for brands with supposedly strong consumer bases, such as Apple or Ferrari. The second study observed consumers' behaviour (what they actually bought) instead of attitudes (what they say they would do) and found Facebook fans tend to be heavy brand buyers, who are known to be less important for a brand's growth. These last two studies included alcoholic drinks as one of the categories under analysis, but no wine brand was observed. It will, therefore, be important to expand the research on the effectiveness of social media, but it is fundamental that researchers propose a sound methodological approach to measure actual behavioural responses.

3.2.4. Premium/luxury wines

The last five years have been characterised by a drastic change in the production policies of several countries. The European Union grubbed up 175,000 ha of vineyards from 2009 to 2011. Australia has been trying to fight the oversupply of wine in the last decade, by deciding to trade up for quality at the expense of quantity. In most of the emerging markets wines are still purchased at much higher price points compared to mature markets. Yet, we do not know whether consumers' behaviour towards premium/luxury wines is different from regular products. Overall, the amount of empirical research in luxury products is quite low. We simply do not know much about the buying behaviour and consequently how the marketing strategy for prestige and luxury wines should differ from that of regular wines. We do not know who actually buys luxury wines, whether it is regular consumers or small numbers of very wealthy consumers. We do not know how luxury brands should best be built or maintained.

3.2.5. Emerging markets

We know Western European markets are declining, while China, Brazil, Russia, and to a lesser extent, India and other developing markets represent opportunities for all wine producers around the world. The preliminary

research approach for these countries should be based on a replication of the studies conducted in mature markets to observe similarities and differences between them and emerging markets. We speculate that emerging markets have still developing routes to market, which can make practical planning difficult. We also speculate that consumers in emerging markets are likely to be new and mainly uninformed consumers. But we really do not know if emerging markets follow the same patterns as developed markets in their reaction to various marketing activities. This is of first importance, along with studies to make sure the methods used to measure behaviour in emerging markets accurately represent the market.

3.2.6. *Wine tourism*

The section on tourism was purposely not large, since it represents a different and broader area encompassing not only sales, but management, training, geography, etc. There is no doubt wineries need to do better in using tourism for both brand building and cash flow. The key elements of tourism in general are known and can be applied to the wine sector quite directly. More research certainly needs to be done to learn about how to maximise returns from tourism investment.

3.2.7. *Relationship between grape/wine quality and consumer behaviour*

It will be necessary as Australia (and other countries) develop better and better tools to measure objective wine quality, that measurement techniques are also developed to understand the contribution of objective wine quality to consumer preference in the presence of a wide range of market information: price, brand, country, region, packaging, etc. It is well known that consumer expectations have a strong influence on the perception of wine quality, but how these influences occur and the strength of them in the presence of other information is not well known. Along with market information, other untested influences would be things like different flavour descriptions, recommendations, and even the social situation in purchase and consumption.

3.2.8. *Wine and health*

The study of the impact of alcohol on human health is becoming increasingly central in the agenda of both public and private stakeholders. The latest documents published by the World Health Organisation (WHO) stated that the objectives of the new global strategy are to increase awareness and knowledge of the risks associated with alcohol abuse, raise technical support to member states to enhance preventive measures to alcohol excess consumption, strengthen the collaboration between stakeholders and improve systems to monitor the effectiveness of these measures over time by observing the changes in consumer behaviour (World Health, 2010). The wine sector is not immune from the new WHO global alcohol strategy, as the organisation considers wine to be like other alcoholic beverages. However, research

showed that wine offers greater protection to health than other alcoholic beverages (Burns et al., 2001). Also, wine drinking is more positively associated with social, cognitive and personality development factors compared to beer (Mortensen et al., 2001) and leads to healthier food choices (Johansen et al., 2006).

It is, therefore, vital for the sustainability of the wine sector to investigate further whether wine could be considered different from other alcoholic beverages, and, if so, find the best way to communicate the risks associated with the abuse of wine and promote moderate wine consumption.

3.2.9. *Measurement tools for more accurate consumer analysis*

One of the findings of the literature review was the large number of convenience studies using simple surveys. These are not wrong, but mainly very blunt measuring instruments, whose reliability must be questioned until there are enough similar results to accept them as given. This is most likely due to the low level of funding for most marketing research in academia and to the type of training provided to market researchers.

Nonetheless, we must improve as a discipline if we want to progress. Marketing in general, not just wine marketing, has few descriptive studies that really look at a phenomenon and describe it. This would be a very useful activity in developing markets to find who is buying wine, what are they buying where they are buying, what are their motivations.

From this we need to progress to combinations of measuring both actual behaviour in the market and simulations of behaviour. Actual behaviour is rarely measured, but as noted above, it could be extremely useful in areas like online, on-premise, and in-store retailing. Few researchers use experiments in the retail area (Sorensen and Suher, 2010; Sorensen, 2011, 2009a, 2009b), yet it lends itself to experimentation as well as observation. As countries develop, more repeat purchase data (panel data) will be available to better understand behaviour. One of the issues, however, is that wine is typically a small category in value, and the data is not as available for analysis. Both researchers and wineries and wine associations should lobby panel data providers to make more wine data available.

Simulated purchasing, through choice experiments (Louviere et al., 2000, 2005; Marley and Louviere, 2005; Mueller et al., 2009) and simulated shopping environments (via the use of different technologies, such as Bluetooth trackers, eye-trackers, infrared technologies, RFID tracking, out-of-stock analysis) provide the ability to test new to the world ideas without having to develop the actual product or release it in view of competitors into the market before testing. In particular, choice experiments would be particularly useful for the analysis of on-premise and on-line buying behaviour, the relationship between grape varieties and consumer preferences and the relationship between wine and health. Simulated shopping

environments would be more suitable for all the research to be conducted in retail stores.

We should not ignore qualitative research (Charters and Pettigrew, 2007; Charters and Pettigrew, 2006; Mitchell and Hall, 2004). Very little of the research reviewed above used good qualitative techniques to better understand wine markets. Although observation, panel data and experiments can show what happens, they do not provide any evidence as to why or what the underlying motivations were. The few papers reviewed that used good interview techniques did find new and useful information for purchasing, for the behaviour of Millennials, and underlying reasons for excessive consumption. More trained researchers should collect data directly by speaking to consumers or consumer groups to help illuminate the issues raised in the discussions of each area. A qualitative component to the research should always be added either in the preliminary stage of the research to better understand what elements should be taken into account by the researchers, or after the quantitative component of the research to better explain and discuss the meaning of the results.

In conclusion, challenging years await wine marketing researchers worldwide. However, the contribution wine marketing researchers can bring to solve the specific needs of the discipline and the unresolved questions in both marketing and economics is still very high. This requires researchers, first, but also industry organisation and funding bodies to approach the suggested research areas in a different way compared to what has been done in the last 20 years. It is not us who are making wine a favour by doing this. We actually owe one to wine. We have chosen our area of research partly because of our personal interest in wine and in marketing. Twenty years ago there was not even a discipline of wine marketing. Now, most major marketing conferences feature wine marketing sections, and several academic conferences specialise in the area. We look forward to our next review in ten more years.

References

- Adinolfi, F., De Rosa, M., Trabalzi, F., 2011. Dedicated and generic marketing strategies: the disconnection between geographical indications and consumer behavior in Italy. *British Food Journal* 113, 419–435.
- Agnoli, I., Begalli, D., Capitello, R., 2011. Generation Y's perception of wine and consumption situations in a traditional wine-producing region. *International Journal of Wine Business Research* 23, 176–192.
- Alelaki, M., Iakovidou, O., 2011. Market segmentation in wine tourism: a comparison of approaches. *Tourism: An International Multi-disciplinary Journal of Tourism* 6, 123–140.
- Atkin, T., Johnson, R., 2010. Appellation as an indicator of quality. *International Journal of Wine Business Research* 22, 42–61.
- Atkin, T., Nowak, L., Garcia, R., 2007. Women wine consumers: information search and retailing implications. *International Journal of Wine Business Research* 19, 327–339.
- Balestrini, P., Gamble, P., 2006. Country-of-origin effects on Chinese wine consumers. *British Food Journal* 108, 396–412.
- Barber, N., 2009. Wine consumers information search: gender differences and implications for the hospitality industry. *Tourism and Hospitality Research* 9, 250–269.
- Barber, N., 2012. Consumers' intention to purchase environmentally friendly wines: a segmentation approach. *International Journal of Hospitality and Tourism Administration* 13, 26–47.
- Barber, N., Almanza, B.A., 2006. Influence of wine packaging on consumers' decision to purchase. *Journal of Foodservice Business Research* 9, 83–98.
- Barber, N., Almanza, B.A., Donovan, J., 2006. Motivational factors of gender, income and age on selecting a bottle of wine. *International Journal of Wine Business Research* 18, 218–232.
- Barber, N., Ismail, J., Taylor, D., 2007. Label fluency and consumer self-confidence. *Journal of Wine Research* 18, 73–85.
- Barber, N., Taylor, C., Strick, S., 2009. Wine consumers' environmental knowledge and attitudes: influence on willingness to purchase. *International Journal of Wine Research* 1, 59–72.
- Barreiro-Hurlé, J., Colombo, S., Cantos-Villar, E., 2008. Is there a market for functional wines? Consumer preferences and willingness to pay for resveratrol-enriched red wine. *Food Quality and Preference* 19, 360–371.
- Boudreaux, C.A., Palmer, S., 2007. A charming little cabernet: effects of wine label design on purchase intent and brand personality. *International Journal of Wine Business Research* 19, 170–186.
- Bressolles, G., Durrieu, F., 2010. A typology of online buyers for French wine web sites based on electronic service quality dimensions. *International Journal of Wine Business Research* 22, 335–348.
- Brown, U., O'Casey, A., 2006. Foreign wine consumption in Australia. *Journal of Food Products Marketing* 12, 15–26.
- Brugarolas Mollá-Bauzá, M.M., Martínez-Carrasco, L., Martínez-Poveda, A., Rico Pérez, M., 2005. Determination of the surplus that consumers are willing to pay for an organic wine. *Spanish Journal of Agricultural Research* 3, 43–51.
- Brunner, T.A., Siegrist, M., 2011. Lifestyle determinants of wine consumption and spending on wine. *International Journal of Wine Business Research* 23, 210–220.
- Bruwer, J., Johnson, R., 2010. Place-based marketing and regional branding strategy perspectives in the California wine industry. *Journal of Consumer Marketing* 27, 5–16.
- Bruwer, J., Lesschaeve, I., 2012. Wine tourists' destination region brand image perception and antecedents: conceptualization of a winescape framework. *Journal of Travel and Tourism Marketing* 29, 611–628.
- Bruwer, J., Li, E., 2007. Wine-related lifestyle (WRL) market segmentation: demographic and behavioural factors. *Journal of Wine Research* 18, 19–34.
- Bruwer, J., Li, E., Reid, M., 2002. Segmentation of the Australian wine market using a wine-related lifestyle approach. *Journal of Wine Research* 13, 217–242.
- Bruwer, J., Nam, K.-H., 2009. The BYOB of wine phenomenon of consumers in the Australian licensed on-premise foodservice sector. *International Journal of Hospitality Management* 29, 83–91.
- Bruwer, J., Rawbone-Viljoen, C., 2012. BYOB as a risk-reduction strategy (RRS) for wine consumers in the Australian on-premise foodservice sector: exploratory insights. *International Journal of Hospitality Management*.
- Bruwer, J., Saliba, A., Miller, B., 2011. Consumer behaviour and sensory preference differences: implications for wine product marketing. *Journal of Consumer Marketing* 28, 5–18.
- Bruwer, J., Wood, G., 2005. The Australian online wine-buying consumer: motivational and behavioural perspectives. *Journal of Wine Research* 16, 193–211.
- Burns, J., Crozier, A., Lean, M.E., 2001. Alcohol consumption and mortality: is wine different from other alcoholic beverages? *Nutrition, Metabolism, and Cardiovascular Diseases: NMCD* 11, 249.
- Casini, L., Cavicchi, A., Corsi, A.M., 2008. Trends in the British wine market and consumer confusion. *British Food Journal* 110, 545–558.
- Casini, L., Corsi, A.M., Goodman, S., 2009. Consumer preferences of wine in Italy applying best–worst scaling. *International Journal of Wine Business Research* 21, 64–78.

- Charters, S., Pettigrew, S., 2006. Product involvement and the evaluation of wine quality. *Qualitative Market Research: An International Journal* 9, 181–193.
- Charters, S., Pettigrew, S., 2007. The dimensions of wine quality. *Food Quality and Preference* 18, 997–1007.
- Charters, S., Velikova, N., Ritchie, C., Fountain, J., Thach, L., Dodd, T.H., et al., 2011. Generation y and sparkling wines: a cross-cultural perspective. *International Journal of Wine Business Research* 23, 161–175.
- Chrea, C., Melo, L., Evans, G., Forde, C., Delahunty, C., Cox, D.N., 2011. An investigation using three approaches to understand the influence of extrinsic product cues on consumer behavior: an example of Australian wines. *Journal of Sensory Studies* 26, 13–24.
- Claster, W.B., Caughron, M., Sallis, P.J., 2010. Harvesting consumer opinion and wine knowledge off the social media grape vine utilizing artificial neural networks. In: *Proceedings of the UKSim European Symposium on Computer Modeling and Simulation*. IEEE, pp. 206–211.
- Cohen, E., 2009. Applying best–worst scaling to wine marketing. *International Journal of Wine Business Research* 21, 8–23.
- Cohen, E., d’Hauteville, F., Sirieix, L., 2009. A cross-cultural comparison of choice criteria for wine in restaurants. *International Journal of Wine Business Research* 21, 50–63.
- Corsi, A.M., Mueller, S., Lockshin, L., 2012. Let’s see what they have: what consumers look for in a restaurant wine list. *Cornell Hospitality Quarterly* 53, 110–121.
- De Magistris, T., Groot, E., Gracia, A., 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* 23, 145–160.
- Delmas, M.A., Grant, L.E., 2008. Eco-Labeling Strategies: The Eco-Premium Puzzle in the Wine Industry.
- Dimara, E., Skuras, D., 2005. Consumer demand for informative labeling of quality food and drink products: a european union case study. *Journal of Consumer Marketing* 22, 90–100.
- Durham, C.A., Pardoe, I., Vega-H, E., 2004. A methodology for evaluating how product characteristics impact choice in retail settings with many zero observations: an application to restaurant wine purchase. *Journal of Agricultural and Resource Economics* 29, 112–131.
- Durrieu, F., Bouzdine-Chameeva, T., 2008. Stopping Rules in Information Search Applied in Web Site by Wine Purchasers.
- Easingwood, C., Lockshin, L., Spawton, A., 2011. The drivers of wine regionality. *Journal of Wine Research* 22, 19–33.
- Espejel, J., Fandos, C., 2009. Wine marketing strategies in Spain: a structural equation approach to consumer response to protected designations of origin (PDOs). *International Journal of Wine Business Research* 21, 267–288.
- Espejel, J., Fandos, C., Flavián, C., 2011. Antecedents of consumer commitment to a PDO wine: an empirical analysis of Spanish consumers. *Journal of Wine Research* 22, 205–225.
- Eves, A., 1994. Sensory analysis—an alternative to wine tasting? *International Journal of Wine Marketing* 6, 32–43.
- Famularo, B., Bruwer, J., Li, E., 2010. Region of origin as choice factor: wine knowledge and wine tourism involvement influence. *International Journal of Wine Business Research* 22, 362–385.
- Felzensztein, C., Dinnie, K., 2006. The effects of country of origin on UK consumers’ perceptions of imported wines. *Journal of Food Products Marketing* 11, 109–117.
- Forbes, S.L., Cohen, D.A., Cullen, R., Wratten, S.D., Fountain, J., 2009. Consumer attitudes regarding environmentally sustainable wine: an exploratory study of the New Zealand marketplace. *Journal of Cleaner Production* 17, 1195–1199.
- Fotopoulos, C., Krystallis, A., Ness, M., 2003. Wine produced by organic grapes in Greece: using means-end chains analysis to reveal organic buyers’ purchasing motives in comparison to the non-buyers. *Food Quality and Preference* 14, 549–566.
- Fountain, J., 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* 23, 107–124.
- Gill, D., Bysma, B., Ouschan, R., 2007. Customer perceived value in a cellar door visit: the impact on behavioural intentions. *International Journal of Wine Business Research* 19, 257–275.
- Gjonbalaj, M., Miftari, I., Pllana, M., Fetahu, S., Bytyqi, H., Gjergjizi, H., et al., 2009. Chinese choices: a survey of wine consumers in Beijing. *Agriculturae Conspectus Scientificus* 74, 333–338.
- Goodman, S., 2009. An international comparison of retail consumer wine choice. *International Journal of Wine Business Research* 21, 41–49.
- Harridge-March, S., Quinton, S., 2005. Initiation of trust and management of risk in on-line retailing: UK on-line wine market. *International Journal of Wine Marketing* 17, 5–20.
- Henley, C.D., Fowler, D.C., Yuan, J.J., Stout, B.L., Goh, B.K., 2011. Label design: impact on millennials’ perceptions of wine. *International Journal of Wine Business Research* 23, 7–20.
- Heslop, L.A., Cray, D., Armenakyan, A., 2010. Cue incongruity in wine personality formation and purchasing. *International Journal of Wine Business Research* 22, 288–307.
- Hollebeek, L.D., Jaeger, S.R., Brodie, R.J., Balemi, A., 2007. The influence of involvement on purchase intention for new world wine. *Food Quality and Preference* 18, 1033–1049.
- Hu, X., Li, L., Xie, C., Zhou, J., 2008. The effects of country-of-origin on Chinese consumers’ wine purchasing behaviour. *Journal of Technology Management in China* 3, 292–306.
- Hughson, A., Ashman, H., Huerga, V., Moskowit, H., 2004. Mind-sets of the wine consumer. *Journal of Sensory Studies* 19, 85–105.
- Jaeger, S.R., Danaher, P.J., Brodie, R.J., 2010. Consumption decisions made in restaurants: the case of wine selection. *Food Quality and Preference* 21, 439–442.
- Jarvis, W., Mueller, S., Chiong, K., 2010. A latent analysis of images and words in wine choice. *Australasian Marketing Journal (AMJ)* 18, 138–144.
- Johansen, D., Friis, K., Skovenborg, E., Grønbaek, M., 2006. Food buying habits of people who buy wine or beer: cross sectional study. *British Medical Journal* 332, 519.
- Johnson, R., Bruwer, J., 2007. Regional brand image and perceived wine quality: the consumer perspective. *International Journal of Wine Business Research* 19, 276–297.
- Johnson, T., Bruwer, J., 2003. An empirical confirmation of wine-related lifestyle segments in the Australian wine market. *International Journal of Wine Marketing* 15, 5–33.
- Johnson, T., Bruwer, J., 2004. Generic consumer risk-reduction strategies (RRS) in wine-related lifestyle segments of the Australian wine market. *International Journal of Wine Marketing* 16, 5–35.
- Ki-Seon, Yoo, K.S.Y., Jee-Sun, Kim, J.S.K., Hyang-Sik Yoon, H.S.Y., Nam soo han, N.S.H., 2008. Sensory test result of Korean consumers on red wines. *한국식품과학*, 224–224.
- King, E.S., Kievit, R.L., Curtin, C., Swiegers, J.H., Pretorius, I.S., Bastian, S.E.P., Francis, I.L., 2010. The effect of multiple yeasts co-inoculations on sauvignon blanc wine aroma composition, sensory properties and consumer preference. *Food Chemistry* 122, 618–626.
- Kolyesnikova, N., Dodd, S.L.S., Callison, C., 2010. Consumer affective responses to direct mail messages: the effect of gratitude and obligation. *Journal of Marketing Communications* 17, 337–353.
- Kolyesnikova, N., Dodd, T.H., 2008. Effects of winery visitor group size on gratitude and obligation. *Journal of Travel Research* 47, 104–112.
- Kolyesnikova, N., Dodd, T.H., Duhan, D.F., 2008. Consumer attitudes towards local wines in an emerging region: a segmentation approach. *International Journal of Wine Business Research* 20, 321–334.
- Lacey, S., Bruwer, J., Li, E., 2009. The role of perceived risk in wine purchase decisions in restaurants. *International Journal of Wine Business Research* 21, 99–117.
- Lee, S.J., Lee, K.G., 2008. Understanding consumer preferences for rice wines using sensory data. *Journal of the Science of Food and Agriculture* 88, 690–698.

- Lesschaeve, I., 2007. Sensory evaluation of wine and commercial realities: review of current practices and perspectives. *American Journal of Enology and Viticulture* 58, 252–258.
- Liu, F., Murphy, J., 2007. A qualitative study of chinese wine consumption and purchasing: implications for Australian wines. *International Journal of Wine Business Research* 19, 98–113.
- Lockshin, L., Hall, J., 2003. Consumer purchasing behaviour for wine: what we know and where we are going. In: *Proceedings of the International Wine Marketing Colloquium*. Adelaide.
- Lockshin, L., Jarvis, W., d'Hauteville, F., Perrouty, J., 2006. Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food Quality and Preference* 17, 166–178.
- Lockshin, L., Cohen, E., 2011. Using product and retail choice attributes for cross-national segmentation. *European Journal of Marketing* 45, 1236–1252.
- Lockshin, L., Knott, D., 2009. Boozing or branding? Measuring the effects of free wine tastings at wine shops. *International Journal of Wine Business Research* 21, 312–324.
- Louviere, J.J., Hensher, D.A., Swait, J.D., 2000. *Stated Choice Methods: Analysis and Application*. Cambridge University Press, Cambridge.
- Louviere, J.J., T.C., E., Cohen, S.H., 2005. *Conjoint Analysis: Methods, Myths and Much More*.
- Ma, Q., 2008. The Chinese wine market: which opportunities and to which conditions? *Bulletin de L'oiv* 80, 671–681.
- Marley, A.A.J., Louviere, J.J., 2005. Some probabilistic models of best, worst, and best–worst choices. *Journal of Mathematical Psychology* 49, 464–480.
- Martinez, L.M.-C., Molla-Bauza, M.M.-B., Gomis, F.J.D.C., Poveda, A.M., 2006. Influence of purchase place and consumption frequency over quality wine preferences. *Food Quality and Preference* 17, 315–327.
- McCutcheon, E., Bruwer, J., Li, E., 2009. Region of origin and its importance among choice factors in the wine-buying decision making of consumers. *International Journal of Wine Business Research* 21, 212–234.
- Mitchell, R., Hall, C.M., 2004. The post-visit consumer behaviour of New Zealand winery visitors. *Journal of Wine Research* 15, 39–49.
- Mortensen, E.L., Jensen, H.H., Sanders, S.A., Reinisch, J.M., 2001. Better psychological functioning and higher social status may largely explain the apparent health benefits of wine: a study of wine and beer drinking in young danish adults. *Archives of Internal Medicine* 161, 1844.
- Mueller Loose, S., Szolnoki, G., 2012. Market price differentials for food packaging characteristics. *Food Quality and Preference* 25, 171–182.
- Mueller, S., Lockshin, L., Louviere, J., Francis, L., Osidacz, P., 2009. How does shelf information influence consumers' wine choice? *The Australian and New Zealand Wine Industry Journal* 24, 50–56.
- Mueller, S., Lockshin, L., Saltman, Y., Blandford, J., 2010a. Message on a bottle: the relative influence of wine back label information on wine choice. *Food Quality and Preference* 21, 22–32.
- Mueller, S., Osidacz, P., Francis, I.L., Lockshin, L., 2010b. Combining discrete choice and informed sensory testing in a two-stage process can it predict wine market share? *Food Quality and Preference* 21, 741–754.
- Mueller, S., Remaud, H., 2010. Are Australian wine consumers becoming more environmentally conscious? robustness of latent preference segments over time. In: *Proceedings of the 5th International Academy of Wine Business Research Conference*. Auckland, New Zealand.
- Mueller, S., Remaud, H., Chabin, Y., 2011. How strong and generalisable is the generation y effect? A cross-cultural study for wine. *International Journal of Wine Business Research* 23, 125–144.
- Mueller, S., Rungie, C., 2009. Is there more information in best–worst choice data?: using the attitude heterogeneity structure to identify consumer segments. *International Journal of Wine Business Research* 21, 24–40.
- Mueller, S., Szolnoki, G., 2010. The relative influence of packaging, labelling, branding and sensory attributes on liking and purchase intent: consumers differ in their responsiveness. *Food Quality and Preference* 21, 774–783.
- Mueller Loose, S., Szolnoki, G., 2012. Market price differentials for food packaging characteristics. *Food Quality and Preference* 25, 171–182.
- Nelson-Field, K., Riebe, E., Sharp, B., 2012. What's not to “like”? can a facebook fan base give a brand the advertising reach it needs? *Journal of Advertising Research*, 1–8.
- Nelson-Field, K., Taylor, J., 2012. *Facebook Fans: A Fan for Life?* Admap. Warc.
- Nicholls, J., 2012. Everyday, everywhere: alcohol marketing and social media—current trends. *Alcohol and Alcoholism* 47, 486–493.
- Olsen, J., Thach, E., Hemphill, E., 2012. The impact of environmental protection and hedonistic values on organic wine purchases in the us. *International Journal of Wine Business Research* 24, 47–67.
- Olsen, J.E., Thach, L., Nowak, L., 2007. Wine for my generation: exploring how us wine consumers are socialized to wine. *Journal of Wine Research* 18, 1–18.
- Orth, U.R., 2005. Consumer personality and other factors in situational brand choice variation. *Journal of Brand Management* 13, 115–133.
- Orth, U.R., Bourrain, A., 2005. Ambient scent and consumer exploratory behaviour: a causal analysis. *Journal of Wine Research* 16, 137–150.
- Orth, U.R., Kahle, L.R., 2008. Intrapersonal variation in consumer susceptibility to normative influence: toward a better understanding of brand choice decisions. *The Journal of Social Psychology* 148, 423–448.
- Orth, U.R., Malkewitz, K., 2008. Holistic package design and consumer brand impressions. *Journal of Marketing* 72, 64–81.
- Orth, U.R., Stöckl, A., Veale, R., Brouard, J., Cavicchi, A., Faraoni, M., et al., 2011. Using attribution theory to explain tourists' attachments to place-based brands. *Journal of Business Research*.
- Perrouty, J.P., D'hauteville, F., Lockshin, L., 2006. The influence of wine attributes on region of origin equity: an analysis of the moderating effect of consumer's perceived expertise. *Agribusiness* 22, 323–341.
- Pitt, L., Mills, A.J., Chan, A., Menguc, B., Plangger, K., 2011. Using Chernoff Faces to Portray Social Media Wine Brand Images.
- Qenani-Petrela, E., Wolf, M., Zuckerman, B., 2007. Generational differences in wine consumption. *Journal of Food Distribution Research* 38, 119–127.
- Quinton, S., Harridge-March, S., 2003. On-line wine—strategic or tactical? *International Journal of Wine Marketing* 15, 34–43.
- Quinton, S., Harridge-March, S., 2008. Trust and online wine purchasing: insights into UK consumer behaviour. *International Journal of Wine Business Research* 20, 68–85.
- Remaud, H., Lockshin, L., 2009. Building brand salience for commodity-based wine regions. *International Journal of Wine Business Research* 21, 79–92.
- Remaud, H., Mueller, S., Chvyl, P., Lockshin, L. Do Australian wine consumers value organic wine? In: *Proceedings of the International Conference of the Academy of Wine Business Research*. 17–19 July 2008. Siena, pp. 1–15.
- Reyneke, M., Berthon, P.R., Pitt, L.F., Parent, M., 2011. Luxury wine brands as gifts: ontological and aesthetic perspectives. *International Journal of Wine Business Research* 23, 258–270.
- Ritchie, C., 2007. Beyond drinking: the role of wine in the life of the UK consumer. *International Journal of Consumer Studies* 31, 534–540.
- Ritchie, C., 2011. Young adult interaction with wine in the UK. *International Journal of Contemporary Hospitality Management* 23, 99–114.
- Ritchie, C., Elliott, G., Flynn, M., 2010. Buying wine on promotion is trading-up in UK supermarkets: a case study in wales and northern ireland. *International Journal of Wine Business Research* 22, 102–121.
- Rocchi, B., Stefani, G., 2005. Consumers' perception of wine packaging: a case study. *International Journal of Wine Marketing* 18, 33–44.
- Santos, C.R., Blanco, M.C., Fernandez, A.G., 2006. Segmenting wine consumers according to their involvement with appellations of origin. *The Journal of Brand Management* 13 (4), 300–312.
- Seghieri, C., Casini, L., Torrisi, F., 2007. The wine consumer's behaviour in selected stores of italian major retailing chains. *International Journal of Wine Business Research* 19, 139–151.
- Sheridan, M.J., Cazier, J.A., May, D.B., 2009. Leisure, wine and the internet: exploring the factors that impact the purchase of wine online. *International Journal of Electronic Marketing and Retailing* 2, 284–297.
- Sherman, S., Tuten, T., 2011. Message on a bottle: the wine label's influence. *International Journal of Wine Business Research* 23, 221–234.

- Sirieix, L., Remaud, H., 2010. Consumer perceptions of eco-friendly vs. conventional wines in Australia. *Academy of Wine Business*.
- Smith, D.E., Mitry, D.J., 2007. Cultural convergence: consumer behavioral changes in the european wine market. *Journal of Wine Research* 18, 107–112.
- Sorensen, H., 2009a. The in-store audience. *Journal of Advertising Research* 49, 176–179.
- Sorensen, H., 2009b. *Inside the Mind of the Shopper*. Pearson Education Inc., Upper Saddle River, New Jersey.
- Sorensen, H., 2011. Pathtracker[®], A New Dimension in Understanding Shopping Behavior. Sorensen Associates.
- Sorensen, H., Suher, J., 2010. The power of atlas: why in-store shopping behavior matters. *Journal of Advertising Research* 50, 21–29.
- Spawton, T., 1991. Marketing planning for wine. *European Journal of Marketing* 25, 6–48.
- St. James, M., Christodoulidou, N., 2011. Factors influencing wine consumption in Southern California consumers. *International Journal of Wine Business Research* 23, 36–48.
- Stening, S., Lockshin, L., 2001. A Comparison of On-Line and In-Store Customers in the Wine Retail Sector.
- Stolz, H., Schmid, O., 2008. Consumer Attitudes and Expectations of Organic Wine.
- Terrien, C., Steichen, D., 2008. Accounting for social taste: application to the demand for wine. *International Journal of Wine Business Research* 20, 260–275.
- Thach, E.C., Olsen, J.E., 2004. The search for new wine consumers: marketing focus on consumer lifestyle or lifecycle. *International Journal of Wine Marketing* 16, 44–57.
- Thach, L., 2009. Wine 2.0—the next phase of wine marketing? Exploring us winery adoption of wine 2.0 components. *Journal of Wine Research* 20, 143–157.
- Thomas, A., Pickering, G., 2005. X-it: gen-X and older wine drinker comparisons in New Zealand. *International Journal of Wine Marketing* 17, 30–48.
- Van Zanten, R., 2005. Drink choice: factors influencing the intention to drink wine. *International Journal of Wine Marketing* 17, 49–61.
- Wansink, B., Cordua, G., Blair, E., Payne, C., Geiger, S., 2006. Wine promotions in restaurants: do beverage sales contribute or cannibalize. *Cornell Hotel and Restaurant Administration Quarterly* 47, 327–336.
- Wolf, M.M., Carpenter, S., Qenani-Petrela, E., 2005. A comparison of x, y, and boomer generation wine consumers in california. *Journal of Food Distribution Research* 36, 186–191.
- World Health O., 2010. *Strategies to Reduce the Harmful Use of Alcohol: Draft Global Strategy*. WHO, Genève.
- Yoo, K., K.S.Y., Jee-Sun, Kim, J.S.K., Hyang-Sik Yoon, H.S.Y., Nam Soohan, N.S.H., 2008. Sensory test result of korean consumers on red wines, 224–224.
- Yu, Y., Sun, H., Goodman, S., Chen, S., Ma, H., 2009. Chinese choices: a survey of wine consumers in Beijing. *International Journal of Wine Business Research* 21, 155–168.