How consumers from the Old World and New World evaluate traditional and new wine attributes

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This work has the purpose to propose two experimental designs applying the Best-Worst scaling methodology to analyze wine consumers preferences in Spain. It considers wine attributes which are known by Spanish consumers, although not a priori highly appreciated by them, but they have a special attraction by "New World" consumers, in order to know how they could react when wines of those characteristics are found in the Spanish market. The first design includes 12 attributes that have been selected from wine consumers' studies undertaken in "Old World" and "New World" countries. The second design has 4 attributes (price, origin, grapevine variety and label) and 3 levels for each attribute. One level for each attribute can be considered as the typical Spanish market reference and the other two are considered as relatively novel for a traditional market, but highly appreciated by "New World" consumers. With that information, a proposition is offered for a choice experiment, to confront Spanish consumers with wines mostly defined by "New World" attributes and levels.

Abstract

This work has the purpose to propose two experimental designs applying the Best-Worst scaling methodology to analyze wine consumers preferences in Spain. It considers wine attributes which are known by Spanish consumers, although not a priori highly appreciated by them, but they have a special attraction by "New World" consumers, in order to know how they could react when wines of those characteristics are found in the Spanish market. The first design includes 12 attributes that have been selected from wine consumers' studies undertaken in "Old World" and "New World" countries. The second design has 4 attributes (price, origin, grapevine variety and label) and 3 levels for each attribute. One level for each attribute can be considered as the typical Spanish market reference and the other two are considered as relatively novel for a traditional market, but highly appreciated by "New World" consumers. With that information, a proposition is offered for a choice experiment, to confront Spanish consumers with wines mostly defined by "New World" attributes and levels.

Key-words: wine, preferences, Best-Worst scaling, experiment design, New World, Old World

Introduction

Wines from "New World" countries have a limited penetration in "Old World" countries but this situation might change in the future. The "New World" has successfully emphasized different attributes on their wines from those expressed in the "Old World" countries. "Old World" countries continue to communicate their wines based on their traditional wine attributes, but it might not be a good policy, since their consumers could be tired of those approaches and closer to "New World" communication ideas. Therefore, it is of great importance for traditionally wine producing countries, like Spain, to understand how their consumers value the common wine attributes offered in the "Old" and "New World" in order to learn how wine consumption could be promoted and sold.

The purpose of this study is to design two experiments to evaluate Spanish consumers wine purchasing behaviour when they are confronted with wine attributes more commonly used in the "New World" countries.

A great number of studies on wine preferences have been based on surveys and the importance of wine attributes has been measured by rating or ranking scales (d'Hauteville *et al.*, 2007; Hollebeek *et al.*, 2007; Jarvis *et al.*, 2007; Lockshin *et al.*, 2006; Mtimet and Albisu, 2006; Perrouty *et al.*, 2006).

However, recent literature on wine marketing has been applying Best-Worst scaling, which tries to improve the performance of other decision procedures and scales (Casini and Corsi, 2009; Cohen *et al.*, 2009; Cohen, 2009; Goodman *et al.*, 2005; Goodman, 2009; Mueller *et al.*, 2009).

Proposed experimental designs

The Best-Worst scaling method is applied and two experimental designs are proposed. Two different types of experiments are considered since each design provides different information in order to test if the cognitive process of wine consumers is the same or is a different task (Caparros et al., 2008). A survey of 400 Spanish consumers will be collected in Zaragoza (Spain).

The first experimental design considers only pair comparisons among a set of 12 attributes in each choice set. Table 1 gathers the selected attributes according to reviewed articles with research undertaken in the "New and Old World". The first four attributes are those mostly preferred by consumers of "Old World" countries, the following four attributes are those that consumers value more in "New World" countries than in traditionally wine producing countries, and the last four attributes are similarly preferred in both types of countries.

Table 1. Wine attributes that consumers consider when purchasing wine.

Attribute Countries	
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The appellation of origin	Old World		
Vintage	Old World		
Matching food	Old World		
I had read about it	Old World		
Country of origin	New World		
Grapevine variety	New World		
Tasted the wine previously	New World		
Someone recommended it	New World		
Price	Old and New World		
Label	New World and Old World		
Brand	New World and Old World		
It won a medal/award	New World and Old World		

The experiment will require each individual to examine 9 sets of four items. The 9 sets of 4 have been constructed using a Balance Incomplete Block Design (BIBD) that allows to allocate each attribute three times across 9 choice sets repeated in four blocks. Then, in the questionnaire, 9 choice sets are shown and each choice is presented in the questionnaire in a separate table. The respondent has to tick the attribute/item most preferred and the least preferred when shopping for a wine.

In the second experimental design, four wine attributes and their levels are taken into account with the addition of the "no choice" alternative, to incorporate recent advances in discrete choice experiments (Auger *et al.*, 2007; Lancsar *et al.*, 2007; Louviere and Islam, 2008; Louviere *et al.*, 2008; Marley *et al.*, 2008; Scarpa *et al.*, 2009).

Each attribute has three levels and one level could be considered representative of the "Old World" and, the other two levels, representative of the "New World". None of the levels considered as representative of the "New World" are totally unfamiliar to consumers from the "Old World". An example is provided in table 2.

Table 2. An example of BW choice set taken into consideration attributes and its levels when choosing a wine

Choosing a wine	Bottle	Bottle	Bottle	Bottle	None of
	А	В	С	D	the previous wine bottles
Origin					
	Spain	Spain	Australia	California	
Grapevine					
variety	Tempranillo	Merlot	Cabernet	Tempranillo	
Label					

Price					
	5€	7€	9€	5€	

The first attribute is price, whose inclusion in the experimental design allows us to analyze the willingness to pay for each attribute, and to simulate market potentials for different wines under different conditions. The range of prices has been selected based on market prices in different shopping places for the types of wines under consideration.

The second attribute is the country of origin, since we are interested to know consumer preference towards Spanish quality wines confronted with wines from "New World" countries, such as Australia and United States (California) wines. It departs from the traditional approach, in the "Old World" countries, of considering region and appellation of origin.

The next attribute considered in the choice experiment is the grape variety. The three levels considered are, one collecting a well known variety in the Spanish market, such as Tempranillo, and two others not so well known and considered as foreigners, such Cabernet Sauvignon and Merlot, widely used in "New World" countries. The two foreign varieties are recognized in the Spanish market.

Another three levels are introduced for label, which is the fourth attribute. One closely related to the Spanish market, called "traditional label", one showing a modern painting and the other is the figure of a dynamic horse. The traditional label is characteristic of distinguish old Spanish wineries, which was selected after analysing wines offered in big distribution centres and the image a traditional winery wants to send to the market. The modern painting corresponds to a label design prepared in United States to sell a Spanish wine in that market, trying to match expectations from US consumers although that label is also sold in the Spanish market. And the horse has been selected, as consumers from the "New World" seem to be more interested about animal figures than consumers from the "Old World" although the latter have some wines with those labels offered in their own market.

The choice set design was created following Street and Burguess (2007). As the research objective is to come to an estimation of the main effects, a fractional design was generated resulting in 9 runs to obtain 4 suitable options. The level of three attributes in each element of the choice set (9) was systematically changed for three attributes, leaving the level of the fourth attribute unchanged. The example of a choice card is reported in Table 2.

The respondent will be asked to choose among 5 options, the most preferred alternative out of 5, then the least preferred out of 1. Then, the respondents will be asked to repeat the exercise among the three options excluded from the first step. Thus, the respondents will have to choose the second best alternative out of the remaining 4, the second worst alternative out of 2.

The requested consumers will a representative sample of the census data. The only limitation is that they should drink quality red wine, which is defined at the beginning of the questionnaire.

Concluding remarks

This research presents the design of, at the moment, hypothetical products. However, it could not be too far away from real products in the future, when wine consumers from the "Old World" fully compare communication policies established by the "New World" and the "Old World" wine producing countries. Currently the presence of wines from the "New World" are very limited in "Old World" countries but the situation could change in the near future. All wine producers should know how wine consumers from the "Old World" react and Spain can be representative of that behaviour.

The experimental design has carefully selected two approaches with only wine attributes, the first one, and attributes and levels, the second one. Each experiment can provide information and part of it could be comparable and other part will be complementary.

The selection of attributes and levels, for each experiment, has been carefully selected based on previous studies undertaken in the "New World" and "Old World" countries. The hypothesis is that researchers have selected the most important ones for each occasion and empirical results provide evidence of their significance. The number of attributes and the information provided to consumers, in each choice set, takes into consideration the ability of consumers to decide among a limited number of alternatives. There is a mixture of visual components representing labels and written information.

This approach could be checked, after a while, to know how Spanish consumers change their attitudes along the years. It could be important for Spanish wineries but also for wineries from the "New World" trying to increase their market share in traditional Mediterranean wine producing countries.

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