

# **Designing Labels to Make Consumers Willing to Pay More for Wines: The Effects of Typical, Fun and Local Front Labels on Consumers' Willingness to Pay for Bordeaux Wines**

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## ***Abstract:***

*Purpose:* While previous research has examined labels as cues that shape consumers' quality perceptions, the effects of label design on consumer's willingness to pay (WTP) remains surprisingly unaddressed. This paper thus seeks to investigate how the three main types of labels used for Bordeaux bottles (namely typical, fun and local) affect WTP.

*Design/Methodology/Approach:* An experiment is conducted with 200 people. Then, analyses of variance and structural equation models are used to describe the respective influence of each label type.

*Findings:* The results highlight the positive effect of typical labels and the negative effects of local labels. Of importance, the structural equation models help understanding the process whereby the characteristics of each label type affects WTP. The model shows that symmetry perceptions, fluency and reinsurance are variables of importance for typical labels, while fun labels exert their influence through flourish perceptions and engagement. A striking result regarding local labels relates to the lack of effect of wine evaluation on WTP.

*Practical Implications:* From a managerial point of view, the results highlight how designing labels that are seen as typical can increase fluency and WTP. Results also emphasize the detrimental effects of local labels, suggesting that designing labels that induce the feeling that the wine is locally produced may be damageable.

*Research limitations/implications:* This study focuses on Bordeaux wines and it remains to be examined whether the results would replicate with wines from other countries and with different characteristics.

**Keywords:** Labels, design, WTP

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## 1. INTRODUCTION

Price is often used as a cue to judge product quality (Rao and Monroe 1989). However, when it comes to the price a consumer is willing to pay, the reversed process might exist, and quality cues may be used to infer willingness to pay (WTP). This process might be particularly relevant for experiential products, those such as wines (Nelson 1970) for which people are not necessarily fully informed as to their quality. In that case, product quality can only be appraised once consumers have engaged in the act of consumption. In the specific context of wine where consumers might usually pay before having tasted the product, it thus might be particularly difficult for consumers to appraise the price they are willing to pay for a given wine, and consumers may thus rely on cues to appraise the quality of the wine and subsequently the price they are willing to pay for it.

Among the specific cues that shape consumers' quality perceptions, the design of the label has probably been the cue that has received the widest attention (Boudreaux and Palmer 2007; Combris et al 2009; Orth et al., 2010). What results suggest is that consumers evaluate bottle designs in a holistic manner (Orth and Malkewitz, 2008), with most consumers processing the label as a whole rather than relying on specific attributes. Considering this holistic process, the investigation of the influence of products and labels design has often been conducted under the lens of typicality, leading to the consensual notion that consumers prefer more typical (vs. atypical) designs (Landwehr and al. 2013; Veryzer and Hutchinson 1998).

In addition to label design, another cues that is used to shape packaging evaluations – and still unexamined in relation with WTP – refers to wine origin. Such cues represents an important one for consumers, as highlighted by the creation in 1935 by the National Institute of Controlled Appellations of the appellation of origin, a tag that wineries put on their labels to indicate the geographic pedigree of their wines. This appellation of origin is seen as a sign of quality and an assurance to consumers of quality standards. As shown by Lunardo (2009), the origin of the wine can contribute to its perceived authenticity. The wine origin might also play a role in wine evaluation; for instance, and with regards not specifically to wine but rather to products, research shows that product origin enhances subjective fluency and subsequent product evaluations (Sangwon and al.2009). Different origins can be distinguished, from the more global product to the more local. Specifically, with respect to wine, origin can be global and thus related to country, or more local and related to a particular region (Suri and Thakor 2013).

Hence, in this paper, we aim to investigate how three distinct types of labels, which can either be seen as highly or lowly typical (that is, fun) or local affect consumers' evaluations of and subsequently their willingness to pay (WTP) for wines. We also identify the mechanisms underlying these effects. Precisely, the mechanisms that are here hypothesized to mediate the effects of label type exposure on evaluations and WTP are subjective fluency and sensory evaluations. As the first refers to the ease with which an incoming stimulus is processed (Reber et al., 1998), it might be the case that as typicality increases, consumers process the wine label with different higher fluency, thus increasing subsequent sensory evaluations and WTP.

In what follows, we adopt an inductive approach to end up with a model of the influence of label design attributes on consumer's responses. The experiment used in this research is



described and the results are presented. These results suggest some important implications for wine producers and retailers that are then discussed.

## **2. METHOD**

### **2.1 Procedure and design**

#### **2.1.1 Stimulus selection and procedure**

A pretest ( $n = 31$ , age ranging from 19 to 55) was conducted to select the stimuli used for the experiment. Participants were asked to 1/ select a total of six labels – two for each of the typical, fun and local types – in a sample of 100 labels that were collected on the web, and 2/ explain the reasons why they considered the selected labels as either typical, fun or local. The labels that were the most frequently considered as representative of a category were retained for the experiment and used as a stimulus in a survey. This survey was developed and administered via Qualtrics ( $n = 200$ , U.S. sample, age ranging from 18 to 60, 70% between 30 and 60).

#### **2.1.2 Measures.**

As in previous research on WTP (Bagchi and Cheema 2013; Ein-Gar and Levontin, 2013, Krishna, 199), participants were asked after being exposed to a specific label to rate on a single-item measure their WTP by asking them "What price in US Dollars would you be willing to pay for a 75 cl bottle of this wine?" (Franke et al., 2009).

The flourish, size and symmetry of the labels were measured through the scale used by Orth and Malkewitz (2008). Then, participants indicated their subjective experience of fluency by rating on a three-item scale adapted from Fang et al. (2007) the ease with which they could process the label (7-point scale: 1 = very difficult to understand/imagine/process; 7 = very easy to understand/imagine/ process). This scale was chosen since it has already been used in previous research (Torelli et al., 2012) and proved reliable ( $\alpha = .80$ ). Sensory evaluations were appraised through the 7-item scale already used by Nerlove (1995), Hughson and Boakes (2001) and Lowengart (2010). Finally, feelings of engagement and reinsurance were respectively measured with the three items "Cold vs. Warm", "Unemotional vs. Emotional", and "Uninteresting vs. Interesting", and the two items "Informal vs. Formal" and "Not calm vs. Calm" (Henderson et al., 2004). All the scales were measured on 7-point scales and were all reliable, with Jöreskog Rho ranging from .78 to .91 (Hair et al., 2005).

## **3. RESULTS**

### **3.1 The Differences between Typical, Fun and Local Front Labels**

In order to examine the effects of the different types of label, analyses of variance (ANOVAs) were conducted with label type as the criterion and the factorial score of every other variable involved in the model as the dependent variables (Table 1).



**Table 1. Factorial Means of Constructs According to Label Types**

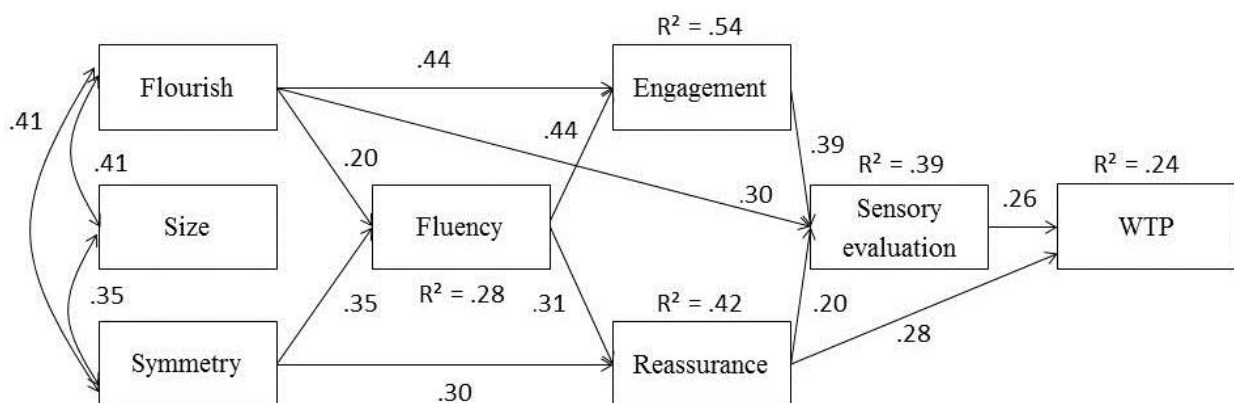
	Label types			F	Sig.
	Typical	Fun	Local		
Flourish	.261	-.121	-.148	2.879	.059
Size	.184	.042	-.235	2.450	.090
Symmetry	.457	-.195	-.276	9.587	.000
Fluency	.372	-.114	-.269	6.409	.002
Sensory evaluation	.245	.034	-.220	3.000	.053
Engagement	.139	.034	-.179	1.397	.250
Reinsurance	.437	-.481	.036	13.108	.000
WTP	.361	-.493	.008	7.067	.001

Results show that the means of all variables ( $F_{\text{Flourish}} = 2.88$ ,  $p = .059$ ;  $F_{\text{Size}} = 2.45$ ,  $p = .090$ ;  $F_{\text{Symmetry}} = 9.58$ ,  $p = .000$ ;  $F_{\text{Fluency}} = 6.41$ ,  $p = .002$ ;  $F_{\text{Sensory Ebal.}} = 3.00$ ,  $p = .053$ ;  $F_{\text{Reinsurance}} = 13.11$ ,  $p = .000$ ;  $F_{\text{WTP}} = 7.07$ ,  $p = .001$ ) except that of size ( $p = .090$ ) and engagement ( $p = .250$ ) significantly vary according to the labels (Table 1). Specifically, what results indicate is that typical labels are those that are associated with the highest mean of flourish ( $M = .261$ ), size ( $M = .184$ ), symmetry ( $M = .457$ ), fluency ( $M = .372$ ), sensory evaluation ( $M = .245$ ), reinsurance ( $M = .437$ ), and, importantly, WTP ( $M = .361$ ). Surprisingly, local labels – and not fun labels – are those that lead to the lowest mean of flourish ( $M = -.148$ ), size ( $M = -.235$ ), symmetry ( $M = -.276$ ), fluency ( $M = -.269$ ) and sensory evaluation ( $M = -.220$ ).

### 3.2 The Structural Models of the Effects of Front Wine Labels

Two structural equation models were then developed. The first model aimed to depict the overall influence of front wine labels. The model that exhibited the best fit ( $\chi^2 = 13.83$  (n.s.); GFI = .97; AGFI = .91; CFI = .98; SRMR = .04; RMSEA = .03) was that presenting flourish perception and symmetry as the antecedents of fluency, these variables positively affecting sensory evaluation through engagement and reinsurance. Sensory evaluation then positively affects WTP. Of note, size is included as a variable that covaries with flourish perceptions and symmetry (Figure 1).

**Figure 1. The Model Resulting from the Path Analysis**



In addition to this model, following the procedure developed by Zhao, Lynch and Chen (2010), mediation analyses were conducted to test the mediating effect of fluency, feelings of engagement and reassurance and sensory evaluation. These analyses were conducted using



Preacher and Hayes' (2008) macro and 5000 bootstrapped samples. As shown by the 95% confidence intervals of the indirect effects excluding zero (Table 2), the results show the mediating effects of fluency, engagement, reassurance and sensory evaluation.

The second structural model aimed to investigate the extent to which the preceding model may explain the effects of each type of front label. A multigroup analysis was thus conducted to test how the typical, fun and local labels differ in their effects. The significant difference between the Chi-squares of the configural invariance model and the model with unequal parameters ( $\Delta\chi^2 = 94.72$ ,  $p < .000$ ) indicates that the three types of labels differ in their effects.

**Table 2. Tests of Mediating Effects of Fluency, Sensory Evaluation and Feelings of Engagement and Reassurance**

IV	M	DV	IV→M	M→DV	IV→DV	Indirect effect	CI	Sig.
Flourish	Se. Ev.	WTP	.43***	.37***	.15	.16**	[.08; .30]	Yes
Flourish	Fluency	Sens. Ev.	.46***	.28***	.39***	.13**	[.06; .23]	Yes
Flourish	Fluency	Engag.		.46***	.35***	.21***	[.13; .33]	Yes
Flourish	Fluency	Reinsur.		.51***	.14*	.24***	[.15; .37]	Yes
Flourish	Engag.	Sens. Ev.	.56***	.22**	.40***	.12*	[.02; .26]	Yes
Symmetry	Reinsur.	WTP	.49***	.33**	.15	.16**	[.05; .31]	Yes
Symmetry	Fluency	Sens. Ev.	.44***	.29***	.38***	.13**	[.06; .23]	Yes
Symmetry	Fluency	Engag.		.58***	.15	.26***	[.16; .38]	Yes
Symmetry	Fluency	Reinsur.		.51***	.16*	.22***	[.14; .35]	Yes
Fluency	Engag.	Sens. Ev.	.62***	.25**	.31***	.16*	[.02; .31]	Yes
Fluency	Sens. Ev.	WTP	.49***	.37***	.08	.18**	[.07; .33]	Yes
Fluency	Reinsur.	WTP	.53***	.38**	.07	.20**	[.09; .35]	Yes

Note: In columns, IV: Independent Variable; M: Mediator; DV: Dependent Variable; CI : Confidence interval of the indirect effect; Sig.: Significance of the mediating effect of M; \*\*\*:  $p < .001$ ; \*\*:  $p < .01$ ; \*  $p < .05$

Table 2 shows that while typical labels makes fluency results from symmetry ( $\beta = .53$ ), fun labels makes it result from flourish perception ( $\beta = .43$ ). However, and still regarding fun labels, such fluency does not lead to more reinsurance ( $\beta = \text{n.s.}$ ); when reinsurance occurs, this variable positively affects wine evaluation and WTP. The process whereby fun labels lead to higher WTP is thus one that involves flourish perception, fluency, engagement, reassurance and evaluation. The difference between fun labels and typical and local labels is that for those latter labels WTP is not affected by reassurance, which is needed only in the case of fun labels.



**Table 3. The Distinct Effects of Labels Attributes for Typical, Fun and Local Labels**

Relationships	Overall	Labels		
		Typical	Fun	Local
Flourish → Fluency	.44	n.s.	0.43	n.s.
Size → Fluency	n.s.	n.s.	n.s.	n.s.
Symmetry → Fluency	.35	0.53	n.s.	0.58
Flourish → Engagement	.44	0.67	0.39	0.39
Flourish → Wine evaluation	.30	n.s.	n.s.	n.s.
Fluency → Engagement	.44	0.22	0.50	0.50
Fluency → Reinsurance	.31	0.39	n.s.	0.36
Engagement → Reinsurance	n.s.	n.s.	0.50	0.35
Engagement → Wine evaluation	.39	0.51	0.43	0.30
Reinsurance → Wine evaluation	.20	n.s.	0.41	n.s.
Wine evaluation → WTP	.26	0.46	0.46	n.s.
R Fluency	.28	0.27	0.27	0.28
R Engaging	.54	0.65	0.65	0.47
R Reassuring	.42	0.46	0.46	0.39
R Wine evaluation	.39	0.45	0.56	0.23
R WTP	.24	0.14	0.44	n.s.

## 4. GENERAL DISCUSSION

This research investigated how label design can shape consumers' responses and WTP. Through an experiment manipulating three distinct and widespread types of labels, this research adds to the literature by making three contributions. First, we demonstrate that mere exposure to a specific label type can influence WTP and we identify the type of label that leads to the highest WTP. Second, we develop a model that explains the influence of and the process whereby labels design attributes influence WTP. Third and finally, through a multigroup analysis, we distinguish for each type of label the specific process whereby each type of wine label affects WTP through fluency, subsequent sensory evaluations of wine and perceptions of engagement and reinsurance.

### 4.1 Theoretical Implications

Our first theoretical contribution lies in the main effects of mere exposure to the different label types. Considering that typical labels have received the most positive scores on all variables, our research supports the notion derived from the theory of the preference for prototype (Campbell and Goodstein, 2001; Hekkert and Van Wieringen, 1990) and arguing that typicality often concludes that the more a product design is perceived as typical of its category, the more it will be appreciated and will produce strong purchase intent (Celhay and Trinquécoste 2014).

The second contribution refers to the process whereby fun labels affect WTP. We show that, as opposed to typical labels, fluency – which surprisingly results from finding the label flourish– does not affect reinsurance, but also that when such a feeling occurs, it strongly affects WTP.



The third contribution of this research relates to the surprising negative effects of local labels. Such labels that emphasize the local origin and the producer of the wine is rated as the significantly most negative on five out of seven variables. Of important and more specifically, local labels are those that lead to the lowest degree of fluency and sensory evaluation.

#### **4.2 Managerial implications for wine producers and retailers**

The first important practical recommendation that can be suggested relates to the mere labels exposure effects. Our results indicate that typical labels are those that lead to the highest WTP, while fun labels are those that induce the lowest. If one considers that WTP is a variable of primary importance, it thus may be suggested for wine producers and marketers of the wine industry to design labels in a way that makes them perceived as typical. As shown by the overall and multigroups analyses, as well as by the test of the mediating effects, the symmetry that consumers perceive from typical labels induce a sense of fluency, which leads to feelings of engagement that increase the evaluation of wine and WTP. Another recommendation lies in the wide negative effects of local labels. Hence, wine producers may gain in designing labels that do not induce the perception that the wine is purely local, but rather may design labels that are seen as either typical or fun. The third recommendation lies in the differential paths observed for the distinct label types. Wine producers that aim to increase their prices and thus WTP may consider the process whereby each label type can increase WTP.

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