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Judging a wine by its bottle: The influence of wine packaging on consumers' responses

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1. Purpose

As wine is a consumable product, whose quality can only be evaluated at the moment of consumption, therefore, wine packaging may convey a relevant message about the quality of the product and influence consumer affective response (Barber & Almanza, 2007; Merdian et al., 2020). The present research focus on clarifying the role of bottle and label shapes on consumers' perceived quality and affective response and, consequently, on their purchase intention. In addition, this study will also attempt to understand the moderating role of both consumer involvement and self-confidence.

Bottle shape, quality perceptions and affective response

The shape of the bottle is one of the key elements influencing consumers' perceptions (Gislason et al., 2020; Flanagan & Bandomir, 2000). Research suggests that consumers tend to prefer the shapes of the bottles that are typically associated with the type of wine contained in them. Considering red wines, the shape of the *bordelaise* bottle (with high shoulder) seems to have a greater positive influence on taste, expected quality and willingness of consumers to buy, since consumers generally associate high shoulder shapes with this type of wine. On the other hand, consumers seem to expect a lower quality of red wine if the bottle shape is sloping shoulder, and, consequently, this shape tends to generate more negative affective responses to the wine packaging. For white wines, consumers tend to prefer sloping shoulder shapes and to associate these bottle shapes with higher quality (Puyares et al., 2010). Considering these, the following hypotheses were formulated:

H1: The type of wine moderates the relationship between bottle shape and quality perception, in such a way that: a) for red wine, a bottle with a high shoulder shape will enhance consumers' perceptions of quality; b) for white wine, a bottle with a sloping shoulder shape will enhance consumers' perceptions of quality.

H2: The type of wine moderates the relationship between bottle shape and the affect towards wine packaging, in such a way that: a) for red wine, a bottle with a high shoulder shape will evoke more favourable affective responses; b) for white wine, a bottle with a sloping shoulder shape will evoke more favourable affective responses.

Label shape, quality perceptions and affective response

Several studies (Boudreaux and Palmer, 2007; Mello & Pires, 2009) suggest that wine label shape also impacts the way consumers perceive a wine, namely influencing their intention to try a certain product (Heatherly et al., 2019; Piqueras-Fiszman & Spence, 2015; Rebollar et al., 2017; Sousa et al., 2020; Wang et al., 2017). Labels can have different shapes, such as parallelogram, circle, ellipse, round-edged rectangle, square, rectangle, among others. According to previous research regarding other products, significant changes in the usual packaging can negatively influence consumers' responses to the product (Schoormans & Robben, 1997) which may suggest that, regarding wine, non-traditional or innovative forms may be associated with inferior quality, generating less favourable affective responses. As, traditionally, most wine labels have angular shape, we expect that round shapes may have a negative impact on consumers' responses. Thus, the following hypotheses were developed:

H3: A label with a more angular shape, when compared to a one with a rounder shape, will enhance consumer's wine quality perception.

H4: A label with a more angular shape, when compared to a one with a rounder shape, will evoke more favourable affective responses.

In fact, both the bottle shape (considering the type of wine) and the angular label shape are traditional elements that consumers are used to. Therefore, it is expected that, if a rounded label - more innovative, with which consumers are not familiar – is attached to a traditional bottle shape, i.e., a high shoulder bottle for red wine or a sloping shoulder bottle for white wine – this will negatively influence consumers responses. Thus, we state the following hypotheses regarding the joint effect of bottle and label shapes:

H5: Label shape moderates the relationship between the interaction bottle shape \times wine type and perceived quality in such a way that: a) a rounder label shape when compared to an angular label shape, for the case of red wine and when the bottle shape is high shoulder, will reduce consumers' wine quality perception; b) a rounder label shape when compared to an angular label shape, for the case of white wine and when the bottle shape is sloping shoulder, will reduce consumers' wine quality perception.

H6: Label shape moderates the relationship between the interaction bottle shape \times wine type and affect towards wine packaging in such a way that: a) a rounder label shape when

compared to an angular label shape, for the case of red wine and when the bottle shape is high shoulder, will evoke less favourable affective responses; b) a rounder label shape when compared to an angular label shape, for the case of white wine and when the bottle shape is sloping shoulder, will evoke less favourable affective responses.

Quality perceptions, affective response, and purchase intention

Previous research reveals that perceived quality is a subjective evaluation that the consumer makes considering the basic dimensions of the product (Grunert, 2005). The literature suggests that consumers' perceived quality about a certain product will directly influence their purchase intention (Boulding et al., 1993; Carman, 1990; Zeithaml et al., 1996). When product quality perceptions are high, this will have a direct positive impact on consumer's buying intention (Saleem et al., 2015). Hence, the following hypothesis was formulated:

H7: Wine perceived quality will positively influence consumer's purchase intention.

According to Cohen et al. (2006), the affective response consumers have towards product-related stimuli may influence their evaluations about the product, which will impact their purchase intention. Usually, consumers' affect impacts their decisions, when they are deciding to buy or not a given product or buy "A" or "B" (Cohen et al., 2006). Therefore, we assume that:

H8: Consumer's affect towards the wine packaging will positively influence his/her purchase intention.

Moderators: consumer involvement and self-confidence

Grossman and Wisenblit (1999) state that, the lower the level of consumer involvement with a product category, the more relevant the presence of visual communication elements, such as the elements of wine packaging. In fact, these elements will be used by consumers as heuristics to evaluate the wine perceived quality and help them to build an image of the product (Silayoi & Speece, 2004). On the other hand, when consumers have a higher involvement with the product category, the relevance of visual elements, such as packaging design elements tends to be lower (Grossman and Wisenblit, 1999; Kupiec & Revell, 2001). Thus, we expect that:

H9: Consumer involvement with wine will moderate the relationship between wine packaging elements, namely the bottle shape, and consumer wine quality perceptions, in

such a way that the impact of these elements will be higher for consumers with low levels of involvement.

Generally, consumers with a low level of self-confidence tend to form their quality perceptions with the help of the store assistants or based on the wine price (Barber et al., 2007). On the other hand, as Barber et al. (2007) advocate, self-confidence is a determining factor affecting consumer's purchase decision. As usually consumers do not have access to all the information about wines,(Gluckman, 1990; Olsen et al., 2003), self-confidence may be crucial, since consumers with lower self-confidence will tend to feel more intimidated when choosing a wine (Gluckman, 1990; Olsen et al., 2003). Hence, we hypothesise:

H10: Consumer self-confidence will moderate the relationship between consumer wine quality perceptions and his/her purchase intention, in such a way that this relationship will be stronger for consumers with a higher level of self-confidence.

2. Methodology

A quantitative research was conducted through a quasi-experimental research design based on an online survey. The stimuli used in this study are based on a sample of 8 unknown bottles that were manipulated according to the dimensions analysed (Figure 1). Thus, the bottles were manipulated according to their shape (high shoulder vs. sloping shoulder) and to their label shape (angular vs. rounded). The between-subjects study examined the answers of a sample of 332 respondents.



Figure 1: Sample of the stimuli.

The variables under analysis were measured through extant instruments, adapted from previous literature (table 1). In the questionnaire, we also collected information on the respondent's gender, age, nationality, education level, job, income level and district of residence. To ensure that the respondents were familiar with the wine category, they were asked about the frequency of consumption and what type of wine they consumed most often.

Table 1: Study variables and measurements

Construct	Adapted from:	Number and type of items
Perceived Quality	Magnier et al. (2016)	Three items with seven-point semantic differential scale
Affect	Chaudhuri & Holbrook (2001); Grossman & Till (1998); Henderson & Cote (1998); Kim et al., (1996); Samu et al., (1999); Walsh et al., (2010)	Four items with seven-point Likert type scale (1 = strongly disagree and 7 = strongly agree)
Purchase intention	Espejel and Fandos' scale (2009)	Three items with seven-point Likert type scale (1 = strongly disagree and 7 = strongly agree)
Consumer involvement	Zaichkowsky (1985)	Five items with seven-point semantic differential scale
Self-confidence	Bearden et al. (2001)	Five items with seven-point Likert type scale (1 = strongly disagree and 7 = strongly agree)

3. Findings

Results were analyzed using a structural equation modelling (SEM) and a multivariate analysis of variance (MANOVA) (French et al., 2008; Hair et al., 1998). First, the measurement model was tested through several statistical procedures, namely the Scale Reliability, Confirmatory Factor Analysis (CFA), Model Fit ($\chi^2/160=2,812$; RMSEA=0,074; CFI=0,937; NFI=0,906; TLI=0,925) and Construct Validity. Considering the favourable results obtained, it was possible to conclude that all the adopted measurements were valid, so the overall structural model could be tested.

We found that perceived quality has a positive impact on purchase intention ($\beta = 0,574$; $p < 0,01$), supporting H7. The same happened with H8, as affect towards wine packaging has a positive impact on the consumer's purchase intention ($\beta = 0,713$; $p < 0,01$). Furthermore, the MANOVA results were consistent with the overall structural model results, showing that for red wine, high shoulder shapes generate higher levels of perceived quality, when compared to the sloping shoulder shape ($\beta = - 0,229$, $p < 0,05$), and the same happens for the affect towards packaging ($\beta = - 0,153$, $p < 0,05$), supporting H1 and H2. However, we could not find a significant relationship between the label shape

and perceived quality ($F(1) = 2,234$; $p = 0,136 < 0,05$; partial $\eta^2 = 0,007$), and, therefore, we could not confirm H3. We could confirm this relationship in respect to the affect towards packaging ($F(1) = 4,122$; $p = 0,043 > 0,05$; partial $\eta^2 = 0,13$), supporting H4. Indeed, angular shapes ($M = 4,984$; $SD = 1,223$) evoke more favourable affective responses than rounded shapes ($M = 4,704$; $SD = 1,242$) regardless of the type of wine. The interaction *bottle shape x label shape x wine type* was considered significant, both considering perceived quality ($F(1) = 15,590$; $p < 0,001$; partial $\eta^2 = 0,046$) and affect towards packaging ($F(1) = 15,690$; $p < 0,001$; partial $\eta^2 = 0,035$), confirming both H5 and H6. Finally, no empirical evidence was found of a moderation effect of involvement on the relationship between the bottle shape and perceived quality, since this relationship was not considered significant ($\beta = 0,056$; $p > 0,05$), making it impossible to support H9. The same happened in the case of self-confidence as a moderator of the relationship between perceived quality and purchase intention, and, therefore, we could not find support for H10.

4. Implications

The results of this study contribute both to the wine marketing literature but also for wine marketing management. Firstly, this research extends the knowledge on the importance of wine packaging, highlighting the relevant effects that it has on consumers' cognitive, affective and conative responses. In addition, this is the first study to analyse the impact of wine bottle shape (high shoulder and sloping shoulder shapes) on consumers' perceptions of quality and on affect and, thereby, on consumers' wine purchase intention. This research shows that, depending on the type of wine, bottle and label shapes may induce higher or lower quality perceptions and, in addition, they may generate more favourable or less favourable affective responses. Furthermore, this research reveals that, although perceived quality is an important predictor of consumer's purchase intention, affect towards packaging is even more important in determining intention to purchase wine.

At the managerial level, this study offers useful insights regarding the choice of bottle shape to signal quality and generate positive affective responses. Besides, label shape also proves to be a quite relevant packaging element since different shapes may generate different perceptions about the wine packaging. Given the considerable effect of

affect towards the wine packaging on consumers' purchase intention, it is critical that managers invest in the development of aesthetically pleasing packaging.

The knowledge about the impact that bottle and label shapes have, depending on the type of wine considered, is particularly relevant for wine marketing managers, since they will be able to understand how they should choose their bottle and label to achieve the desired consumer responses.

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