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Short Communication

Does wine label processing fluency influence wine hedonics?

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ABSTRACT

Research from the sensory science literature reveals that product information has an influence on the hedonic taste rating. Studies from social cognitive research have shown that processing fluency influences decision-making and evaluation processes. The present field study ($N = 123$) applied a 2×2-between-subject design to explore whether the processing fluency of the label information (low versus high) or the consumption domain (everyday versus special-occasion) have an effect on the subsequent hedonic taste rating of a wine. Fluency was manipulated via an easy- or difficult-to-read font. Results showed that there was no effect of the consumption domain. However, the wine was liked more in the high-fluency condition compared to the low-fluency condition. Thus, the results indicate that a wine tastes better if the labeled visual information can be processed relatively fluently. This research therefore adds to the literature on processing fluency because it suggests that fluency transfers across modalities. To give reliable recommendations to marketing specialists and label designers, further research is required to confirm the observed findings.

1. Introduction

In the wine market, success is substantially determined by the label design. Producers employ a wide range of different label images, colors, fonts, and information to induce the consumer to buy their products (Vollherbst & Urben, 2011). Long-term product demand, however, depends also on repurchasing, which is determined by different factors, including the consumer's post-consumption evaluation (Blackwell, Miniard, & Engel, 2006, pp. 83–84, 210–214). Therefore, knowledge about influential determinants of the wine label on hedonic evaluations is crucial for wine-marketing specialists in developing productive marketing strategies. This field study explored whether fluency with which a wine label text is processed or the declared consumption domain have an effect on wine hedonics.

A large body of research has revealed that product information, such as brand name (Allison & Uhl, 1964), production method (Caporale & Monteleone, 2004), product origin (Wansink, Payne, & North, 2007), price (Plassmann, O'Doherty, Shiv, & Rangel, 2008), or a wine critic's rating (Siegrist & Cousin, 2009), have an impact on the hedonic taste rating of a product. Recent studies, however, have shown that the decision-making and evaluation processes of a consumer depend not only on the presented information itself but also on processing fluency. Processing fluency is the "ease or difficulty with which new, external information can be processed" (Schwarz, 2004, p. 338). A high processing fluency of information, which can be achieved with an easy-to-read font (e.g. Song & Schwarz, 2008), for example, was found to have a positive influence on the short-term performance of shares (Alter & Oppenheimer, 2006), the preference for wine (Labroo, Dhar, & Schwarz, 2008), the estimated effort to carry out an exercise routine or prepare a Japanese recipe (Song & Schwarz, 2008), the evaluated hazardousness of a food additive (Song & Schwarz, 2009) or a pharmaceutical drug (Dohle & Siegrist, 2014), and led to less buying deferrals than difficult-to-process information (Novemsky, Dhar, Schwarz, & Simonson, 2007).

The experience of processing fluency is used as an additional information source and its effect is suggested to be influenced by the naive theory applied to interpret processing fluency (Alter & Oppenheimer, 2009; Pocheptsova, Labroo, & Dhar, 2010; Schwarz, 2004; Schwarz, Song, & Xu, 2009). A common naive theory states that the processing of a familiar stimulus is easier compared to a novel one (Schwarz et al., 2009; Song & Schwarz, 2010). Therefore, it is assumed that people misinterpret a relatively fluently processed, but novel, stimulus, independent from where it originates, as being familiar, resulting in a more positive judgment. Further research revealed that a stimulus with a high processing

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fluency is able to trigger a positive affective response (Reber, Winkielman, & Schwarz, 1998; Schwarz et al., 2009; Winkielman & Cacioppo, 2001).

A recent study (Pocheptsova et al., 2010) showed that the effect of processing fluency in the case of the evaluation of consumer goods depends on the consumption domain. In this research, processing fluency of an advertisement was either high or low and was manipulated via the font (easy- versus difficult-to-read, respectively). Furthermore, the product was described either as a special-occasion gourmet cheese or an everyday cheese. The findings showed that higher fluency (compared to lower fluency) resulted in higher intention to buy the everyday cheese. In accordance with the naive theory described above, it was assumed that participants interpreted the easy-to-process stimulus, and therefore the product itself, as more familiar and attractive. Interestingly, a reverse result was found for the gourmet cheese: a lower processing fluency resulted in a higher purchase intention. Pocheptsova et al. (2010) reasoned that the product evaluation for the special-occasion cheese was influenced by the activation of a further naive theory: special-occasion products are often of limited availability, and their exclusivity, uniqueness, and rarity therefore create added value. Consequently, it was inferred that the less fluently processed advertisement induced a perception that the special-occasion product was unfamiliar and unique.

The aim of the present field study was to investigate whether wine label's processing fluency, manipulated via an easy- versus difficult-to-read font, and the labeled consumption domain (everyday versus special-occasion) have an influence on the subsequent hedonic taste evaluation of a wine. Based on the research from Pocheptsova et al. (2010), we hypothesized an interaction of both factors. We expected that a wine for everyday occasions would be liked more if the wine label conveyed a high processing fluency. In contrast, a wine for special occasions should be liked more when processing fluency is low.

2. Method

2.1. Participants

A sample consisting of 123 German-speaking consumers (50.4% male; age: $M = 46.5$, $SD = 17.8$, $min = 19$, $max = 86$ years) was recruited. A small number of the participants (7.3%) had only attended primary or lower secondary school, 51.3% had completed upper secondary school, and 39.8% had finished a tertiary school. Two participants did not report their education level. The median monthly income was 5000–6000 CHF. Seventeen participants did not indicate their income. Our sample mirrors the 2011 data for the Swiss population over 18 years of age concerning gender distribution (49% male) and average age (48 years) (BFS, 2012).

2.2. Design

Following Pocheptsova et al.'s (2010) approach, a 2(processing fluency: low versus high) × 2(consumption domain: everyday versus special-occasion) between-subject design was applied. The degree of fluency was manipulated by using different label fonts (easy- versus difficult-to-read). The consumption domain was manipulated via the wine description on the back label.

2.3. Material

A French red wine (St-Emilion AOC Grand Cru Château Franc Grace-Dieu, 2008, 24.00 CHF; 52% Merlot, 41% Cabernet Franc, 7% Cabernet Sauvignon) was chosen because it met the following selection criteria: (1) standard wine bottle (0.75 L), (2) a wine that is neither heavy nor light, and (3) a wine that is appropriate for everyday or special occasions. The original distinctive cork and shrink capsules of those wine bottles presented to the participants were replaced by blank corks. The wine for the tasting samples was taken from bottles whose corks were not changed. The front and back sides of the bottles were pasted over with self-made labels (Fig. 1). The labels (12 × 8 cm) showed fictive information in order to minimize possible expectations. For the same reason, no information on the price was given. On the front label, the wine name "Marcelano" and additional information such as quality assurance label, alcohol content, vintage and winemaker were printed. On the back label, it was stated that the wine was 100% Merlot and that it was from the DOC region Umbria.[1] The description of the everyday wine contained expressions such as "an ideal match for everyday dishes, especially pasta, pizza, cold cuts, or cheese platter and grilled meat," "a suitable wine to enjoy everyday moments," and "an uncomplicated Italian wine for every day!" Serving ideas in the special-occasion condition included "an ideal match for festive dishes," "the wine goes excellently hand-in-hand with red meat, roast, venison, and soft cheese," and "an elegant wine for special occasions!"[2] An earlier study (Song & Schwarz, 2008) had shown that the font Mistral is significantly more difficult to read than the font Arial and that behavior instructions printed in these two fonts resulted in significantly different effort prediction and motivation. Therefore, the back labels in the high-fluency condition were printed in Arial Narrow. For the low-fluency group, the font Mistral was used. The wine name and vintage on the front label were also printed in either the difficult- or easy-to-read font.

2.4. Procedure

The experiment took place in two grocery stores in Zurich, Switzerland, on four consecutive weekdays (Tuesday to Friday) from 1:30 p.m. to 6:30 p.m. The grocery stores were owned by one of Switzerland's largest retailers and wine shops. The wine bottles were stored uncooled. Opened wine bottles were used for no longer than 2 h because oxygen can alter the wine's aroma (Jackson, 2009, p. 103; Lee, Kang, & Park, 2011). The wine temperature was measured at the beginning and then hourly with a digital measuring instrument (Tenma® Thermometer, article-no. 72-2060). The wine temperature varied between 15.6 and 19.6 °C during the experiment.

Two experimenters recruited passing consumers near the shop entrance and checkout zone to "taste this wine and fill in a questionnaire about it" by presenting the wine bottle at the same time. Up to four consumers could participate at the booth simultaneously. A short explanation of the procedure followed and informed consent was obtained. Next, the wine bottle was presented: "This is the wine you are going to taste afterwards. Please take enough time to read the whole label (front and back sides). Subsequently, the tasting will take place." The time each participant took to read the label was measured. If the time was less than one minute, the experimenter asked the subject to take more time. The bottle was then put aside, and a 1-dL plastic cup filled with approximately 50 mL of wine was served. After tasting, the participants reported their hedonic response by making a mark on a 10 cm-long visual analog scale with endpoints labeled "*do not like at all*" and "*like very much*" following Siegrist and Cousin's (2009) method. To investigate possible covariates, the questionnaire

[1] Note that Cabernet Franc and Cabernet Sauvignon are only rarely consumed in Switzerland. Thus, stating that the wine also contained Cabernet Franc and Cabernet Sauvignon could have resulted in the expectation that this wine could be a wine for special occasions.

[2] The full English translations of the back labels can be received by the authors upon request.