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Authentic Information on the Back Label of Wine Bottle

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Abstract

This paper investigates whether including authentic information on the back labels of wine bottles enhances consumers’ confidence and purchase intentions about wine; it also assesses the moderating role of involvement and knowledge about wine. We conducted two experimental studies. Study 1 generated three findings. First, when the back label had authentic information, subjects showed higher confidence levels. Second, this effect was held for subjects with low levels of involvement. Finally, we did not observe this effect for subjects with high levels of involvement. Study 2 extended study 1’s findings and identified the moderated mediation effect of confidence. The findings highlight the important impact on wine choice of authentic information. However, the findings also suggest that authentic information may not be sufficient to attract people with high levels of involvement and knowledge. This study’s findings provide wine producers with practical marketing insights.

Keywords: Authenticity, Wine, Confidence, Involvement, Knowledge
had three specific goals. First, we investigate whether emphasizing authenticity by adding authentic information on the back labels of wine bottles increases purchase intentions. Consumers’ growing interest in producer information and the emphasis marketers place on wine label make this an important question. Even though producer information has been used in the food industry (e.g., Spinach sold in Iglo, Europe’s frozen foods market), whether such an approach effectively leads to commercial impact has not been rigorously tested. Second, we examine whether consumers’ involvement with and their knowledge about wine moderated this effect (D’Alessandro and Anthony 2013). This question is important because understanding the ways in which consumers’ involvement and knowledge levels influence how they use the different information cues on wine labels prior to making purchase decisions could provide researchers with profound insights. Third, we also examine whether confidence mediates this effect. Many consumers may feel intimidated when selecting wine. To increase wine sales, wine marketers should find ways to enhance consumers’ confidence prior to making purchases.

We aim to achieve these three goals by conducting two experiments. For the experiments, we created a hypothetical red wine and graphically presented its back labels to subjects. The experiments were conducted at a state university in Northern California; we recruited 95 undergraduate students for the first experiment and 271 undergraduate students for the second experiment. Our findings were as follows. First, subjects displayed greater confidence in purchasing wine and higher purchase intentions when the back labels included authentic information than when the back labels had no such information or merely included information about wine grape varieties. Second, the effect of adding authentic information on confidence disappeared when subjects were highly involved with wine, and its effect on purchase intentions disappeared when subjects were highly knowledgeable about wine. Third, confidence mediated the effect of authentic information on purchase intentions. Together, these findings suggest that authenticity increases confidence, which, in turn, increases purchase intentions only when consumers are either less involved with or less knowledgeable about wine consumption.

1. Literature review

1.1. Authenticity

Although authenticity is a multilayered, polysemous concept, it implies that a given item has the authority of its original creator (Spiggle, Nguyen and Caravella 2013). The use of the word as a synonym for genuineness entered the language in the late eighteenth century and the nature of authenticity in consumption remains contested (Ayto 1990). Researchers have described authenticity as original and staged (MacCannell 1973), symbolic (Culler 2007), literal or objective (Beverland, Adam and Michiel 2008), legitimate (Kates 2004), sincere (Beverland 2006), approximate and moral (Leigh, Peters and Shelton 2006), and emergent (Cohen 1988). Although the term authenticity has different meanings, authentic products are believed to have heritage, and products that violate their heritage appear inauthentic. This is because authentic object is viewed as a unique piece that is almost artistic whereas non-authentic one is considered to be replicated to reach wide markets (Leigh, Cara and Jeremy 2006). As such, in the process of creating the authenticity of products, people search for “indexical or iconic cues that would confirm the idea of something placed out of the market, preferably in an utopian past that suggests a long heritage” (Pace 2015, p. 1168).

More specifically, as Grayson and Martinec (2004) noted, brand heritage relies on indexical cues—perceptions that brands have actual connections to the cultural associations that serve as the bases for their heritage. This dimension parallels Gilmore and Pine’s (2007) notion of referential authenticity, which they describe as a product of connections to time-situated places, objects, persons, or events. On a related note, Kruger et al. (2004) found that participants believed that a painting that took longer to paint was aesthetically superior and worth more money than one that was painted quickly, even though the two paintings were perceptually identical.

1.2. Authentic information on the back labels of wine bottles

Wine is an information-intensive experience product. It has a unique characteristic that sets it apart from other products as consumers generally cannot assess its quality until they consume it (Choi 2017). Therefore, wine purchase decisions are often regarded as complex and involving high degrees of perceived risk and consumers consider not only their own experience and knowledge but also various types of information (Lacey, Bruwer and Li 2009). Among the various type of information they consider, research has shown that back labels influence consumers’ wine choices (Annunziata et al.
Although the back labels of the wines include numerous information regarding wine including regions of origin, vintages, grape varieties, and how the wines are blended, some wines add authentic information on their back labels—information regarding founders to highlight the heritage of wine. The inclusion of such information on back labels is quite rare, generally limited to a few prestigious wines such as Opus One and Dominus. The back label of Opus One, for instance, says the wine is produced and bottled by Robert Mondavi and Baron Philippe De Rothschild. The back label of Dominus features a sketch of the winemaker, Christian Moueix, and his signature from the debut vintage produced between 1983 and 1990. Given that the founders of these wineries have built reputations for high quality wines over several decades, the inclusion of this information on back labels likely leverages reputation or heritage to signal high quality.

This raises an interesting question: could this strategy work for wineries without such reputations, given that references to unknown founders may convey little information to consumers about the wine? Borrowing an insight from a study about busines owners, we predict that the same effect would occur. Widely known successful founders (e.g., Steve Jobs and Jeff Bezos) helped create and maintain positive attitudes toward their brands (Pace 2015). Interestingly, even though consumers may not trust small business owners to the extent that they trust well-known CEOs, the presence of such information is found to reduce consumers’ perceived risk (Choi, Rosen and La 2012). We argue that information regarding founders functions as an authenticity-related cue and thereby signals legitimacy and originality. Indeed, we posit that authentic information would increase consumers’ confidence. In other words, we predict that consumers would consider authentic information more critical than grape information, meaning they would be more confident and more likely to purchase wines that include authentic information on their back labels. We therefore develop the following hypothesis:

H1: Consumers will be more confident in buying wine when the back label includes authentic information.

1.3. Involvement

The impact of authentic information on back labels, however, may depend on the extent of consumers’ involvement with wine. Involvement represents the importance or relevance consumers perceive in a product based on their needs, values, and interests. Research has shown that it plays a pivotal role in wine purchase decisions (D’Alesandro and Anthony 2013).

Several prior studies focusing on the impact of wine involvement on consumers’ wine decision making suggest that low involvement consumers tend to consider various information to reach their own subjective decisions whereas high involvement consumers consider objective information exclusively to reach an objective decision. For instance, when simulated wines were provided with price, region, brand, and awards, less involved wine drinkers focused on price and awards individually. However, highly involved wine drinkers combined attributes in a more complicated way to make objective decisions. Further, when asked to conceptualize wine quality, less involved wine drinkers rely on subjective, sensory dimensions such as flavor and smoothness whereas highly involved wine drinkers tend to rather objective, cognitive dimensions such as interest or complexity (Charters and Pettigrew 2006).

Note that authenticity is subjective rather than objective. This is primarily because authenticity has a rich nature and various definitions. For instance, in contrast to the common belief that mass-marketed brands cannot be authentic, Kates (2004) argues that “the authentic may be potentially located in select mass-marketed brands” (p. 463). Therefore, even McDonald’s’ could be authentic for some people who believe easy access of this brand as an authentic aspect, supporting that mass-marketed brands can be authentic (Beverland 2006).

We therefore predict that back label information would not affect highly involved consumers, whereas less involved consumers would likely depend heavily on back label information in making their choices. This is because only less involved consumers will consider authentic information on back labels critical and therefore only they will become more confident (Barber et al. 2006). By contrast, highly involved consumers are more likely to use more complex information cues and seek to make more informed selections to satisfy their needs. They are highly likely to ignore authentic information because it is subjective. We therefore develop the following hypothesis:

H2a: Less involved consumers will be more confident in buying wine when the back label
includes authentic information; this will not be the case for highly involved consumers (See Fig. 1).

1.4. Knowledge

The impact of authentic information on back labels may also depend on the extent of consumers’ knowledge about wine. Product knowledge refers to the extent of a consumer’s expertise and familiarity with a product (Alba and Hutchinson 1987). It is considered an important indicator of involvement (Charters and Pettigrew 2006). In general, consumers with different levels of product knowledge develop schema differentially, attend to different types of information, and use the same information in different manners (Raju, Lonial and Glynn Mangold 1995). Research has shown that experts have a greater understanding of products, are better acquainted with related information cues, and use these cues more efficiently when evaluating and selecting products than novices (Selnes and Troye 1989). More specifically, novices use surface differences as bases for decision making and engage in simple evaluative judgments based on prior evaluations or simplistic criteria such as image-based cues (Kim et al. 2015). On the other hand, experts use cues only when they are relevant to a product or when they are consistent with their past experiences of the product (D’Alessandro and Anthony 2013).

Based on research examining differences between novices and experts, we expected that the two groups would place different weight on authentic information on back labels. Because authentic information tends to be subjective, novices are likely to respond more positively to such information than to information about wine grapes, meaning they tend to place a heavy weight on such information. Experts, on the other hand, are not likely to weigh such informational cues in this way. Experts process information more comprehensively and make more refined judgments (Maheswaran and Sternthal 1990); consequently, they are likely to recognize that authentic information, which is rather subjective, provides less insight into wine quality than information about wine grapes. In other words, high knowledge consumers are likely to think that the authentic information on back labels provides little insight regarding wine quality, whereas low knowledge consumers may find such information critical and therefore be more willing to purchase wines with back labels that include authentic information as opposed to those that include information regarding wine grapes. In a similar vein, Chaney (2000) argued that wine labels are relevant to the decision-making process only for infrequent wine drinkers, which strengthens our reasoning. Therefore, we develop the following hypothesis:

H2b: Less knowledgeable consumers will be more likely to purchase wine when the back label includes authentic information; this will not be the case for highly knowledgeable consumers.

1.5. Confidence

Confidence is important in consumers’ wine purchase decisions as enhanced self-confidence regarding wine selection increases wine purchases (Olsen, Thompson and Clarke 2003). Gluckman (1990) noted that self-confidence plays a key role in wine purchases because consumers tend to be intimidated when purchasing wine and therefore often use any available information to reduce the stress associated with wine purchases. Barber, Almanza, and Donovan (2006) argued that consumers with little knowledge about wine tend to use easily available information to increase their self-confidence and reduce risk, whereas consumers with extensive knowledge about wine rely more on their own experiences or complex information. Therefore, we predict that the effect of back label information on purchase intentions would depend on consumers’ knowledge, which would be mediated by confidence. Thus, we expect that back labels with authentic information would increase the confidence of low knowledge consumers, which, in turn, would increase their purchase intentions. However, we do not

Fig. 1. Conceptual framework of H1 and H2a.
expect this pattern to hold for high knowledge consumers. We therefore predict the following:

H3: Consumers’ knowledge will moderate the effect of authentic information on back labels on purchase intention, and confidence will mediate this moderating effect (See Fig. 2).

2. Study 1

2.1. Objective

In study 1, we tested two hypotheses: whether authentic information on back labels increases consumers’ confidence regarding wine purchases (H1) and whether involvement moderates this effect (H2a). We predicted that (1) subjects would have higher levels of self-confidence when back labels included authentic information than when they did not include such information and that (2) this effect would only manifest among less involved subjects. Correspondingly, we predicted that the effect of authentic information on confidence would disappear among highly involved subjects.

2.2. Procedure

We created a hypothetical red wine namely Operancelli and graphically presented its front and back labels. To test hypotheses 1 and 2a, we employed a 2 (Information: no vs. authentic) X 2 (Involvement: low vs. high) between-subjects design. We manipulated only the information of the back labels of wine bottles by including hypothetical authentic information or not. The back label for subjects in the authentic information condition read: “Honoring the winemaking legacy that has earned Operancelli its reputation, we have devoted ourselves to crafting wines of exceptional quality and distinctive style for several decades. Our red wine is named Operancelli in honor of my grandfather, Gaetano Operancelli, who founded our property in 1932.” Meanwhile, the back label for subjects in the no information condition included no such information. Note that we focused on manipulating only one piece of information on the back labels and kept the remaining information consistent between the two conditions. For instance, the logos, amounts, and alcohol percentages listed on the front labels, as well as the government warnings and barcodes on the back labels were identical between the two conditions. Next, in each condition, subjects were divided into two groups based on median-split involvement scores. In total, subjects were divided into four different groups.

We measured subjects’ levels of confidence prior to making wine purchase decisions having them answer three questions on 7-point Likert scales (α = .962) (Urbany et al. 1997) (“Please indicate the level of confidence that you have in making a purchase decision regarding this wine”: not confident vs. confident, uncertain vs. certain, and not sure vs. sure). We also measured subjects’ level of involvement by asking them to answer three questions on 7-point Likert scales (In general, I have a strong interest in this product category, this product category is very important to me, and This product category matters a lot to me (strongly disagree vs. strongly agree) (Flynn et al. 1996).

2.3. Study 1 results

2.3.1. Findings

We recruited 97 subjects from a state university located in Northern California, assigning 46 subjects to the no information condition and the remaining 51 subjects to the authentic information condition. Note that we conducted a test to reduce the chance that subjects’ socio-demographic characteristics would influence their choice behavior in any way. We asked subjects to indicate how often they drank wine (every day, twice a week, once a week, twice a month, less than a month, consumed in the past, never). Wine consumption levels differed, but when we controlled wine consumption by making it a covariate, the interaction effect remained significant. More importantly, subjects were undergraduate students enrolled in courses at the same university,
so there was no significant difference with respect to age.

Initially, we randomly allocated subjects to one of two conditions (no information vs. authentic information), and in each condition, further divided them into two groups based on a median-split of their indicated involvement scores. We assigned 53 subjects with average involvement scores between 1 and 3 to the low involvement group and the remaining 44 subjects with average involvement scores between 3.33 and 7 to the high involvement group. The average involvement scores in the two groups differed significantly ($F(1,96) = 258.157, p < .001$).

As hypothesized, we found that back label information and involvement had an interaction effect on confidence ($F(1,86) = 4.119, p = .045$). More specifically, our analysis showed that confidence varies depending on the presence of authentic information on back labels and involvement moderates this effect. The low involvement subjects showed higher confidence levels in response to the back label that included authentic information than to the back label that included no information (MNo, low involvement = 2.46, MAuthentic, low involvement = 4.05 $F(1,40) = 9.448, p = .004$). On the other hand, we did not observe such an effect among high involvement subjects (MNo, high involvement = 4.62, MAuthentic, high involvement = 4.87, $F(1,48) = 0.455, p > .05$ (Table 1).

<table>
<thead>
<tr>
<th>involvement</th>
<th>No information</th>
<th>Authentic Information</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low involvement</td>
<td>2.46</td>
<td>4.05</td>
<td>$F(1,40) = 9.448,$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$p &gt; .05$</td>
</tr>
</tbody>
</table>

2.4. Discussion

Our findings demonstrate that authentic information on back labels enhances consumers’ confidence, validating the effectiveness of the current marketing practice often observed in the food and beverage industry. We also found that such information increased confidence only for less involved consumers. Although the findings we obtained supported our hypotheses, three issues remained. First, subjects in the authentic information condition received a greater amount of information about the wine than the subjects in the no information condition. Information about the authentic might have increased confidence simply because the quantity of available information in that condition was greater. Second, confidence itself may not matter much for marketers. If adding authentic information merely increases confidence but fails to produce corresponding changes in consumers’ behaviors, doing so may have little impact for marketers. Finally, involvement is a relatively broad concept. Although it is critical in decision making, we need to introduce a more narrowly defined concept to deepen our understanding of the impact of authentic information on consumers’ decision making.

To address these three issues, we conducted a second study. In study 2, we compared responses to two different types of information in back labels, measuring both confidence and purchase intentions, and investigating the moderating impact of product knowledge, which is among the strongest indicators of involvement and more clearly defined than involvement (Alba and Hutchinson 1987; Charters and Pettigrew 2006).

3. Study 2

In study 2, we explored a boundary condition and an underlying mechanism of the effect of authentic information on wine purchase behaviors. The key premise of our hypotheses was that wine novices would be less confident than wine experts when making wine purchase decisions. If this is true, wine novices provided with authentic information (vs. grape information) would be more confident, which, in turn, would lead to higher purchase intentions. On the other hand, wine experts would not be influenced by authentic information because they would already be sufficiently confident about their wine purchases. Combining these two hypotheses, we predicted that consumers with low levels of knowledge about wine would be more likely to buy wines with back labels showing authentic information than those showing grape information because the former information would increase confidence and the latter information would not. We expected this effect to disappear for consumers with high levels of knowledge about wine because neither authentic information nor grape information would be likely to increase their confidence. Note that these statements are assumptions based on the premise that authentic information increases confidence for wine novices who lack confidence. In sum, we predicted that label information would influence purchase intentions through confidence only for consumers with low levels of knowledge about wine and that this would not hold for consumers with high levels of knowledge about wine. Study 2 differed from the previous study in two ways. First,
we measured knowledge in lieu of involvement. Second, we measured both confidence and purchase intention. In so doing, we aimed to provide a more comprehensive explanation of the effect of wine back labels on consumer behavior.

3.1. Method

3.1.1. Design and stimuli

In the experiment, we employed a 2 (Label: grape vs. authentic) X 2 (Knowledge: high vs. low) between-subjects design. First, we randomly allocated subjects to one of two conditions. Second, we further divided the subjects in each condition into two groups based on a median-split of their knowledge scores. We manipulated the back labels in the following ways. Subjects in the authentic information condition read the same back label used in Experiment 1 (“Honoring the winemaking legacy that has earned Operancelli its reputation, we have devoted ourselves to crafting wines of exceptional quality and distinctive style for several decades. Our quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades. Our devotion to crafting wines of exceptional quality and distinctive style for several decades.

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3.2. Study 2 results

3.2.1. Findings

We recruited 271 subjects from the same university located in northern California. We dropped 21 respondents who did not answer the questions completely and ultimately analyzed a total of 250 responses (104 male, 142 female, and 4 unidentified gender). Their average objective knowledge score was 6.140 (Min objective knowledge = 0, Max objective knowledge = 10, SD objective knowledge = 2.026).

We predicted that authentic information (vs. grape information) would increase purchase intentions by increasing confidence in wine purchases. Accordingly, we used model 4 of the PROCESS macro for SPSS (Preacher and Hayes 2004) to test whether confidence mediated the effect of back label information on purchase intentions. Bootstrapping analyses using 5000 bootstrap samples revealed a significant mediation. We found that back label information had a significant indirect effect on purchase intentions (0.240, SE = .052, CI [0.039, 0.454]). (Tables 2–4).

3.2.2. Moderated mediation analysis

We predicted that authentic information (vs. grape information) would increase low knowledge consumers’ purchase intentions by increasing their confidence in their wine purchases. On the other hand, we expected that back label information would not have any effect on the confidence or purchase intentions of high knowledge consumers. Accordingly, we used model 7 of the PROCESS macro for SPSS to test whether knowledge moderated the effect of back label information on purchase intentions via confidence. Bootstrapping analyses using 5000 bootstrap samples revealed a significant moderated mediation.

According to the moderated mediation index, confidence had a significant effect (−0.126, SE = 0.052, CI = [−0.247, −0.039]). It also showed a significant interaction effect between back label information and knowledge on confidence (B = −0.278, SE = .101, CI = [−0.477, −0.078]), and that confidence successfully mediated the path between back label information and purchase intentions when knowledge was either mean (6.140, B = 0.231, SE = 0.101, CI = [0.055, 0.453]) or mean minus one standard deviation (4.114, B = 0.486, SE = 0.156, CI = [0.218, 0.841]). By contrast, confidence failed to mediate the same path between back label information and knowledge on confidence.

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**Table 2. Purchase intentions as a function of back label information and knowledge level.**

<table>
<thead>
<tr>
<th>Knowledge Level</th>
<th>Grape Information</th>
<th>Authentic Information</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low knowledge</td>
<td>3.24</td>
<td>4.79</td>
<td>F (1, 87) = 19.34, p = 0.00</td>
</tr>
<tr>
<td>High knowledge</td>
<td>4.47</td>
<td>4.62</td>
<td>F (1, 112) = 0.235, p &gt; 0.6</td>
</tr>
</tbody>
</table>
Table 3. Mediation analysis.

<table>
<thead>
<tr>
<th>Effect</th>
<th>SE</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total effect of back label information on purchase intentions</td>
<td>0.673</td>
<td>0.207</td>
<td>3.247</td>
<td>0.001</td>
<td>0.265</td>
</tr>
<tr>
<td>Direct effect of back label information on purchase intentions</td>
<td>0.433</td>
<td>0.187</td>
<td>2.313</td>
<td>0.022</td>
<td>0.064</td>
</tr>
<tr>
<td>Indirect effect of back label information on purchase intentions (mediated by confidence)</td>
<td>0.240</td>
<td>0.106</td>
<td>0.038</td>
<td>0.454e</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Moderated mediation analysis.

<table>
<thead>
<tr>
<th>Mediator</th>
<th>Objective knowledge</th>
<th>Effect</th>
<th>Boot SE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effect of back label information on purchase intentions</td>
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<td>0.022</td>
<td>0.064</td>
</tr>
<tr>
<td>Conditional indirect effect(s) of back label information on purchase intentions at the values of the moderator</td>
<td>4.114</td>
<td>0.486</td>
<td>0.156</td>
<td>0.218</td>
<td>0.841</td>
</tr>
<tr>
<td></td>
<td>6.140</td>
<td>0.231</td>
<td>0.101</td>
<td>0.055</td>
<td>0.453</td>
</tr>
<tr>
<td></td>
<td>8.166</td>
<td>−0.025</td>
<td>0.134</td>
<td>−0.308</td>
<td>0.227</td>
</tr>
</tbody>
</table>
information and purchase intentions when knowledge was mean plus one standard deviation (8.166, B = −0.025, SE = 0.134, CI = [−0.308, 0.227]). In sum, when knowledge was less than or equal to the mean knowledge score (low knowledge), authentic information increased confidence and purchase intentions. However, when knowledge was higher than the mean knowledge score (high knowledge), authentic information failed to increase confidence or purchase intentions.

3.2.3. Supplementary analysis (N = 201)
To acquire a fuller understanding of the mediation effect of confidence and the moderated mediation effect of knowledge, we conducted a median split of knowledge. We dropped respondents whose knowledge scores were the same as the median (Median knowledge = 6) and categorized the remaining 201 respondents into low knowledge (N = 88) and high knowledge (N = 113) groups. The average knowledge scores between the two groups differed significantly (M low knowledge = 3.875 vs. M high knowledge = 7.965, t (199) = 29.172, p < .001).

As hypothesized, the analysis revealed a significant interaction effect between back label information and knowledge (p < 0.05). When subjects were less knowledgeable about wine consumption, authentic information resulted in higher purchase intentions than grape information (M Grape, low knowledge = 3.24, M Authentic, low knowledge = 4.79, F (1, 87) = 19.34, p = 0.00). However, the back labels had no effect on the purchase intentions of subjects with high levels of knowledge (M Grape, high knowledge = 4.47, M Authentic, high knowledge = 4.62, F (1, 112) = 0.235, p > 0.6). Note that our analysis showed that knowledge had a main effect on purchase intentions, which we did not hypothesize. Highly knowledgeable subjects had higher purchase intentions than less knowledgeable subjects (M low knowledge = 4.05, M high knowledge = 4.55, F (1, 197) = 5.10, p = 0.025). Confidence may explain these unexpected findings—highly knowledgeable subjects tend to be more confident, making them more likely to buy wine. We discuss this relationship in more detail in the mediation analysis section below.

3.2.4. Purchase intentions
As hypothesized, we found that back label information and knowledge had an interaction effect on purchase intentions (F (1, 197) = 8.902, p = .003). The main effects of back label information and knowledge were also significant. When the back label included authentic information, subjects were more likely to purchase wine than when it included grape information (M Grape = 3.923 vs. M Authentic = 4.695, F (1, 197) = 13.139, p < .001). When subjects were highly knowledgeable about wine consumption, they were more likely to buy wine than when they were less knowledgeable (M low knowledge = 4.053 vs. M high knowledge = 4.546, F (1, 197) = 4.923, p = .028). Note that the interaction between back label information and knowledge drove these two main effects. Low knowledge subjects were more likely to buy the wine with authentic information than the wine with grape information on its back label (M Grape = 3.238 vs. M Authentic = 4.797, simple effects analysis, mean difference = 1.559, F (1, 197) = 19.435, p < .001). However, this effect disappeared for high knowledge subjects; their purchase intentions were not influenced by back label information (M Grape = 4.465 vs. M Authentic = 4.617, simple effects analysis, mean difference = 0.151, F (1, 197) = 0.235, p = .629).

3.2.5. Confidence
We obtained similar findings regarding the effects of back label information and knowledge on confidence. Their interaction effect was significant (F (1, 197) = 5.062, p = .026) and the two main effects were also significant. The subjects were more confident when the back label contained authentic information than grape information (M Grape = 4.158 vs. M Authentic = 4.657, F (1, 197) = 5.650, p = .018). More knowledgeable subjects were also more confident than less knowledgeable subjects (M low knowledge = 4.110 vs. M high knowledge = 4.664, F (1, 197) = 6.006, p = .015). Again, the interaction effect mainly drove the two main effects. Low knowledge subjects were more confident when they were exposed to the authentic information than the grape information (M Grape = 3.540 vs. M Authentic = 4.630, simple effects analysis, mean difference = 1.091, F (1, 197) = 9.527, p = .002). Meanwhile, we found no interaction effect for high knowledge subjects (M Grape = 4.648 vs. M Authentic = 4.678, simple effects analysis, mean difference = 0.030, F (1, 197) = 0.009, p = .924).

3.2.6. Mediation analysis
We conducted a mediation analysis following Baron and Kenny (1986). For low knowledge subjects (N = 88), confidence partially mediated the effect of back label information on purchase intentions (1.559, t = 4.398, p < .001) - 0.881, t = 2.983, p < .001). In this group, back label information influenced confidence (1.091, t = 3.092, p = .003) and confidence influenced purchase intentions (0.621, t = 7.249, p < .001). In contrast, for high knowledge subjects (N = 113), back label information influenced neither purchase intentions nor confidence. In this group, confidence only determined purchase intentions (0.276, t = 3.022, p = .003).
3.3. Discussion

The results of study 2 demonstrated that the effects of back label information on purchase intentions depend on knowledge (H2b), which is mediated by confidence (H3). Authentic information increased low knowledge subjects’ confidence, which, in turn, increased their purchase intentions. However, we did not observe a similar pattern for high knowledge subjects. In summary, we not only extended the findings obtained in study 1, but also identified the moderated mediation effect via confidence.

4. Conclusion

Consumers rarely have an opportunity to taste wines prior to purchasing them at retail stores. Thus, to reduce perceived risk, many consumers refer to extrinsic cues such as brand, price, award, labeling, wine origin, bottle form or color (Charters, Lockshin and Unwin 1999; Mueller et al. 2010). However, the large number of available cues often overwhelm consumers. This study showed that including authentic information on the back labels of wine bottles enhances consumers’ pre-purchase confidence. It is in line with the contemporary findings about the commercial impact of authenticity (Beverland, Adam and Michiel 2008; Beverland and Farrelly 2010; Gilmore and Joseph Pine 2007; Leigh, Cara and Jeremy 2006).

Interestingly, authentic information effectively increased the confidence of consumers with low levels of involvement, but not those with high levels of involvement, indicating that back labels are more likely to influence subjects who have low levels of interest in wine and are therefore more susceptible to such information. However, we did not observe this authentic information effect among subjects with high levels of involvement. When people are highly involved with wine, the information cues available on back labels do not affect their confidence. This might be because highly involved consumers do not consider back labels important information sources or the information on back labels may not be sufficient to increase the confidence of such consumers, whereas the same back label information can be critical for less involved consumers. While the study 1 findings were intriguing, we needed to conduct further research to deepen our understanding of the impact of back label information cues.

In study 2, we investigated the relative importance of two types of information (authentic vs. grape) and the impact of confidence on purchase decisions. In lieu of involvement, we employed product knowledge in study 2, since product knowledge is more focused than involvement and directly related to decision making. While research has shown that extrinsic cues influence consumers’ acceptance of products (Combris et al. 2009), only few studies have separated and analyzed the relative effects of different extrinsic cues on product evaluations (Enneking, Neumann and Henneberg 2007). This is a critical issue because many wine consumers find it difficult to determine which information they should consider prior to making purchases. Among the many available cues, we compared the relative importance of authentic information and grape information. Our analysis showed that authentic information increased the purchase intentions of low knowledge individuals to a greater extent than grape information. However, we found no such difference among high knowledge subjects, suggesting that highly knowledgeable consumers may look for more relevant information that is rarely found on wine labels. Consistent with Chaney (2000), who found that wine labels are only relevant to the decision-making processes of infrequent wine drinkers, our findings suggest that consumers’ responses to back label information cues differ based on knowledge level.

Furthermore, we found that confidence serves as a mediator between authentic information on back labels and purchase intentions and that knowledge moderates this mediator. More precisely, for low knowledge subjects, confidence partially mediated the effect of back label information on purchase intentions. In other words, authentic information increases confidence—leading to increased purchase intentions—only among low knowledge consumers. Since most consumers lack confidence when choosing wine, understanding how to boost confidence prior to wine purchases is critical. Our findings suggest that highlighting authentic information on back labels is likely to attract low knowledge consumers, but may not have the same impact on high knowledge consumers. This is because consumers with high knowledge may rely less on back label information cues than their own experiences, or they may look for more relevant information cues (e.g., wine reviews from influential wine critics and wine scores) to make informed decisions.

4.1. Practical implications and future research recommendations

This study’s findings suggest that wine label designers need to consider including authentic information when creating wine labels. Note that other food manufacturers have utilized this practice. For instance, Iglo, a leader in Europe’s frozen foods market, recently added tracking codes to their
packages of spinach under the name “Woher kommt Ihr Spinat” (Where does your spinach come from) program. Consumers can type in the code on Iglo’s website to find out which farm their spinach comes from and the information the website presents includes family photos and blurbs about the specific farmers (e.g., Claus Bernsmann, for example, is 39 years old, has three children and has been farming for Iglo since 1999).

However, it is also important to note that this may not be effective for everyone. Study 1 showed that exposure to authentic information on the back label only increased the confidence of subjects in the low involvement condition. In a similar vein, study 2 showed that only the subjects in the low knowledge condition displayed increased confidence and higher purchase intentions when exposed to authentic information. Practitioners should consider the possibility that wine label information cues may not be sufficient to attract people with high levels of involvement and knowledge. They may need to provide more relevant and complex information to boost confidence and increase purchase intentions among such consumers, since consumers with high levels of involvement and knowledge have a desire and are motivated to process more relevant and/or even complex information prior to making purchases (Hwang et al. 2021; Park 1999). At the same time, wine makers who are mainly interested in attracting wine novices should pay more attention to wine labels. Understanding the different information needs of the two types of wine consumers (high vs. low involvement, high vs. low knowledge) will provide wine producers with practical marketing insights.

One limitation of this research is that we only considered two types of extrinsic cues: grape and founder. To determine the relative importance of extrinsic cues, researchers should consider more extrinsic cues and compare their weights. Second, our findings suggest that the back labels of wine bottles are not effective for high involvement and high knowledge subjects. Researchers should therefore consider examining which wine label elements, if any, effectively increase the confidence and purchase intentions of highly involved and highly knowledgeable consumers. Other information including reviews or scores from trusted sources such as Wine Spectator could play important roles in this regard (Park et al. 2021).

Provided that this area of inquiry was beyond the scope of this research, we leave it to future research. Third, we recommend that researchers consider examining the effect of wine labels in a more realistic setting such as an actual wine store. Field experiments or observational studies may provide more insights into the impact of wine labels on consumers’ decisions. Finally, we suggest that researchers should pay more attention to equalize the amount of the information provided in two different conditions (e.g., authentic label vs. not authentic label) in the future research. Also, they may need to pay extra care to determine the right “tone” for the authentic label in order to manipulate perceived authenticity of information properly.

Appendix

Appendix 1a. Experimental stimuli for Study 1—Label No.
Appendix 1b. Experimental stimuli for Study 1—Label Authentic.

Appendix 2a. Experimental stimuli for study 2—Label Grape.
Appendix 2a. Experimental stimuli for study 2—Label Authentic.

References


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