Measuring acceptability of a new product through consumers’ prolonged exposure: the case of low-alcohol wine

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Research questions

- To what extent is a consumer ready to accept a product that has undergone a change of one of its intrinsic attributes?
- How is this change perceived at blind level and when the information is given to consumers?

Assumptions

- A mere exposure can develop a familiarity with the product and create a preference for him (Zajonc, 1968).
  - H1: prolonged exposure of consumers to a wine increases preference for this wine.
- The secretion of a hormone responsible for the sensation of satiety is linked to the consumption of ethanol (Geary et al., 2004).
  - H2: in blind consumption at home, the consumed quantities of low-alcohol wine are greater than those of standard wine.
- Information on the lower alcohol level may be perceived negatively (Masson et al., 2008).
  - H3: with information provided on the wine alcohol content, the consumed quantities of wine labelled as 10.5% alcohol should be less than those of wine labelled as 13.5% alcohol.

Methodology

Chronology of the experimentation

1. Blind stage (1st month)
2. Full stage (2nd month)

<table>
<thead>
<tr>
<th>Test</th>
<th>Hedonic score</th>
<th>Exposure at home (15 d.)</th>
<th>Exposure at home (15 d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>2.5</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
</tr>
<tr>
<td>Test 2</td>
<td>2.5</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
</tr>
<tr>
<td>Test 3</td>
<td>2.5</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
</tr>
<tr>
<td>Test 4</td>
<td>2.5</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
<td>Standard wine 12.5% and Low-alcohol wine 9%</td>
</tr>
</tbody>
</table>

Group A
- Standard wine (12.5%)
- Low-alcohol wine (9%)

Group B
- Standard wine (12.5%)
- Low-alcohol wine (9%)
Result 1: Evolution of hedonic scores after the 1st blind exposure

- Group A: hedonic scores of the 2 wines decrease, but those of exposed low-alcohol wine decreases lower than those of standard wine, but these results are not significant.
- Group B: hedonic scores of the 2 wines decrease, but those of exposed standard wine decreases lower than those of low-alcohol wine, and this result is significant.

These results suggest that exposure have limited the decline of hedonic scores of exposed wine.

Result 2: Evolution of hedonic scores after the 2nd blind exposure

- Group A: hedonic scores of exposed standard wine increase significantly whereas those of low-alcohol wine decrease, but not significantly.
- Group B: hedonic scores of the 2 wines increase, but only the difference for exposed low-alcohol wine is significant.

Again, exposure seems to have a slight effect on hedonic scores of exposed wine.

Result 3: Quantities consumed in blind according to the different wines alcohol content

- In blind consumption at home, the 2 wines are equally consumed.
- Lower alcohol content has not produced larger consumed quantities.

Result 4: Quantities consumed of wine according to the different information on the alcohol content (10.5 % Vs 13.5 % Vol.)

- In consumption at home with information on the alcohol content, the 2 wines are again equally consumed.
- Information on lower alcohol content has not produced smaller consumed quantities.
Conclusion

- These results did not allow validating our assumptions. % exposure effects have been mixed. % alcohol content has not had impact on the consumed quantities.
- These results are certainly limited by the sample too small and the first test of this experimental protocol that may be not optimal.
- Future research will have to repeat this study with an improved experimental protocol and a better control of the participants.
- For wine growers and wine marketers, this study shows that low-alcohol wine can compete with standard wine and that there is no major barrier to consumption of this product.