

# Consumer preferences for new products: Eye tracking experiment on labels and packaging for olive oil based dressing

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## INTRODUCTION

The product can be defined as a "basket of attributes" which provides the customer with the functional value specific to that class of product, as well as a set of secondary values (called benefits or services) which may be necessary or added. [1]. These additional services differentiate the brands and may have determining influence on customer's preferences. Within the "GLASOIL" project the research activity focused on the development of the new product (olive oil based dressing) as a whole through the evaluation of the basket of attributes. Once the main reference targets had been defined, the survey focused on the expectations and evaluations of potential customers with respect to the new product. Investigating consumer preferences, before a product is launched on the market, is fundamental for companies and makes it possible to reduce failure rates.

## MATERIALS AND METHODS

### Focus group: objectives, sample and procedure

The survey through the focus group was carried out to investigate the preferences and opinions of potential consumers in relation to the new product, before the market launch of the same.

The aim was to stimulate interaction between the participants. Participants were recruited to represent the reference targets identified for the use of the product. From the results obtained, different combinations of packaging were elaborated, subsequently used as graphic stimuli to carry out tests with eye tracking.

### Eye tracking analysis

The results of the focus group made it possible to elaborate different packaging combinations, to be used as graphic stimuli for the eye tracking test. Two different packaging models (A and B) have been created, in three different combinations (Figure 1 and Figure 2).

Through eye tracking analysis and the subsequent debrief survey, we tried to understand what attracted consumers' attention most, arousing particular emotions or memories.

For the analysis of the eye movement data, we defined a set of areas of interest (AOIs) to capture the eye fixations.



Figure 1. Packaging model "A" in three combinations (source: our processing)

Figure 2. Packaging model "B" in three combinations (source: our processing)

## RESULTS AND DISCUSSION

### Graphic stimulus A1 - B1 (Figure 3)

The A1 packaging showed a higher concentration of fixations in the area of interest with the product name and in the AOI with the image of the olives. The profile of the packaging (especially the ergonomic part) and the wording "Made in Calabria" were particularly observed. Men have been more attracted by the image of the olives, while women to the area of interest with the representations of the dishes on which to use the dressing.

Stimulus B1, has been observed uniformly from top to bottom (not only the label but also the neck of the bottle with the product visible for the transparency of the wrapping). Women were more attentive than men to all the details of the label and packaging.

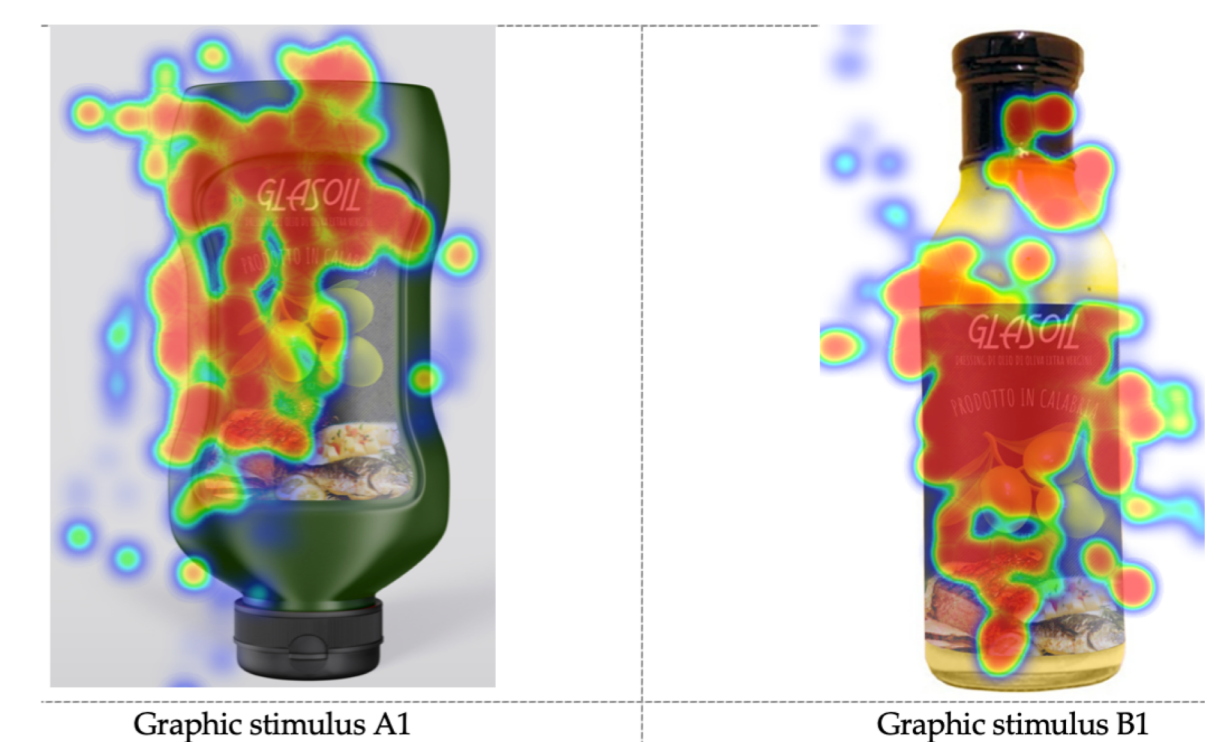


Figure 3. Heatmap graphic stimulus A1 and B1 (our processing)

### Graphic stimulus A2 - B2 (Figure 4)

Graphic stimulus A2 showed a high intensity of fixations in the AOI of the product name, in the AOI with the figure of the hand squeezing the olives and on the images of the dishes on which the dressing is to be used. Compared to stimulus A1, the presence of the "hand" squeezing the olives captured the attention of the participants. The flow of pressed product from the olives towards the dishes, guides the participants' gaze downwards, thus shifting their attention to this area of interest.

Few differences in observation between men and women; men have been more attracted by the wording "Dressing and Decorating". In the case of the B2 model, women were more focused on design and content, visible through the transparent bottle. The debrief survey revealed a preference for this second packaging (B2) over the first (A2), given the particularity of the shape and the possibility of seeing the product contained in it.

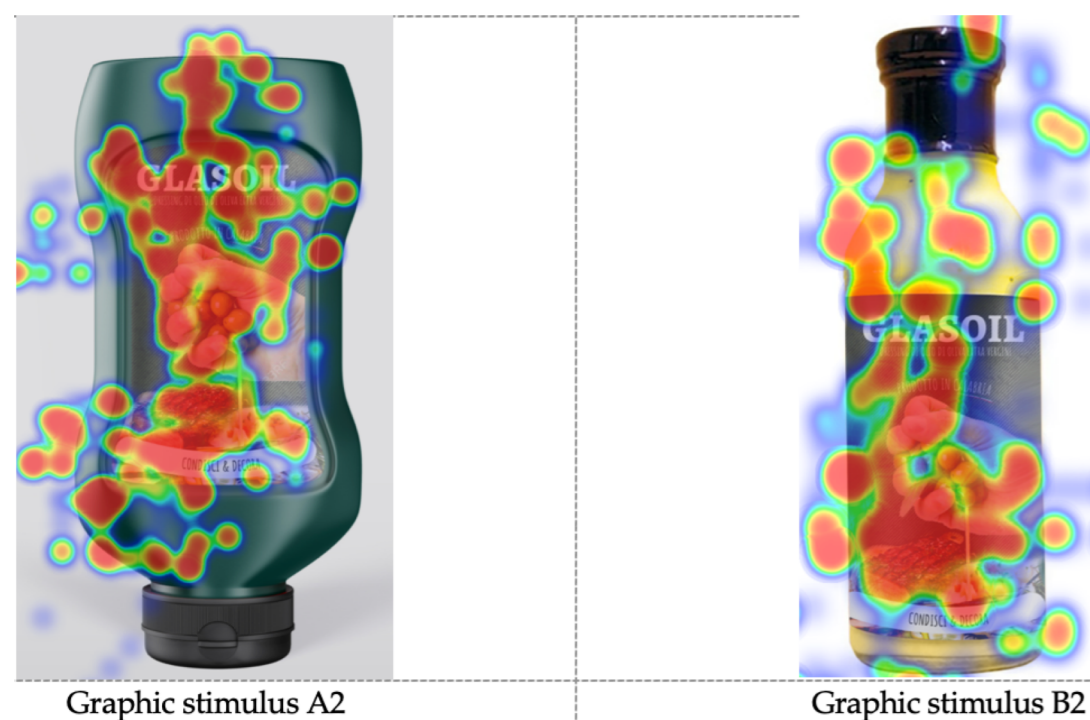


Figure 4. Heatmap graphic stimulus A2 and B2 (our processing)

### Graphic stimulus A3 - B3 (Figure 5)

In the first case (stimulus A3), the area of greatest attraction was the central one, representing a hand squeezing a dressing pack on some dishes. The fixations in the section containing the wording "Made in Calabria" and the graphic icon of the Calabria region were very intense. On the contrary, there were fewer fixations on the AOI with the name of the product and the wording "Dressing of extra virgin olive oil".

For the A3 stimulus women were more attentive to the details of the label. In the case of stimulus B3, as before, this combination drew attention to the packaging and label.

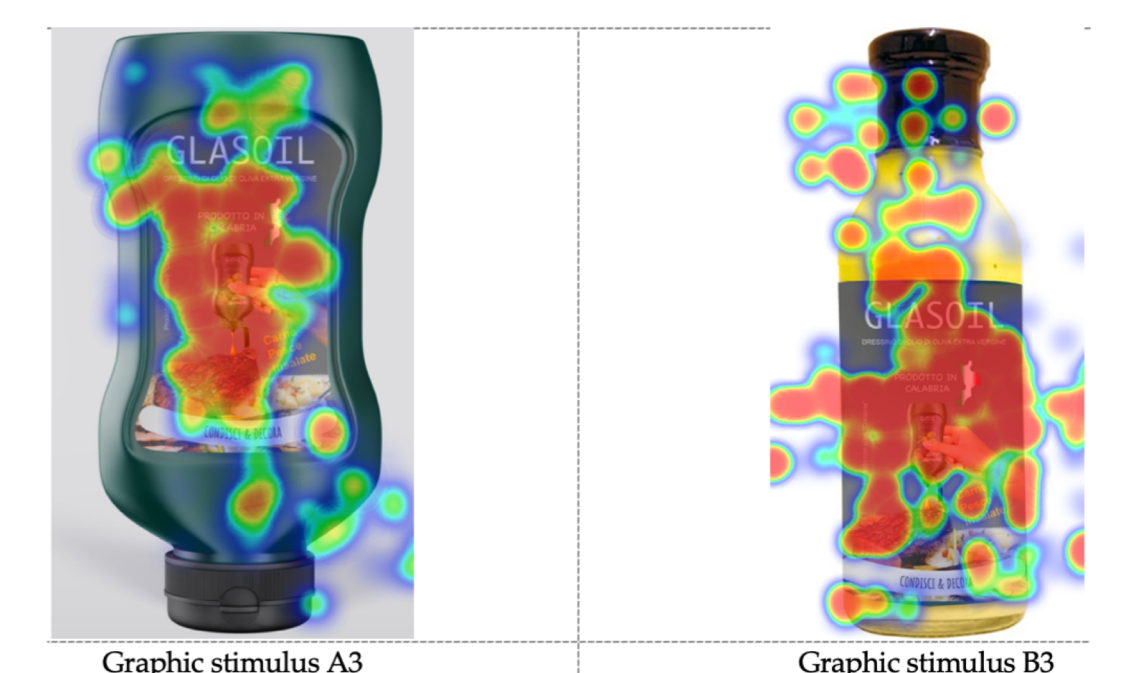


Figure 5. Heatmap graphic stimulus A3 and B3 (our processing)

This study confirms the importance of the information on the label, highlighting how much the materials, shape and colours of the packaging can influence the possible choices of consumers. Very often, the same information, must be communicated in a different form on the same label if the product is destined to different targets at the same time [2] [3].

This study confirmed that, for this specific type of product, consumers preferred a transparent package that makes the product visible inside, characterized by elegant lines and equipped with a drop breaking cap. The participants saw in this packaging a high quality product and this confirms that the material, the design and the ergonomics of a packaging are elements that can transfer certain information about the product and how it is intended to be perceived [4].

On the label, on the other hand, consumers, in addition to the information required by law, wanted to see the origin of production and instructions on possible use.

## CONCLUSIONS

In conclusion, the analysis with eye tracking showed that images with elements such as a hand using the product, prove to be "winning", as they attract the observer's attention. Eye tracking analysis also confirmed that men and women look at the packaging and label differently.

**Author Contributions:** M.F. carried out the overall project design experimental work, M.F. and A.R. carried out the experiments and analysed the results. M.R.L. assisted the experimental work and provided funding acquisition. All authors conceptualized aspects of the project and assisted in the revision and editing of the manuscript. All authors read and accepted the published version of the manuscript.

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