

Using Neural Correlates for Enhancing Customer Experience Through Effective Visual Price Placement

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This research seeks to understand if consumers expect price information accompanying a product in a price promotion to appear in specific spatial location next to the product and how neural correlates could pinpoint the location for such an expectation. Our survey (study 1) of 727 prices for six different retailers suggested that electronics retailers (eg, Best Buy) are likely to present their prices more towards the right side of the product (68 vs. 50%, $z=9.64$, $P<.001$), whereas discount retailers (eg, Target) present such prices more to the left-hand side of the product (77 vs. 50%, $z=14.46$, $P<.001$). Thus, although a retail standard does not appear to exist, these results suggest that the location of a price is relevant and price perception is a complex process often impacted by factors beyond economics.¹ Building from research in visual field effects, we find that under low engagement, price information shown on the left will be more salient, causing that price information to dominate in product evaluations (see Fig. 77.1).

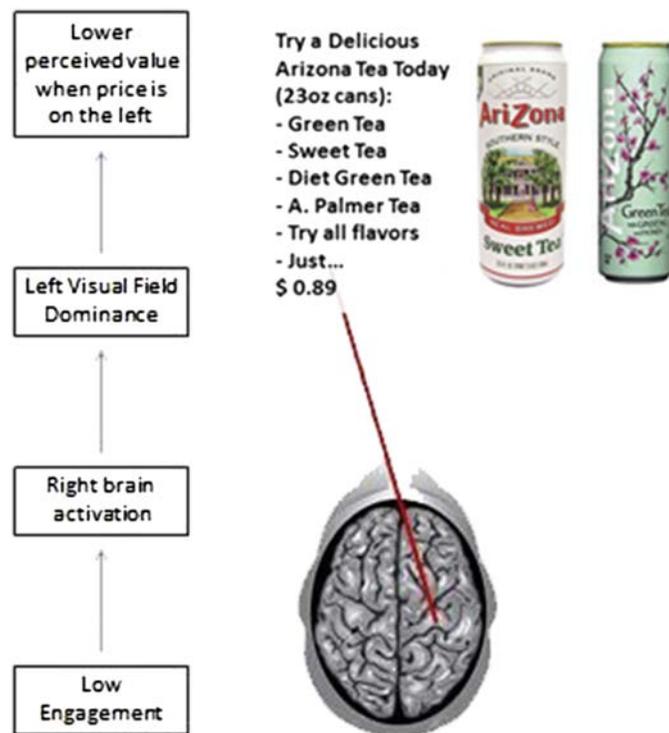


FIGURE 77.1 Price perception under low engagement.

Conversely, under high engagement, price information shown on the right of the product will be more salient. This will cause that price to be more dominant in evaluations and lead to lower value perception.

Study 2 tested the sales of a product for an actual retailer as a function of the left versus right visual field location of price information for the product. The study was a single three-level factor (visual field location: left, right, control) between designs. Sales data were collected over a 3 wk period and we featured a promotion for a product (ie, Arizona iced tea; see Fig. 77.1 for the signage) by posting a large sign on the front of a product cooler in a location of national convenience store. A price featured in the left visual field led to a nonsignificant increase in sales ($M_{\text{left}}=2.12$, $M_{\text{control}}=1.75$, $t(166)=1.22$, $P>.22$), whereas a price featured in the right visual field led to significantly more sales ($M_{\text{right}}=2.52$, $M_{\text{control}}=1.75$, $t(166)=2.19$, $P<.05$). These findings suggest that prices to the right increase buying behavior.

The aim of study 3 was to measure neural correlates as preliminary evidence of left-hemisphere activation under high engagement. Ten right-handed people from the community ($M_{\text{age}}=26$ years, 63% male) participated in the study for a stipend. The study adopted a 2 (engagement: low, high) \times 2 (visual field location: left, right) mixed design. Participants were shown six prices in a row on the screen in front of them. Participants were then shown one of the prices alone and asked to click the mouse on the location on the screen in front of them where that price had appeared previously. To assess the attentional focus of participants we measured the distance between the actual location and the participant's recall of the price's location. Further, to assess the relative level of activation in the left versus right hemisphere during the task, we measured the blood flow in the prefrontal cortex. To examine asymmetric activation in the prefrontal cortex, we used functional near infrared spectroscopy (fNIRS), a noninvasive neuroimaging tool for measuring activity in the prefrontal cortex.² As expected participants showed a leftward bias in recall of the price locations under low engagement but not high engagement ($P<.05$). Further, greater blood flow was observed in the anterior left dorsolateral prefrontal cortex (DLPFC) ($F(1, 5)=22.5$, $P<.01$).

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