Why shoppers choose products from the center of displays

Previous research has established that consumers are more likely to pick articles located in the center of supermarket shelves than those on the sides. Selin Atalay, Onur Bodur, and Dina Rasolofarison explore the underlying mechanisms of this phenomenon, showing that this “horizontal centrality effect” is linked to the tendency of centrally located items to receive more visual attention from shoppers rather than conscious inferences made about product.

Whether selecting clothes from a rack, dishes from a buffet, or a movie from an online selection, consumers are constantly choosing from options displayed horizontally. Even in supermarket aisles, goods can only be stacked so high or so low before getting physically out of reach, so they are lined up on long shelves. In such contexts, shoppers tend to go for the option in the center of the horizontal array, the snack at the center of the vending machine, the bathroom stall in the middle of the row, and so on. This tendency, known as “horizontal centrality,” is well documented and, of course, highly relevant to retail shelf management. But Selin Atalay and her co-authors go a step further, identifying why and how the brand in the middle was consistently preferred. “The existing literature is mostly speculative or contradictory in its explanation of the effect, with one stream of research arguing the product in the center gets more attention and another the opposite,” says Selin Atalay. “We reconcile that by looking at the mechanisms.”

VISUAL ATTENTION AND CHOICE
In fact, the researchers simply look at what consumers look at, with the finding that horizontal centrality is linked to visual attention (i.e., eyes resting upon an object). The research team proceeded by breaking down to the millisecond the eye movements of study participants. While making a choice in consumption online, the participants gazed more and longer at the products at the center of displays and tended to pick those same products (45.3% of the time) over those on the sides (on average 27.3% of the time). Hardly surprising, though, that our gaze falls on the center of any new scene. “Biologically, our eyes are more comfortable looking straight ahead, it’s what is called the orbital reserve,” says Selin Atalay. “Also, to get the widest account of what is in an area, the optimal position is looking in the middle, with our peripheral vision picking up the rest.” But, when looking more closely at eye-movement patterns, it appears that the actual choice predictor is not the initial look at the center, which is pretty much systematic, but the final moments of the gazing process just before a decision is finalised. “The fixation converging onto the chosen option is called the gaze cascade effect,” the researcher explains, “and central gaze cascade effect when participants are more likely to focus on the central brand. Both effects add up.”

SIMPLIFYING, REASSURING CHOICES
So the correlation with visual attention is clear, but do consumers look more at the product they choose,
The choice predictor is the final moments of the gazing process just before a decision is finalised.

or do they choose it because they have looked at it more? The study does not investigate which is cause and which is consequence, but Selin Atalay believes one can argue one way or the other. "If the search were 'leader-focused,' attention would concentrate on one of the options as the leading choice to make sure it fits the consumer's needs by collecting more information about this option ['hm, this chocolate cake looks good']; whereas if it were 'leader-driven', then more information would be collected to differentiate this option from the rest, in a limited, confirmatory hypothesis testing fashion ['hm, the other cake beside has less whipped cream'] to support the choice," she says. Either way, if a "leading" choice is made, people are usually capable of justifying it later when questioned, by recalling positive features of the product (extra whipped cream) – a trick of the mind to sound self-coherent and avoid "cognitive dissonance" (picking the other cake despite loving whipped cream). Yet participants in the studies remember no significant qualities about their chosen vitamin or drink when asked to draw upon conscious memories. "My intuition tells me it is a different search process – and not a conscious one," muses Selin Atalay. In any case, she figures, the unconscious centrality bias is just another simplifying mechanism, one of the reassurances the mind seeks when it comes to decision-making. "Indeed, the more options a consumer is faced with (the harder the choice), the stronger the bias," she predicts.

POLITICAL POSITION IN THE DISPLAY, NOT ON THE SHELF

So should shop managers pull out tape measurers and compasses to place specific merchandise at the exact mid-point of a rack to ensure it goes flying off the shelves? Of course, the answer is not so easy. "The way you define the center is not clear-cut," points out Selin Atalay, "it may be the central object in an odd number display, or just the central area in an even-number display, but the effect is found in different configurations." More importantly, it is not the geometrical center of the shelf, rack, or buffet table that counts, but the center of the array of products in a given category. Again, studies show that the bottle of energy drink that draws consumers is not the one that neatly divides their visual field in two exact halves, despite human fondness for symmetry. Rather, it is the one at the center of the product array, even if it is off-center compared to the buyer’s computer screen or portion of shelf, as was the case in two of the three experiments conducted by Selin Atalay and her fellow researchers. The picture is complicated even further when throwing the in increasing numbers of categories and sub-categories of goods on the market (think of the endless variety of hair care products), each new category arranged with its own center...

IMPLICATIONS FOR MARKETERS

Retail shelf management needs to update its thinking about what has always been considered "premium brand space": the shelving areas between customers’ knees and eye level, within easy arm reach, says Selin Atalay. Horizontal centrality bias needs to be taken into account when designing product arrays, because it is so strong that it can outweigh even the reassuring effect of brand familiarity. Again, managers must bear in mind that centrality within a specific display, not just on a shelf, is crucial. What about those brands that cannot work their way into a central position? Given the importance of visual attention, they also have to find ways to compete visually with better positioned brands to catch shoppers’ eyes. How they can do just that is the next research question Selin Atalay and her research team will be tackling!

Based on an interview with Selin Atalay and the article “Shining in the Center: Central Gaze Cascade Effect on Product Choice” (Journal of Consumer Research, to be published), written with Onur Bodur and Dina Rasolofoarison.

METHODOLOGY

Two studies examined 67 and 64 undergraduate students respectively at HEC Paris when choosing products. They were asked to pick from nine fictitious brands of vitamins and meal-replacement bars from online displays, one display centered on the computer screen and the other off-centered, and their eye movements were tracked to see where and how long they looked. Another study carried out with 84 undergraduate students from Concordia University in Montreal tested their choices from an array of energy drinks of fictitious brands, this time from a physical shelf.