

Retail Focus: You Really Do Get What You Pay For
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STANFORD GRADUATE SCHOOL OF BUSINESS —You walk into the drugstore. You see two comparable national brands of aspirin positioned next to each other on the shelf. One happens to be on sale for 25 percent off the regular price. You go ahead and buy it—but maybe you shouldn't. The fact that it is discounted might actually make it work less well for you.

This scenario is actually quite plausible, according to recent research by Baba Shiv, associate professor of marketing at the Business School. Among other things, Shiv's research found that marketing actions, such as pricing and advertising, can actually alter the efficacy of products.

"Price can have strong behavioral effects," said Shiv, who co-wrote the paper with Ziv Carmon, an associate professor of marketing with INSEAD business school in Fontainebleau, France, and Dan Ariely, a professor of marketing science at MIT.

It has long been known that consumers' beliefs and expectations influence their judgment of products and services. For example, consumers often judge lower-priced items to be of lower quality. Consumers' beliefs also can affect their subjective experiences. In one well-known study, beer was rated as better tasting when it had a favorite brand's label than when it was unlabeled. What makes this new study different from previous research is that it shows marketing actions can affect more than just judgments and subjective consumption experiences—going so far as to change actual consumer behavior.

"We have these general beliefs about the world—for example, that cheaper products are of lower quality—and they translate into specific expectations about specific products," said Shiv. "Then, once these expectations are activated, they translate into self-fulfilling prophecies that actually impact our behavior."

In each of three different studies, participants were given energy drinks that supposedly make consumers feel more alert and energetic. Some participants paid full price for the drinks; others were offered them at discounted prices. The participants were then asked to solve a series of word puzzles. In all three studies, the people who paid discounted prices consistently solved fewer puzzles than the people who paid full price for the drinks.

The studies have enormous implications for consumers, especially with regard to medications—both prescription and over-the-counter products. "You might get 10 percent off an over-the-counter medication, but the net result is that you could get less effect than if you bought the medication at full price," said Shiv, who said there could be similar results if a patient buys cheaper prescription drugs from Canada as opposed to paying full price at a U.S. pharmacy.

And not only pricing, but advertising also can impact the effectiveness of a product. "Promoting the efficacy of a medication can have significant improvements to a consumer's health," said Shiv. "Advertising, if done well, can give rise to a positive placebo effect."

Shiv said that he and his fellow researchers were struck by the strength of the research results. "We thought pricing might shape behavior at the margins, but it turned out to be a pretty strong effect across the board," he said. "We ran the study again and again, not sure if what we got had happened by chance or fluke, but every time we ran it we got the same results." Moreover, said Shiv, it was clear from the studies that that people had no idea that price was actually influencing their performance. "The results signaled to us that this was largely a non-conscious effect," he said.

Shiv and his colleagues are now at work at follow-up research studying the impact pricing has on the effect of painkillers. He also hopes to get into the neural underpinnings of the phenomenon, particularly because the effects noted seemed to be non-conscious. "This might be happening more at the primitive brain structures in the limbic system rather than in the higher-order brain structures such as the prefrontal cortex," he said. "There's a lot more to explore in this area."

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