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NEWS

RSNA Press Release

MRI Shows Brains Respond Better to Name Brands

Released: November 28, 2006

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At A Glance

- Well-known brands activate positive emotional responses in our brains.
- Researchers used functional magnetic resonance imaging (fMRI) to study areas of the brain affected by visual stimuli associated with strong and weak brands.
- "Brain branding" is an interdisciplinary approach to improve understanding of how the mind perceives and processes brands.

CHICAGO — Your brain may be determining what car you buy before you've even taken a test drive. A new study gauging the brain's response to product branding has found that strong brands elicit strong activity in our brains. The findings were presented today at the annual meeting of the Radiological Society of North America (RSNA).

"This is the first functional magnetic resonance imaging (fMRI) test examining the power of brands," said Christine Born, M.D., radiologist at University Hospital, Ludwig-Maximilians University in Munich, Germany. "We found that strong brands activate certain areas of the brain independent of product categories."

"Brain branding" is a novel, interdisciplinary approach to improve the understanding of how the mind perceives and processes brands. Using modern imaging methods, researchers are now able to go beyond marketing surveys and gather information on how the brain responds to a particular brand at the most basic level.

"Brain imaging technologies may complement methods normally used in the developing area of neuroeconomics," Dr. Born said.

Dr. Born and colleagues used fMRI to study 20 adult men and women. The volunteers were all right-handed, had a mean age of 28 years and possessed a high level of education. While in the fMRI scanners, the volunteers were presented with a series of three-second visual stimuli containing the logos of strong (well-known) and weak (lesser-known) brands of car manufacturers and insurance companies. A brief question was included with each stimulus to evaluate perception of the brand. The volunteers pressed a button to respond using a four-point scale ranging from "disagree" to "agree strongly." During the sequence, the fMRI acquired images of the brain, depicting areas that activated in response to the different stimuli. In addition to the questions asked during the scanning, the volunteers were given questionnaires prior and subsequent to fMRI.

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The results showed that strong brands activated a network of cortical areas and areas involved in positive emotional processing and associated with self-identification and rewards. The activation pattern was independent of the category of the product or the service being offered. Furthermore, strong brands were processed with less effort on the part of the brain. Weak brands showed higher levels of activation in areas of working memory and negative emotional response.

Dr. Born believes that this research will be used as a benchmark to improve the understanding of the processing of brand-related information.

"The vision of this research is to better understand the needs of people and to create markets which are more oriented towards satisfaction of those needs," she said. "Research aimed at finding ways to address individual needs may contribute to a higher quality of life."

Co-authors are Stefan O. Schoenberg, M.D., Ph.D., Maximilian F. Reiser, M.D., Thomas M. Meindl, M.D., and Ernst Poeppel, M.D.

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RSNA is an association of more than 40,000 radiologists, radiation oncologists, medical physicists and related scientists committed to promoting excellence in radiology through education and by fostering research, with the ultimate goal of improving patient care. The Society is based in Oak Brook, Ill.

Editor's note: The data in these releases may differ from those in the printed abstract and those actually presented at the meeting, as researchers continue to update their data right up until the meeting. To ensure you are using the most up-to-date information, please call the RSNA Newsroom at (312) 949-3233.

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