

# Financial advice causes 'off-loading' in the brain

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A study using functional magnetic resonance imaging (fMRI) shows that expert advice may shut down areas of the brain responsible for decision-making processes, particularly when individuals are trying to evaluate a situation where risk is involved. The study was published in the March 2009 issue of the Public Library of Science (*PLoS One*).

During times of uncertainty such as an economic recession, many people feel unqualified to sort out the implications of their financial decisions. Often they will seek the [advice](#) of a consultant on what choices to make.

In a study led by Gregory Berns, MD, PhD, professor of [neuroeconomics](#) and psychiatry at Emory University School of Medicine, researchers investigated the neural mechanisms through which advice is integrated into the financial decision making process.

"While the field of neuroeconomics has made progress in understanding the neurobiological basis of risky decision-making, the neural mechanisms through which external information is integrated in that process had not been studied before this," says Berns.

Study participants were asked to make a series of [financial choices](#) between a guaranteed payment and a lottery while undergoing fMRI scanning. During portions of the testing, the participants had to make decisions on their own; during other portions, they received advice from a financial expert about which choice to make.

"Results showed that [brain](#) regions consistent with decision-making were active in participants when making choices on their own; however, there occurred an offloading of the decision-making process in the presence of expert advice," says Jan B. Engelmann, PhD, Emory research fellow in the Department of Psychiatry and Behavioral

Sciences, and first author of the study.

"The expert provided very conservative advice, which in our experiment did not lead to the highest earnings. But the [brain activation](#) results suggested that the offloading of decision making was driven by trust in the expert," explains C. Monica Capra, PhD, an economist in the Department of Economics at Emory and coauthor of the study.

"This study indicates that the brain relinquishes responsibility when a trusted authority provides expertise, says Berns. "The problem with this tendency is that it can work to a person's detriment if the trusted source turns out to be incompetent or corrupt."

Berns is the Emory Distinguished Chair of Neuroeconomics and leads the Center for Neuropolicy at Emory University. Scientists at the Center for Neuropolicy focus on how the biology of the brain influences decision-making in politics, policy and business.

Source: Emory University ([news](#) : [web](#))

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