

March 21, 2007

Brain - Damaged People Give Insights Into Morality

By REUTERS

Filed at 5:37 p.m. ET

WASHINGTON (Reuters) - It's wartime, and an enemy doctor is conducting painful and inevitably fatal experiments on children.

You have two kids, ages 8 and 5. You can surrender one of them within 24 hours or the doctor will kill both. What is the right thing to do?

For most people, this scenario based on one in William Styron's novel "Sophie's Choice" is almost an impossible dilemma. But for a group of people with damage in a part of the brain's frontal lobe that helps govern emotions, the decision was far more clear. They would choose one child for death.

Scientists said on Wednesday a study involving these people has produced unique insights into the brain mechanics of moral decision making and showed that in some key situations emotions play a fundamental role in moral judgments.

The new findings highlighted the role of a region in the front part of the brain below the eyes called the ventromedial prefrontal cortex.

Earlier research had pegged this area -- one of the more recently evolved parts of the human brain -- as playing a role in generating social emotions. In fact, the people with damage in this region due to stroke or other causes experienced severely diminished empathy, compassion and sense of guilt.

The new findings published in the journal Nature seem to confirm its central role in guiding certain moral judgments like life-or-death scenarios.

The researchers set out to gauge to what degree emotions govern moral judgments by comparing decisions made by people whose emotions already were crippled by this brain damage to decisions made by people with no such damage.

TOUGH CHOICES

The judgments on what is right and wrong made by these brain-damaged people were similar to the others in some scenarios put before them.

But when asked to make decisions in emotionally wrenching scenarios like the permissibility to kill one's own child to save other people's lives, those with the brain damage were far more likely to accept this utilitarian but harsh solution.

Scientists and philosophers long have debated how people make judgments relating to morality. Are these decisions governed strictly by a calculus of cold, hard facts and logic? Do emotions carry the day?

``This shows a much more subtle, a much more nuanced view, which of course makes the whole problem -- the science of morality -- infinitely more interesting," said Harvard University's Marc Hauser, one of the study's authors.

The study involved six people with damage in this brain region who were presented with 50 scenarios requiring moral judgments, some trivial and some difficult. Their responses were compared to those of 12 others with damage to an unrelated part of the brain and 12 more with no brain damage.

Another wartime scenario involved enemy troops searching for civilians to kill. The people in the study were asked about their willingness to kill their own infant whose crying was drawing the attention of enemy soldiers who would then kill the parent, the baby and people hiding with them.

Again, the people with this brain damage were far more willing to judge killing the baby as the right moral choice.

The scenarios weighed immediate harm or death to one person against certain future harm or death to many. These brain-damaged people regularly showed a willingness to bring harm to an individual, an act others may find repugnant.

``They are perfectly capable of endorsing the kind of extreme high-conflict dilemma in which indeed you would produce harm to someone because there would be greater good coming to a larger group," said study co-author Antonio Damasio, director of the University of Southern California's Brain and Creativity Institute.

``And this is something that human beings in general reject."

Copyright 2007 Reuters Ltd.

[Privacy Policy](#) | [Search](#) | [Corrections](#) | [RSS](#) | [First Look](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Site Map](#)