



June, 2004 (page 8)

## **Brushes with death transform life and the brain**

**By Julia C. Keller**

Having a near death experience can change a person's entire life, including one's brain, researchers have discovered.

Researcher Willoughby Britton, a doctoral student at the University of Arizona, studied the brain waves of people who have had positive, transformative near death experiences and found their brain patterns distinctive when compared with people who didn't have a brush with death.

"It's interesting to see why some people are transformed and why some people aren't and whether studying people with positive near death experiences can help the people who have negative experiences," Britton said. "It's a profound personality overhaul."

Britton compared the brainwaves of sleeping subjects and found a distinct spike in activity in the temporal lobe of people with near death experiences.

The brain's temporal lobe has often been implicated in reports of near death experiences that closely mirror what epileptics feel during a seizure: feelings of peace and tranquility, encountering a bright light and increased sensitivity to smells and sounds.

The temporal lobe, Britton said, is considered "the God module, the part of the brain that connects with the transcendent." Surprisingly, however, all of the activity that Britton recorded was from the left half of the brain not the right half, which is more often associated with visual and spatial creativity.

"One hundred percent of the activity came from the left side, which, in itself, is very unusual," said Britton. "There's no reason for someone to have an accident and just have one side of their brain affected."

Dr. Bruce Greyson, a psychiatrist at the University of Virginia Health System who studies people with near death experiences, said this proves the mind-brain interaction is much more complex than scientists previously thought.

"That discrepancy suggests that our concepts of the role of the brain in mental life, and particularly in what appear to be transformative spiritual experiences, is far too limited," Greyson said.

But what the activity on the left side of the brain actually says about why people have transformative near death experience isn't clear, Greyson said.

People's brains may be predisposed to having transformative experiences, or, he said, "it is also

plausible that near death experiencers were indistinguishable neurophysiologically from other people before their [transformation], and that any observed changes reflect the transformative aftereffects of the experience.”

What is clear, however, is that all those in Britton’s study who came close to dying scored higher on an evaluation of their ability to cope with stressful situations than their counterparts.

“It’s more evidence that there’s no psychopathology in this group, which tends to be the scientific party line,” Britton said.

In fact, Britton said, people with positive transformative experiences tend to change in a way that “as a psychotherapist, that’s how you would want them to respond over a lifetime of therapy.

“They’re less self-centered, much more compassionate towards other people. Many people give up their jobs and become much more service-oriented,” she said.

Another interesting outcome of Britton’s study was the finding that near death experiences leveled the playing field when it came to personal spirituality. “People that went to an organized church stopped going to church. People who were atheists became more spiritual,” she said. “They became more similar to each other.”

Britton added that her insight into the brain’s response to near death experience will encourage other scientists to explore the effect of positive, transformative experiences and the role that spirituality might play.

“I think, for the most part, psychology tends to look at the problems and nobody studies the people that are psychologically healthy or who have transformative events following a crisis,” she said.