Believers stay calmer than atheists in trying situations, study suggests

Brain scans show reduced anxiety among faithful

BY JENNIFER GREEN

The brains of religious people are calmer in the face of error and uncertainty than doubters, Canadian university researchers found.

"This is the first set of studies connecting individual differences in religious conviction to basic (brain) processes," say authors Michael Inzlicht and Ian McGregor, psychology professors at the University of Toronto and York University, respectively.

Compared to irreligious subjects, the highly religious had 33 per cent less activity in the anterior cingulated cortex, a part of the brain that regulates anxiety. Those certain of God's existence had 45 per cent less activity in this region compared to those convinced there is no God.

The religious people weren't just calm, they were more accurate. "The more participants were zealous, the fewer errors they made," said the paper, "Neural Markers of Religious Conviction," published in the March edition of the academic journal Psychological Science.

"We suggest that religious conviction buffers against anxiety by providing meaning," the authors said.

Ten men and 18 women of various convictions and faith were asked to rate themselves on a scale of zero to five on questions like: "I aspire to live according to (certain religious codes)" or "My beliefs are more correct than others." In a second test, nine men and 13 women from diverse ethnic backgrounds were asked on a scale of one to five whether God exists. One meant the respondent was sure He exists; five meant the respondent was sure He did not. Religious affiliations were not recorded for this test.

In both studies, the subjects then donned skull caps with electrodes to record brain activity, and quickly read words such as "purple" printed in purple ink or "red" printed in red ink. The next test was a little more confusing with "purple" printed in red ink and "yellow" in blue ink.

Everyone stayed relatively calm for the easy test, but the non-religious brain got much more agitated in the harder one.

The religious people took their time, answered the questions more carefully and made fewer errors. If they did make a mistake, they took it in stride.

Inzlicht said the team was taken aback by the results, so they tried the experiment repeatedly.

"We're pretty sure it's a robust finding, and not just an accident."

"The anterior cingulated cortex is kind of like a cortical alarm bell. It rings when something's not right; you've made an error. The things that tend to set it off are anxiety-inducing, like error, uncertainty and conflict.

"Anxiety is a strange beast. It does not have a linear function in performance. You need a little to get you going, but too much paralyzes you with fear. We think that religion puts one in an optimal anxiety state."

Inzlicht says he's a "Jewish atheist; culturally Jewish, but I personally don't believe in God." These studies are unlikely to have people signing up for faith. "You can't make yourself believe. You either believe or you don't, so if you're an atheist, this won't change your mind."