

Study: Lower levels of brain activity in cognitive control and reasoning areas when focusing on sacred values

June 12 2019, by Bob Yirka



Credit: CC0 Public Domain

An international team of researchers has found that people have lower levels of activity in brain in areas related to cognitive control and reasoning when they are focusing on sacred values. In their paper published in *Royal Society Open Science*, the group describes their study

[involving brain scans](#) of terrorist sympathizers and what they found.

Prior research and anecdotal evidence have shown that once a person develops sacred values regarding a particular topic, it is difficult to get them to change their minds. Prior research has also shown that people who have certain sacred values are often more willing to fight and die for a cause than others. In this new effort, the researchers sought to learn more about what goes on in the minds of people who have expressed a willingness to die for a cause that is based on sacred values—in this case, sympathizers of an Al-Qaeda offshoot called Lashkar-et Taiba.

The researchers note that sometimes, people say and do things that are contrary to what they are truly thinking or feeling. For this reason, they chose to recruit several sympathizers for brain scan testing. They claim that neuroimaging rules out posturing by individuals because brain signals related to brain processing cannot be controlled.

Testing involved asking the volunteers questions while they were undergoing fMRI scanning. The questions concerned their sacred values, such as whether they would be willing to fight and die for these values, and non-sacred values as a comparison.

The researchers report that they found that when the volunteers were being asked questions related to their sacred values, there were lower levels of brain activity in areas related to reasoning and cognitive control. Prior research has shown that such areas are typically involved in processing consequences and calculating costs. They report that they also found that if they told the volunteers that other sympathizers they knew were less willing to die for a cause, their own willingness to do so dropped, as well. The researchers claim their findings show that there are distinct processes that occur in the [brain](#) when a person is focused on issues related to strongly held sacred values.

More information: Nafees Hamid et al. Neuroimaging 'will to fight' for sacred values: an empirical case study with supporters of an Al Qaeda associate, *Royal Society Open Science* (2019). [DOI: 10.1098/rsos.181585](https://doi.org/10.1098/rsos.181585)

© 2019 Science X Network

Citation: Study: Lower levels of brain activity in cognitive control and reasoning areas when focusing on sacred values (2019, June 12) retrieved 23 April 2024 from <https://medicalxpress.com/news/2019-06-brain-cognitive-areas-focusing-sacred.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.