

Neural Correlates of Sympathetic Magical Belief

Results:

In sympathetic magical belief, action to a representation of an object is thought to affect the object itself. This supernatural belief is common in preliterate societies but rarely explicitly endorsed in scientifically literate adults. Regardless, our results show that even those who do not express sympathetic magical beliefs none-the-less show significantly greater activation in the insular cortex, a brain area associated with pain and loss, and the anterior cingulate cortex, an area associated with suppression of emotion, when viewing a video of a beloved object being destroyed relative to controls, even though they know it to be pretend. We interpret the result as evidence that (a) scientifically literate adult implicitly endorse sympathetic magical beliefs when reasoning about emotionally important objects and (b) that this bias is suppressed by frontal lobe networks, enabling rational explicit responses.

Published work:

Papers

- Lindemann, M., Reikki, T. & Hood, B.M. Is weaker inhibition associated with supernatural beliefs? *Journal of Culture and Cognition*, 2011, 11, 231-239
- Hood, B.M., Donnelly, K., Leonards, U., & Bloom, P. Implicit voodoo: electrodermal activity reveals a susceptibility to sympathetic magic. *Journal of Culture and Cognition*, 2010, 3(4), 391-399

Books

Hood, B.M. *SuperSense: why we believe the unbelievable*. 2009, San Francisco, Harper Collins. Also published in The Netherlands, Italy, Germany, Poland, Spain, Croatia, Colombia, UK, Portugal, and Japan.

Area(s) of interest:

Superstition belief, implicit biases, neuropsychology

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