

SCIENTISTS SHED LIGHT ON CREATIVITY BY STUDYING PIANISTS' BRAIN ACTIVITY



Scientists claim to have shed light on the neural basis of creativity by scanning the brains of accomplished pianists while they improvised on a keyboard.

Images of the pianists' brains highlighted areas that seemed to underpin their musical creativity, alongside regions that were strongly connected in *pianists* with the most improvisation experience.

The scans point to a network of brain regions that are involved in creative playing, including the dorsolateral prefrontal cortex, which has previously been linked to the suppression of stereotypical responses and the selection of improvised actions.

To do the experiment, the researchers had a keyboard custom made to work inside a brain scanner. The high magnetic fields generated in a functional magnetic resonance scanner meant none of the normal metal components could be used. Instead of steel strings, fibre optics were fitted to sound out the notes.

Ana Pinho, at the Karolinska Institute in Stockholm, scanned the brains of 39 professional musicians and students, most of whom came from the Royal College of Music in Stockholm. The musicians had different levels of training in classical and jazz piano.....

Read more from <http://www.theguardian.com/science/2013/nov/12/scientists-creativity-pianists-brain-activity>