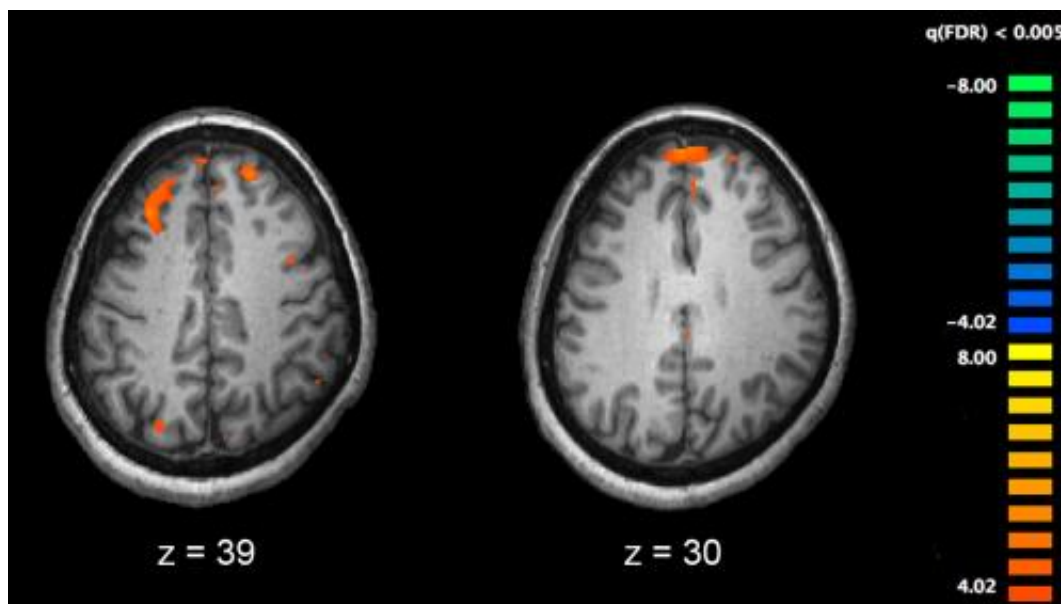


Finger lengths may indicate risk of schizophrenia in males

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Functional magnetic resonance imaging (fMRI) and other brain imaging technologies allow for the study of differences in brain activity in people diagnosed with schizophrenia. The image shows two levels of the brain, with areas that were more active in healthy controls than in schizophrenia patients shown in orange, during an fMRI study of working memory. Credit: Kim J, Matthews NL, Park S./PLoS One.

Research suggests that the ratio of the lengths of the index finger and the ring finger in males may be predictive of a variety of disorders related to disturbed hormonal balance. When the index finger is shorter than the ring finger, this results in a small 2D:4D ratio, pointing to a high

exposure to testosterone in the uterus.

In a new study of 103 male patients diagnosed with schizophrenia and 100 matched healthy male individuals, investigators found that the 2D:4D ratio may be an effective predictor of schizophrenia—there were significant differences between schizophrenia and control groups concerning the ratio of the lengths of the second digit to the fourth digit, as well as its asymmetry, in both hands.

"Asymmetry index showed moderate discriminatory power and, therefore asymmetry index has a potential utility as a diagnostic test in determining the presence of schizophrenia," said Dr. Taner Oznur, co-author of the *Clinical Anatomy* study.

More information: Bolu, A., Oznur, T., Develi, S., Gulsun, M., Aydemir, E., Alper, M. and Toygar, M. (2015), The ratios of 2nd to 4th digit may be a predictor of schizophrenia in male patients. *Clin. Anat.*. DOI: [10.1002/ca.22527](https://doi.org/10.1002/ca.22527)

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