Brain scan studies busted by statistics

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THERE is fresh evidence that the budding field of social neuroscience is producing misleading results because of statistical methods often used to analyse brain scans.

In January, Hal Pashler of the University of California, San Diego, and colleagues, sparked controversy when they criticised the statistical methods used by a clutch of high-profile research teams to link brain activity to emotions. They said the teams' results could be inflated because random noise was not properly accounted for.

Now Nikolaus Kriegeskorte of the National Institute of Mental Health in Bethesda, Maryland, and his colleagues report that of more than 100 brain-imaging papers in five top journals that they looked at, 40 per cent use similar methods (*Nature Neuroscience*, DOI: 10.1038/nn.2303).

Russell Poldrack of the University of California, Los Angeles, says the latest study "will drive more people to take the problem seriously".

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