

Discounting the 'lefty' myth

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(Medical Xpress) -- Left-handed people consistently perform worse than right-handed people in measures of cognitive ability, or IQ, with the 'level of disability' equivalent to being prematurely born.

This is the finding of a recent study led by Professor Mike Nicholls (pictured), newly-appointed Director of the Brain and Cognition Laboratory in Flinders University's School of Psychology, which dispels the common myth that left-handed people are more likely to be gifted.

"The evidence, based on our analyses of very large databases of handedness and other attributes in people across Australia, the UK and the USA, doesn't bear out that myth," Professor Nicholls said.

"Our study of members of the same family confirms that left-handed children will do worse than their right-handed siblings," he said.

Professor Nicholls, who is himself left-handed, has been appointed to one of the new Strategic Professorships designed to bolster specific areas of research.

He joined Flinders in January after 17 years at the University of Melbourne. Over that time, he was awarded seven large Australian Research Council grants for projects examining how the brain affects behaviour.

He said handedness is tied to left/right asymmetries in the brain, or laterality – a major research focus of the Laboratory.



"Left and right could so easily be the same in humans and in some animal species it is the same. In humans, though, there seems to be this large specialisation of the two sides of the brain," he said.

"It is most likely related to squeezing as many eggs as possible into one basket."

Spatial attention is the second research focus of the Laboratory team which includes postdoctoral fellows Tobias Loetscher from Switzerland and Nicole Thomas from Canada.

"We're very interested in how the general population tends to pay more attention to the left-hand side of an object than the right," Professor Nicholls said.

This bias manifests itself as a tendency to deviate to the right in activities from steering a wheelchair to walking and even goal-kicking.

"There is a difference between near and far space and how the brain codes what can and cannot be touched.

"In the case of AFL footballers (see video below), when they aim for the midpoint between two posts, they tend to kick slightly to the right of middle."

Professor Nicholls said the ultimate goal of his research is to develop remedial techniques for <u>people</u> with neurological problems such as ADHD and <u>brain</u> damage.

Provided by Flinders University

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