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Brainiacs born this way

Alex White

It is not your fault if you are stupid, it could be in your genes.

University of Melbourne researchers have found that the way a person's brain is wired makes some people better at performing certain tasks than others.

Lead researcher Dr Alex Fornito said the brain's network had been a mystery for years, but with a new mapping technique scientists have discovered some people are nat-

urally smarter.

Fornito's latest study of 38 identical and 26 non-identical Australian twins found that 60 per cent of the brain functioned based on genetics and not environmental factors.

"It is about the brain getting more bang for its buck," he said.

"Genes play a role in how well your brain is wired and people with better wiring will do well in school tests."

Previous research has shown that people with more efficient

brains scored higher on tests of intelligence.

Lower brain efficiency was a common factor in people with schizophrenia and Alzheimer's.

The latest tests found that genes in the prefrontal cortex of the brain – which controls decision making, planning and memory – were responsible for up to 80 per cent of the brain's efficiency.

But Fornito said there was hope for those not blessed with these intelligence genes, with

40 per cent of the brain still responding to environmental factors.

"Genes are not the whole story," he said.

"If it was all genes we would be like robots unable to respond to our environment."

The study hopes to uncover the risk for mental illness and neurological diseases such as schizophrenia and Alzheimer's and lead to gene-based therapy.