

Managers have bigger brains

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(Medical Xpress) -- Managing other people at work triggers structural changes in the brain, protecting its memory and learning centre well into old age.

University of New South Wales researchers have, for the first time, identified a clear link between managerial experience throughout a person's working life and the integrity and larger size of an individual's hippocampus – the area of the brain responsible for learning and memory – at the age of 80.

The findings refine our understanding of how staying mentally active promotes brain health, potentially warding off neurodegenerative diseases such as Alzheimer's. The study was presented at the Brain Sciences UNSW symposium *Brain Plasticity –The Adaptable Brain* today.

The Symposium focuses on research into “brain plasticity” that is revealing the brain's ability to repair, rewire and regenerate itself, overturning scientific dogma that the brain is “hard-wired”.

“We found a clear relationship between the number of employees a person may have supervised or been responsible for and the size of the hippocampus,” says Dr Michael Valenzuela, Leader of Regenerative Neuroscience in UNSW's School of Psychiatry.

“This could be linked to the unique mental demands of managing people, which requires continuous problem solving, short term memory and a lot

of emotional intelligence, such as the ability to put yourself in another person's shoes. Over time this could translate into the structural [brain](#) changes we observed.”

The research comprises the doctoral work of Mr Chao Suo, supervised by Dr Valenzuela in collaboration with Scientia Professor Perminder Sachdev's [Memory](#) and Ageing Study based in Sydney.

Using MRI imagery in a cohort of 75-92 year-olds, researchers found larger hippocampal volumes in those with managerial experience compared to those without, even after accounting for any of a number of possible alternative explanations. While many male participants followed traditional management career paths, the effect was also seen in women who had taken on managerial roles in nursing or teaching, for example.

Provided by University of New South Wales

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