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Monash Alfred Psychiatry Research Centre's Dr Peter Enticott and the rubber limb used in the body image trial.

A helping hand for anorexia sufferers

A study led by Monash Alfred Psychiatry Research Centre (MAPrc) aims to understand more about the perception anorexia nervosa sufferers have about their bodies.

MAPrc research fellow and co-lead investigator Peter Enticott said those who suffer the eating disorder often have a distorted view of their own bodies.

'When they look in the mirror, even when emaciated, they think themselves overweight,' Dr Enticott said. The *Body awareness in anorexia* study aims to test the body's perceptions and how easily they can be manipulated.

The research trial is a collaboration between The Alfred, Monash University, St Vincent's and Austin Hospitals and Body Image and Eating Disorder Treatment and Recovery Service.

With co-investigators Professor Susan Rossell, Dr Jakob Hohwy and post graduate student Miranda Tanamas, Dr Enticott will look at the cognitive neuropsychology of the illness. 'We will be using a rubber hand task to test participants' perception, their sense of their body and where it is in space.

'Basically, participants will sit at a desk with one arm covered so they can't see it and a rubber limb will be placed where their arm would normally be.

'The task involves their real hand and rubber hand being stroked at the same rate – they can feel it on their actual arm and see it happening on the rubber arm.

'We use visual information and sense of touch to perceive where our bodies are. 'An odd illusion happens and lot of people feel the rubber limb is their real hand during this exercise,' Dr Enticott said.

A control condition will involve their hand being stroked at a different rate – this normally results in no illusion occurring.

'A part of anorexia involves a distorted body image perception – there is the sense that body image is unstable, more variable and open to change in the way perception works,' Dr Enticott said.



'We expect those with a body image distortion will experience the illusion more strongly, suggesting that it is easier for the body image to be manipulated in those cases.'

The trial also includes participants undertaking a reaching movement, where the speed and accuracy of the reach is timed. Those who have a strong sense of the rubber hand being their own are expected to have an altered sense of where their actual hand is.

Another measure to be taken will be the temperature of the skin following the task – there is some evidence the skin temperature in the limb 'disowned' drops.

'The better we can characterise the dysmorphic perception, the more we can help develop treatments for this,' Dr Enticott said.

'Anorexia is one of the most difficult psychiatric disorders to treat.

'There are a range of techniques at present, which have varying successes.

'The other hospitals involved in this study see a lot of patients with this condition and are excited by this new approach as it has the potential to help our understanding of this illness.'

The trial involves 20 patients and 30 healthy controls.
Results from the trial are expected by the end of the year.

<http://www.health.vic.gov.au/healthvictoria/aug11/anorexia.htm>