

The Disconnected Mind

Professor Ian Deary

I'm Ian Deary and I'm Professor of Differential Psychology at the University of Edinburgh and conduct research into mental abilities, how we think, how we remember, how we process information and I'm particularly interested in how that changes as we grow older. My research since I came here has been on individual differences in intelligence, that is how people differ in their thinking skills and I began looking at individual differences in healthy young people but as my research progressed I became more and more interested in how things changed when we got older because that's where the most marked differences are. People when they're old sometimes are still very sharp they remember things very clearly and they think very quickly. Other people don't do quite so well they start to become slowed up and forgetful so I wanted to find out the secret of successful ageing in mental abilities and it was about the middle of the 1990's when I came across a treasure trove that existed in Scotland that could help us to answer that question in a unique way...

Scotland is the only country ever to test the entire nation on the same test, on the same day, using the same questions and the same instructions. So in fact Scotland has cached the IQ scores for its entire nation born in 1936.

I knew I had a once in a lifetime chance to work with a unique set of data to answer a vital question how some brains age better than others...

The uniqueness in the Disconnected Mind project doesn't just lie in the fact that we've got a survey of individuals who took mental tests at age 11 that no one else in the world actually has, it's also that it's situated in Edinburgh. We have a team of individuals who are world class in neuroscience and can actually help me study the biological basis, the actual changes in the brain that underlie why some people have a successful cognitive ageing and other people undergo mental decline, so various elements are in place. A unique sample of older people, a unique team with different skills in neuroscience that just simply doesn't exist elsewhere in one place.

When you ask older people what their fears are about growing old, quite often at the top of that is keeping their mental function sharp they want to keep their thinking skills as good as they used to be and what we have to find out is this; we need to find out why some people's brains age well and other people's brains deteriorate, we need a recipe for successful mental ageing.

Sheila Fletcher

I remember my school and I have really fond memories of being there – it was a close little community... I had lots of friends, I was very contented there. My mother actually taught at the school and today I'm still in touch with two of the girls that I went to primary school with.

I had a letter from the cohort studies explaining what they were about and I thought it would be a very interesting project and that's why I volunteered. We spent the day at the Western General having medicals and doing all sorts of tests which I find very interesting. We also did the same test that we did in 1947 over again and since then I've been at One B Union in Edinburgh which I found very interesting with the professors giving us information and I don't quite know what will be happening in the future but I know they will be getting in touch with us again.

I have no recollection of the 1947 test at all. I did it again in the Western General and believe it or not I got exactly the same scores that I got in 1947. I don't know if that's good thing or bad thing, either I haven't advanced at all, or at least I haven't got any worst.

One of the main reasons I was keen to get involved was because of the project they were doing and how it could help in the future with people who have Alzheimer's and mental problems. I do actually know quite a few people who have dementia, it is absolutely terrifying in the first stages as they don't know what is going on but they don't quite know what and they are terrified and its only after a time as the illness progresses that they reach a plateaux and are calm again but until that is reached it's frightening.

I am very enthusiastic about the Disconnected Mind project because anything that can help in the future with all the problems associated with old age and mental old age surely is really important and if we could help only a few people then we're doing a good job. If I was to develop dementia or Alzheimer's obviously there's nothing the project can do at this stage but if I was able to help in any way by being monitored I would be only too delighted.

I would like to see the Disconnected Mind project achieve from the knowledge they've got from the way we've lived our lives and they can analyse it and help future generations to be healthier.