

Study of one million Swedes uncovers link between IQ and risk of death

12 March 2009

A study of one million Swedish men has revealed a strong link between cognitive ability and the risk of death, suggesting that government initiatives to increase education opportunities may also have health benefits.

Dr David Batty, a Wellcome Trust research fellow at the MRC Social and Public Health Sciences Unit in Glasgow, and colleagues, found that a lower **IQ** was strongly associated with a higher **risk of death** from causes such as accidents, coronary heart disease and suicide.

The researchers studied data from one million Swedish men conscripted to the army at the age of 18. After they had taken into account whether a person had grown up in a safer, more affluent environment, they found that only education had an influence on the relationship between IQ and death.

The researchers say the link between IQ and **mortality** could be partially attributed to the healthier behaviours displayed by those who score higher on IQ tests.

"People with higher IQ test scores tend to be less likely to smoke or drink alcohol heavily, they eat better **diets**, and they are more physically active. So they have a range of better behaviours that may partly explain their lower mortality risk," says Dr Batty.

Previous studies have suggested that preschool education programmes and better **nourishment** can raise IQ scores. The study suggests this may also have previously unforeseen health benefits, further validating government efforts to improve living conditions and education.

Dr Batty suggests there may also be benefits from simplifying health information for the public.

"If you believe the association between IQ and mortality is at least partially explained by people with a lower IQ having worse behaviours - which is plausible - then it might be that the messages used to change health behaviours are too complicated," he says.

"Messages about diet, including how much or what type of alcohol is beneficial, aren't simple, and the array of strategies available for quitting smoking are diverse and actually quite complicated. If you clarify the options available to people who want to, say, quit smoking, in the short term that may have an effect."

A second study, also co-authored by Dr Batty, used data from more than 4000 US soldiers and followed them for 15 years. The study found the same relationship between IQ scores and mortality, as well as a significant association between higher **neuroticism** and increased **mortality risk**.

References

Batty GD et al. IQ in early adulthood and mortality by middle age: Cohort Study of 1 million Swedish Men. Epidemiology 2008.

Weiss A et al. Emotionally stable, intelligent men live longer: the Vietnam experience study cohort. Psychosomatic Medicine, published online before print 27 February 2009.