

# Positive ageing:

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# TITLE

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# Outline

## **Ageing in Context**

Demographics

The ageing process

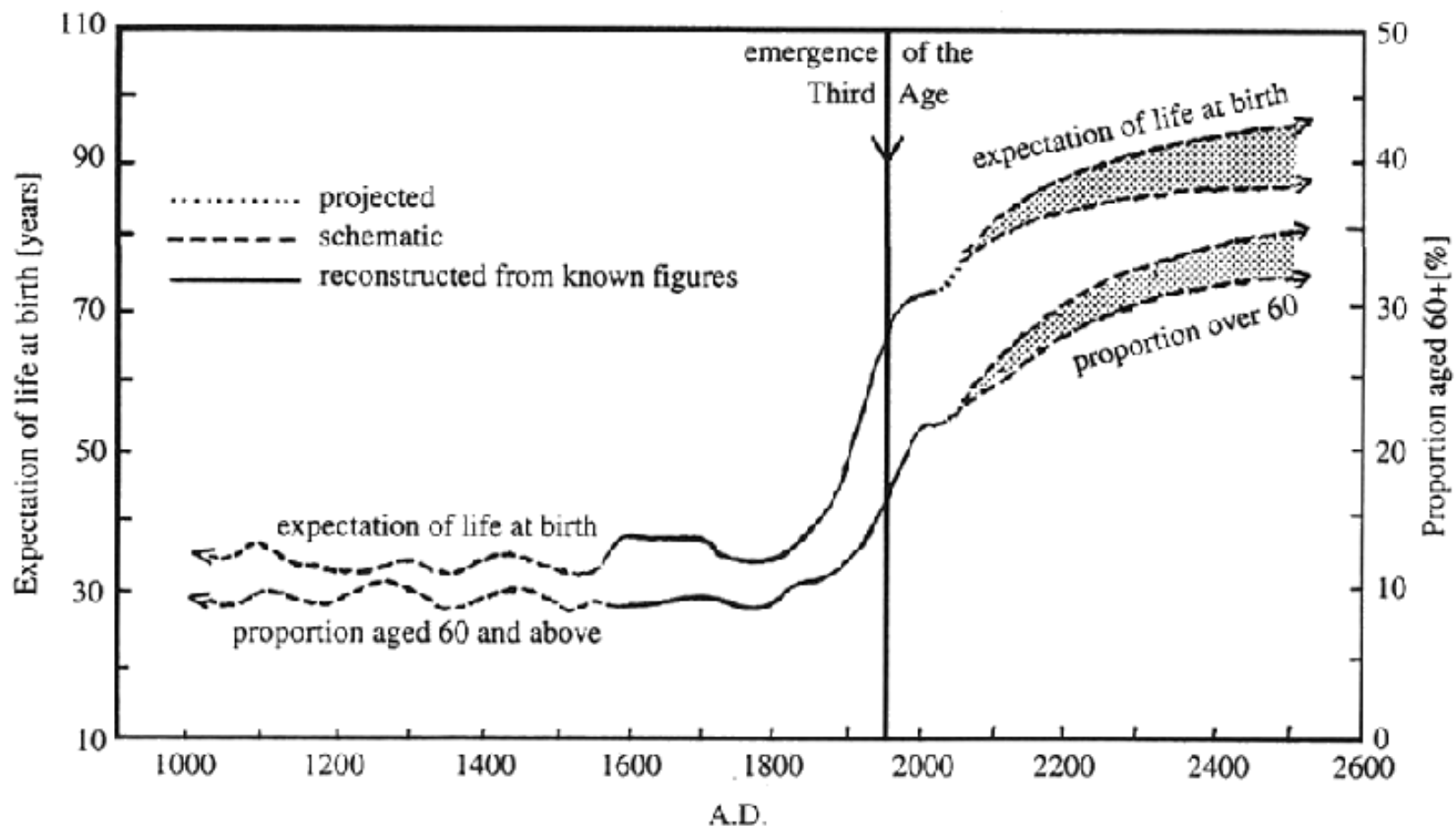
## **Psychology of Ageing**

Subjective well-being

Attitudes and stereotypes

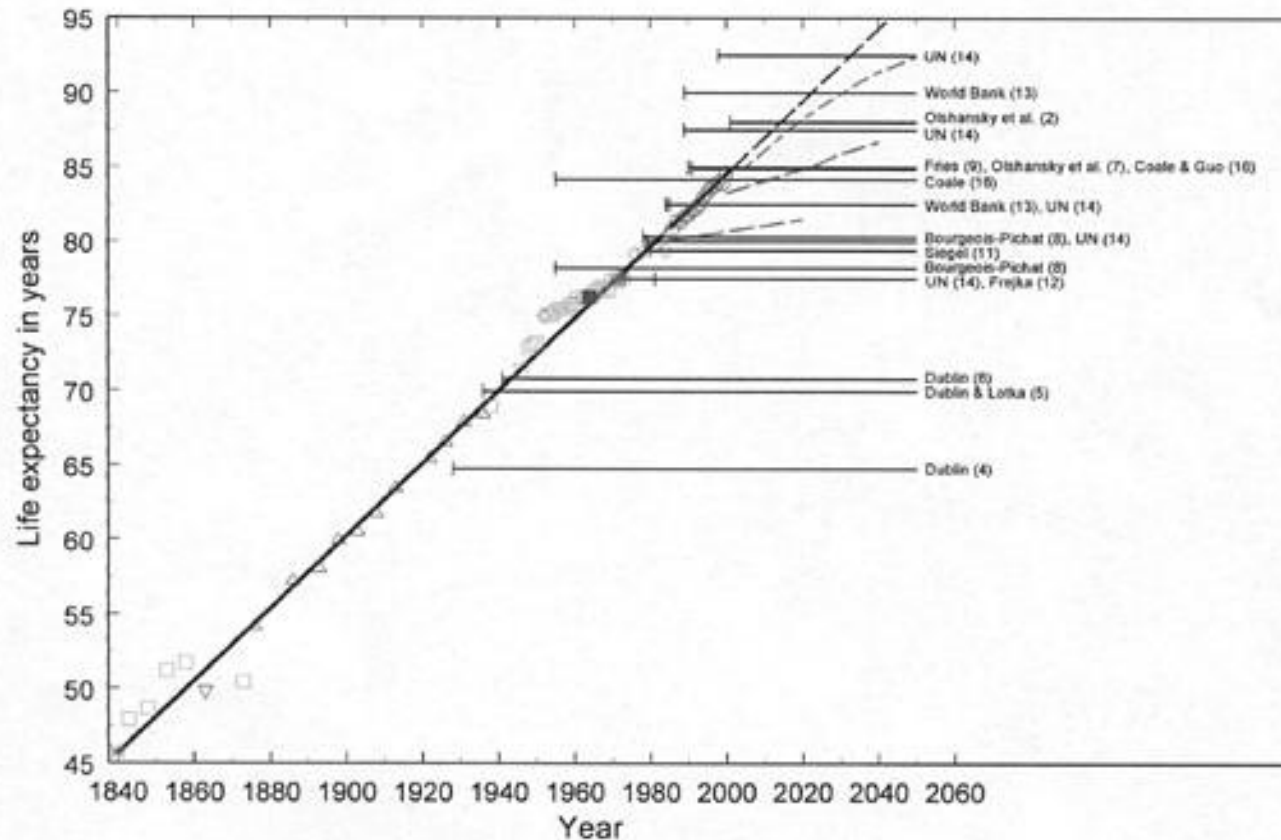
## **Taking action**

# The secular shift in ageing England, 1000 - 2500AD



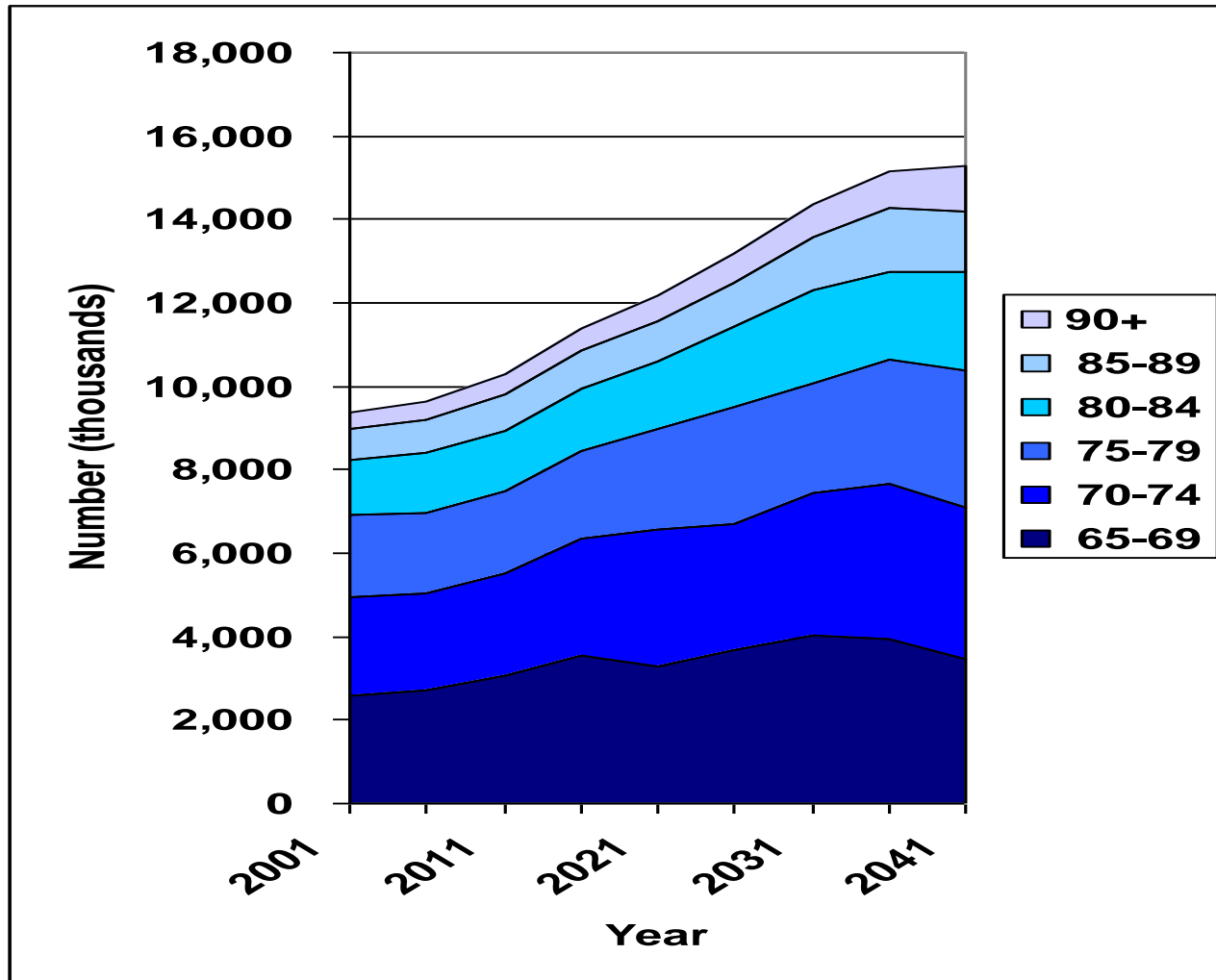
# Prediction of average life expectancy

Oppen & Vaupel, Science. 2002, May, 296(5570): 1029-31



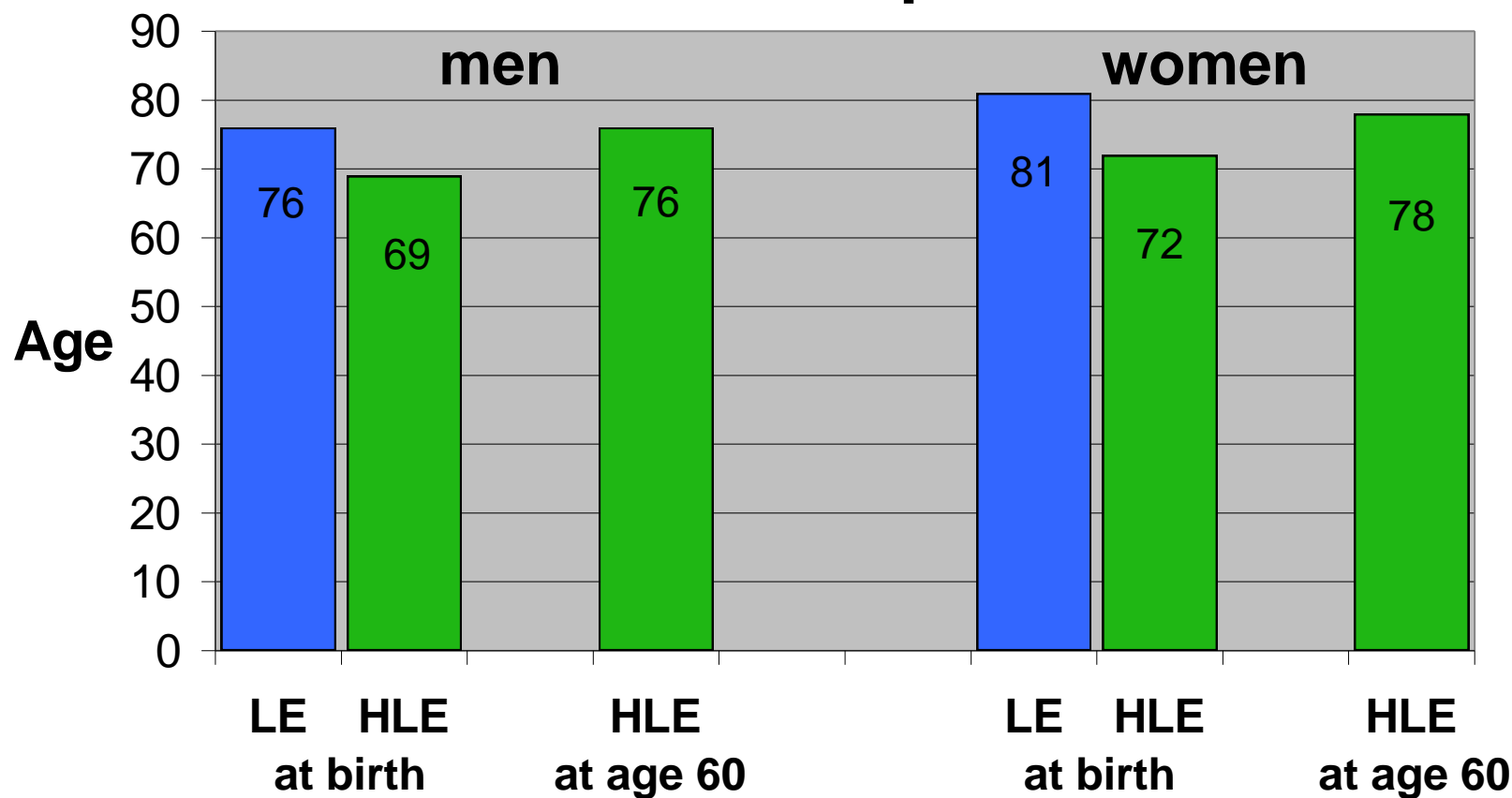
Female life expectancy in the record-holding country, 1840-2000:  
Vertical lines show assumed ceilings on life expectancy

# Projected numbers >65 years 2001-2041 UK



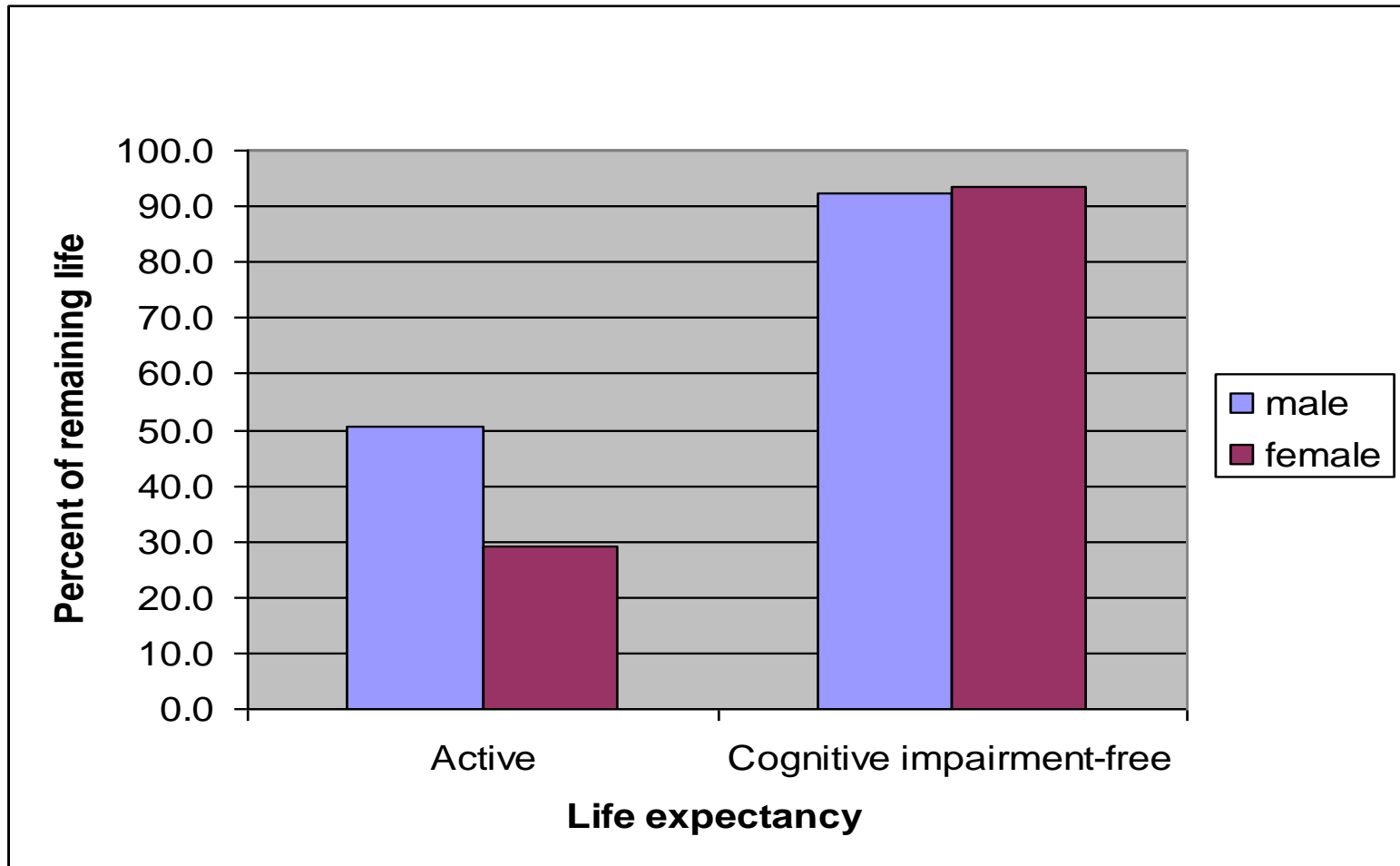
# Life expectancy (LE) and healthy life expectancy (HLE) in the UK

## World Health Report 2003



# Active life expectancy and cognitive impairment-free life expectancy at age 75

Melton Mowbray Study, Sauvaget et al, Age & Ageing 2001

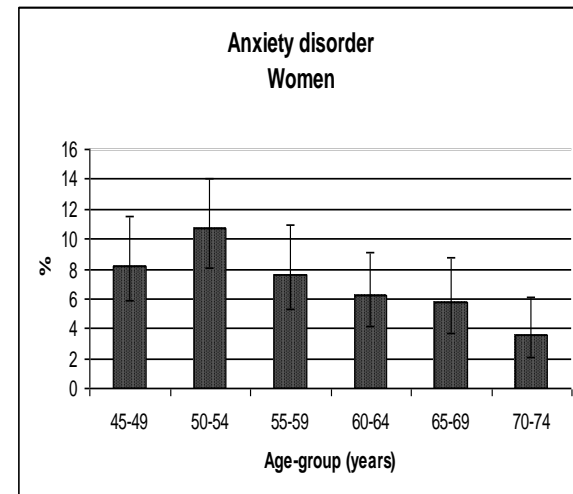
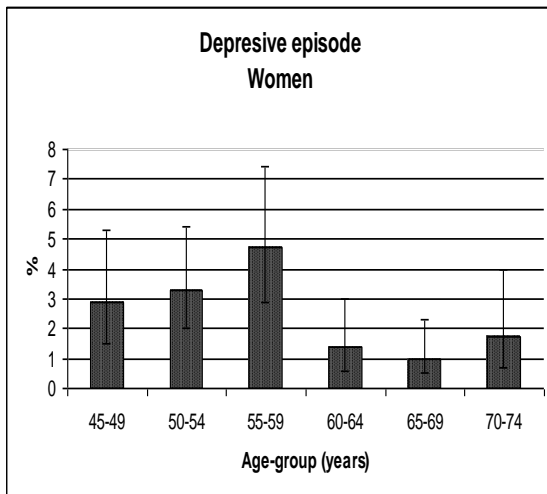
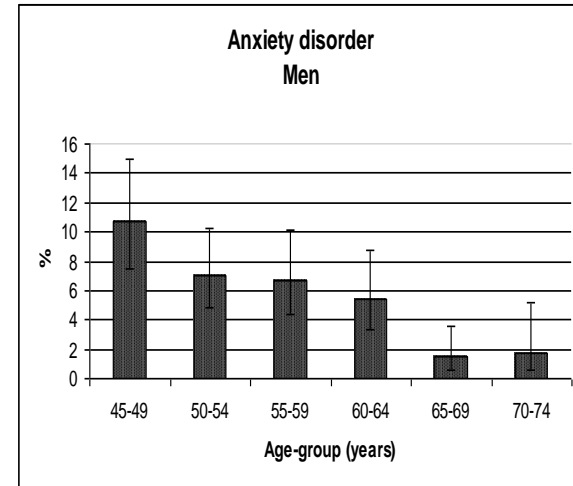
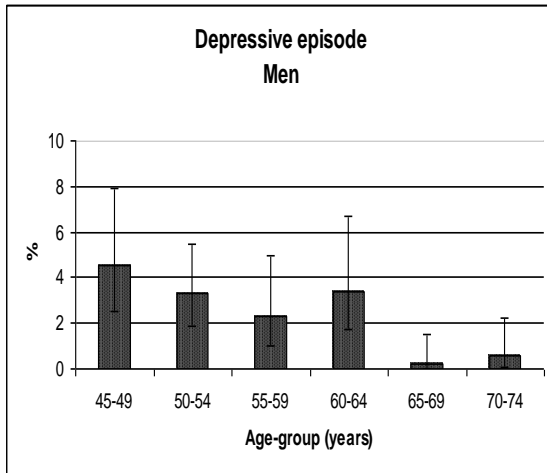


# Paradox of Retirement

- When statutory retirement and the state pension were introduced, few people lived long enough to retire.
- Now people are spending a quarter of their life in the post-retirement phase.

# Prevalence of common mental disorders drop around statutory retirement age

Villamil et al., Psychol. Med., 2006



Prevalence (%) of depressive episode and anxiety disorders by gender and age-group

# Possible solutions to the retirement paradox

- Creating age-friendly work environment
- Continuing career development
- Making work satisfying
- Valuing diversity
- Phased retirement
- Better work-life balance

# The ageing process

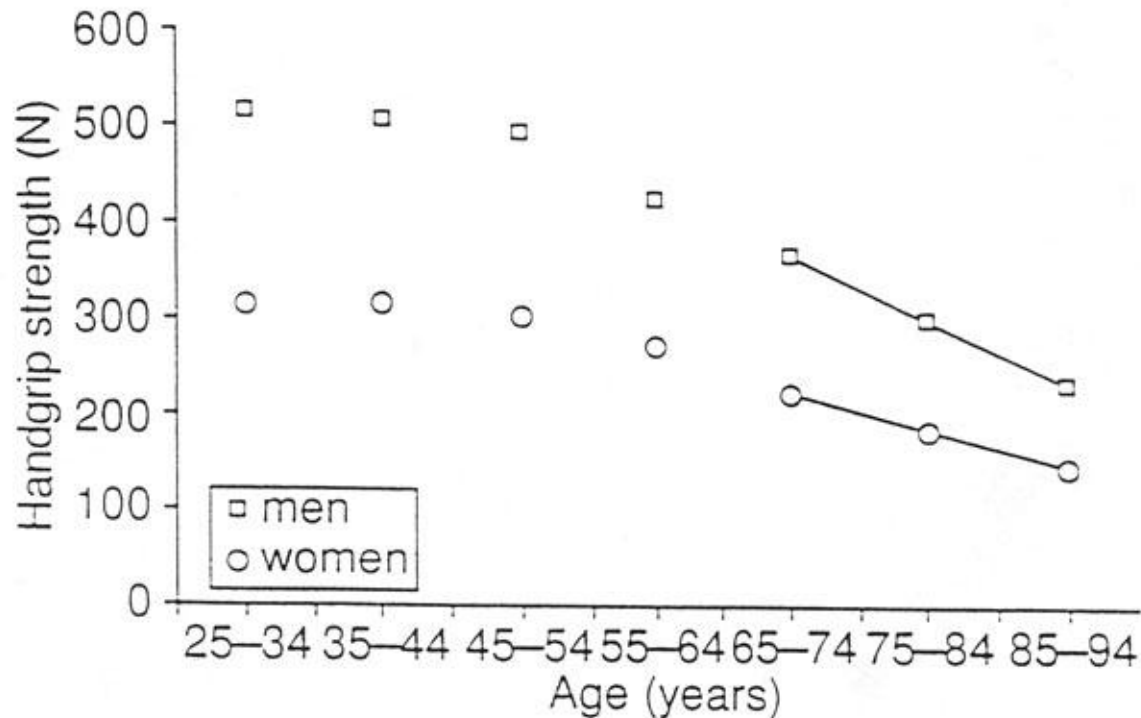
Biological ageing produces a series of challenges to which we have to adapt:

- physical ability
- sensory function
- mental capability

# The change in maximal isometric handgrip strength with age in men and women

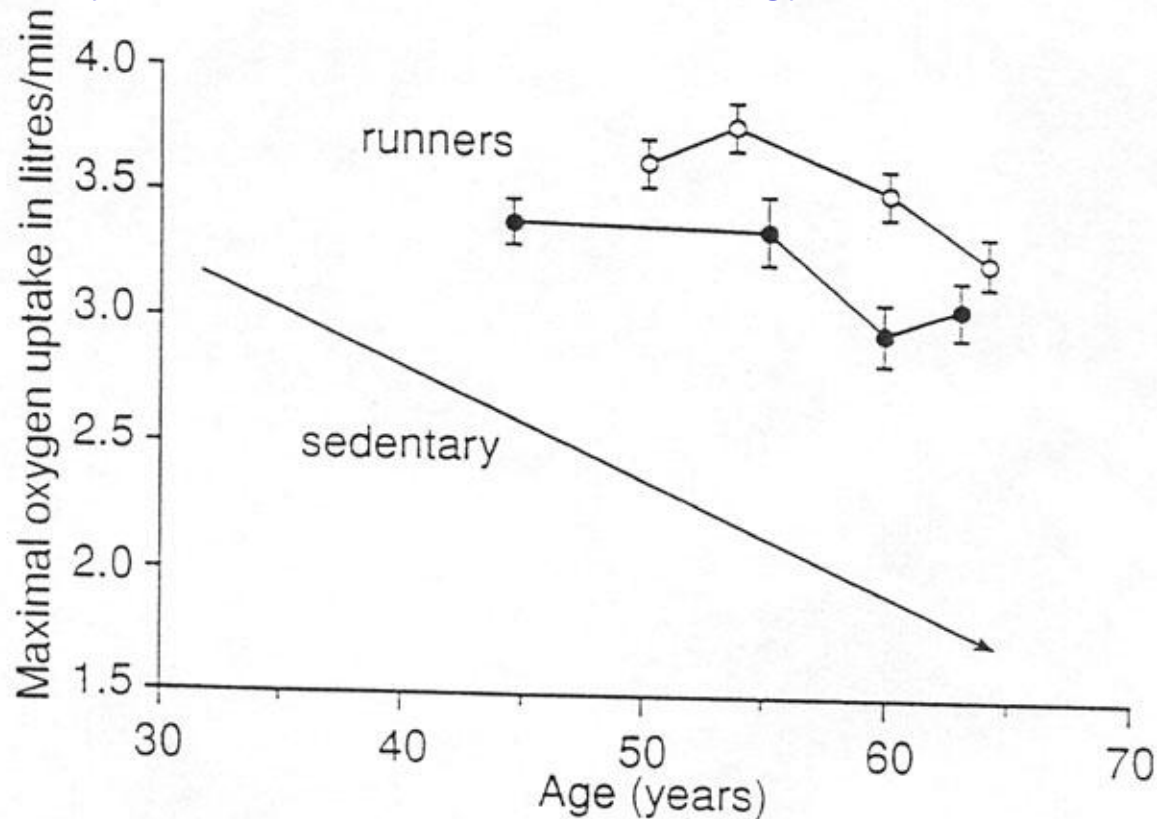
Data from two representative national surveys in England

Bassey, Reviews in Clinical Gerontology, 1997;7,289-297



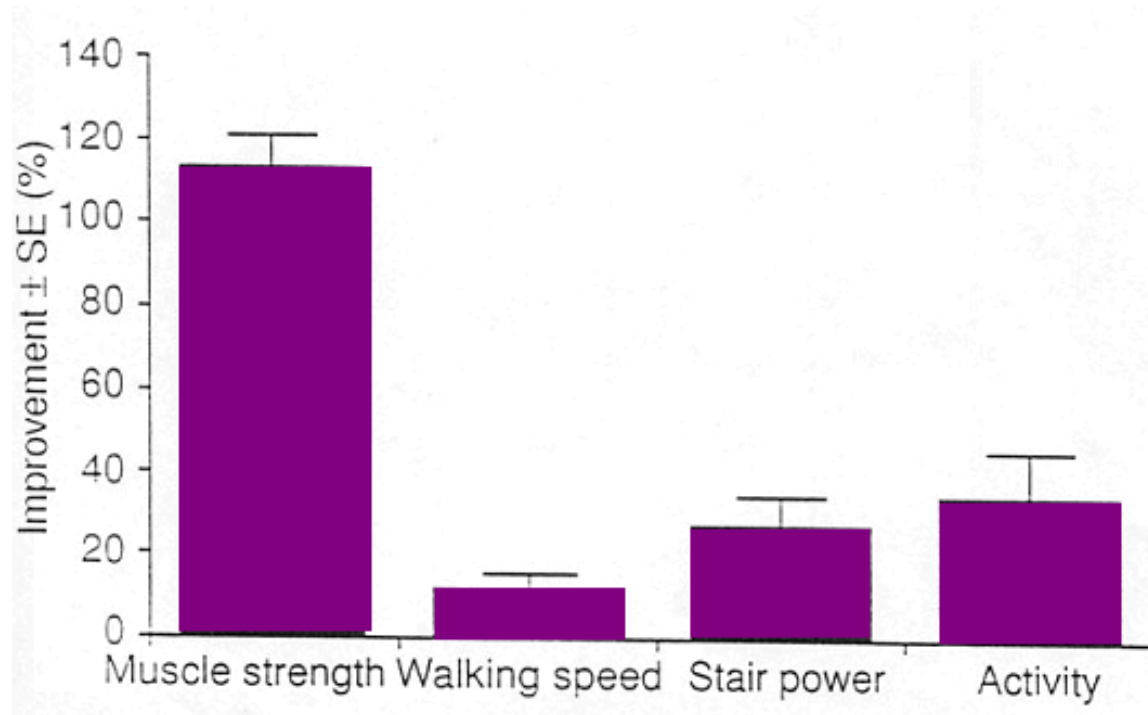
# Data from two longitudinal studies of male runners who attempted to maintain regular running activities throughout

Bassey, Reviews in Clinical Gerontology, 1997;7,289-297



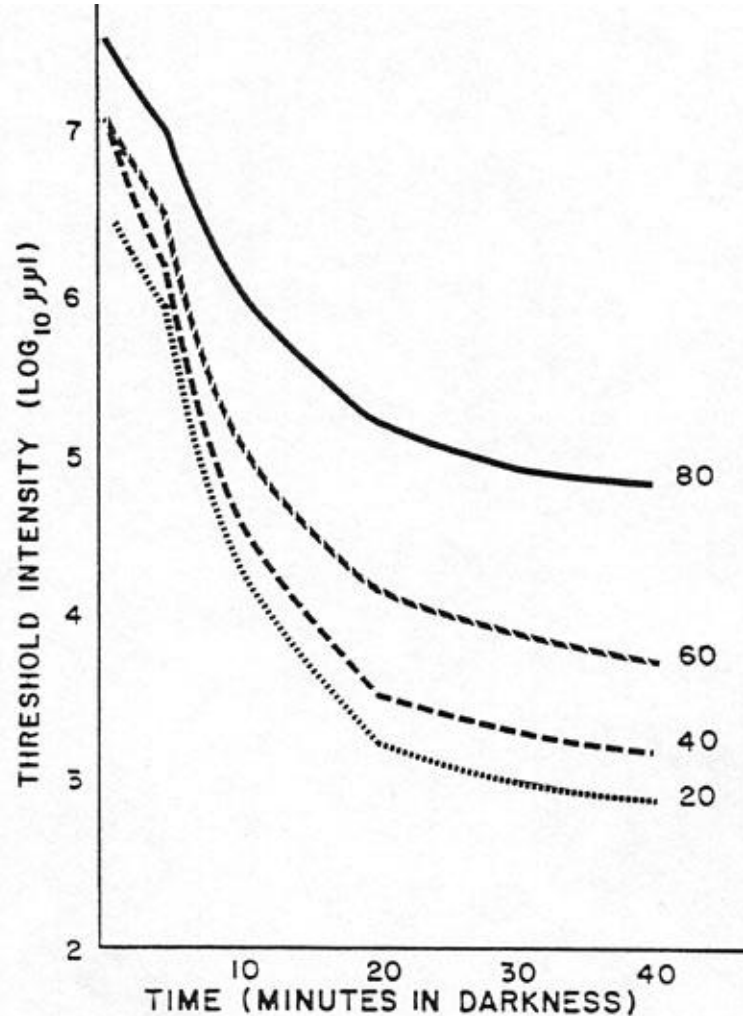
# Significant improvements in physical performance in frail nursing home residents of mean age 87 years

Bassey, Reviews in Clinical Gerontology, 1997;7,289-297



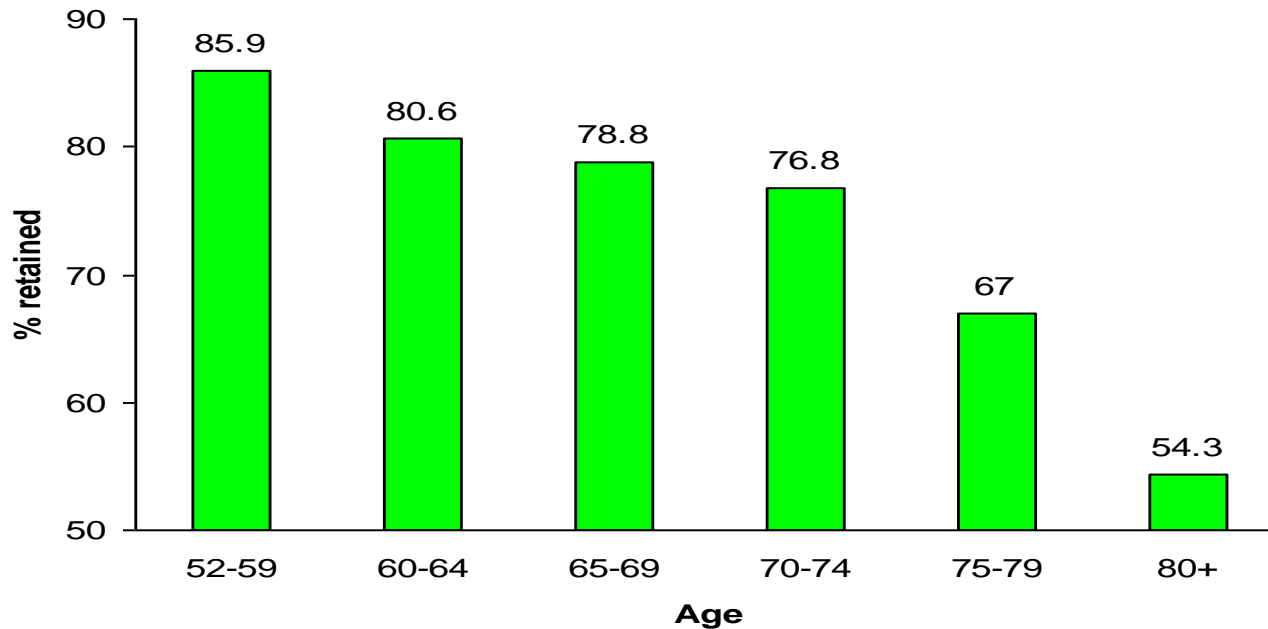
# Decline in light sensitivity

Visual threshold after dark adaptation in different age groups



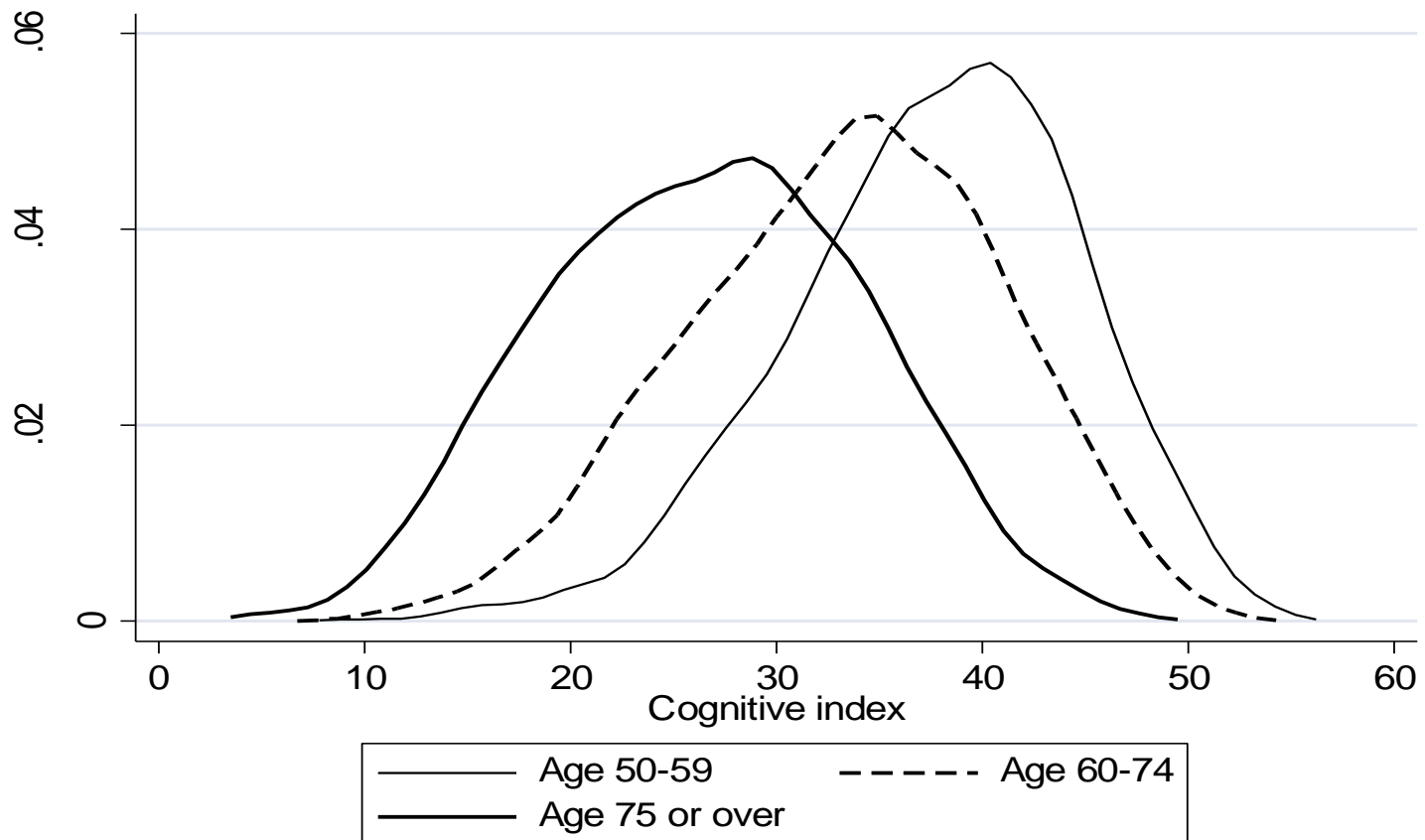
# How much information is retained after a short delay?

Delayed recall of a 10-word list as a percentage of immediate recall – data from the English Longitudinal Study of Ageing (ELSA)



# Variability in cognitive function increases with age

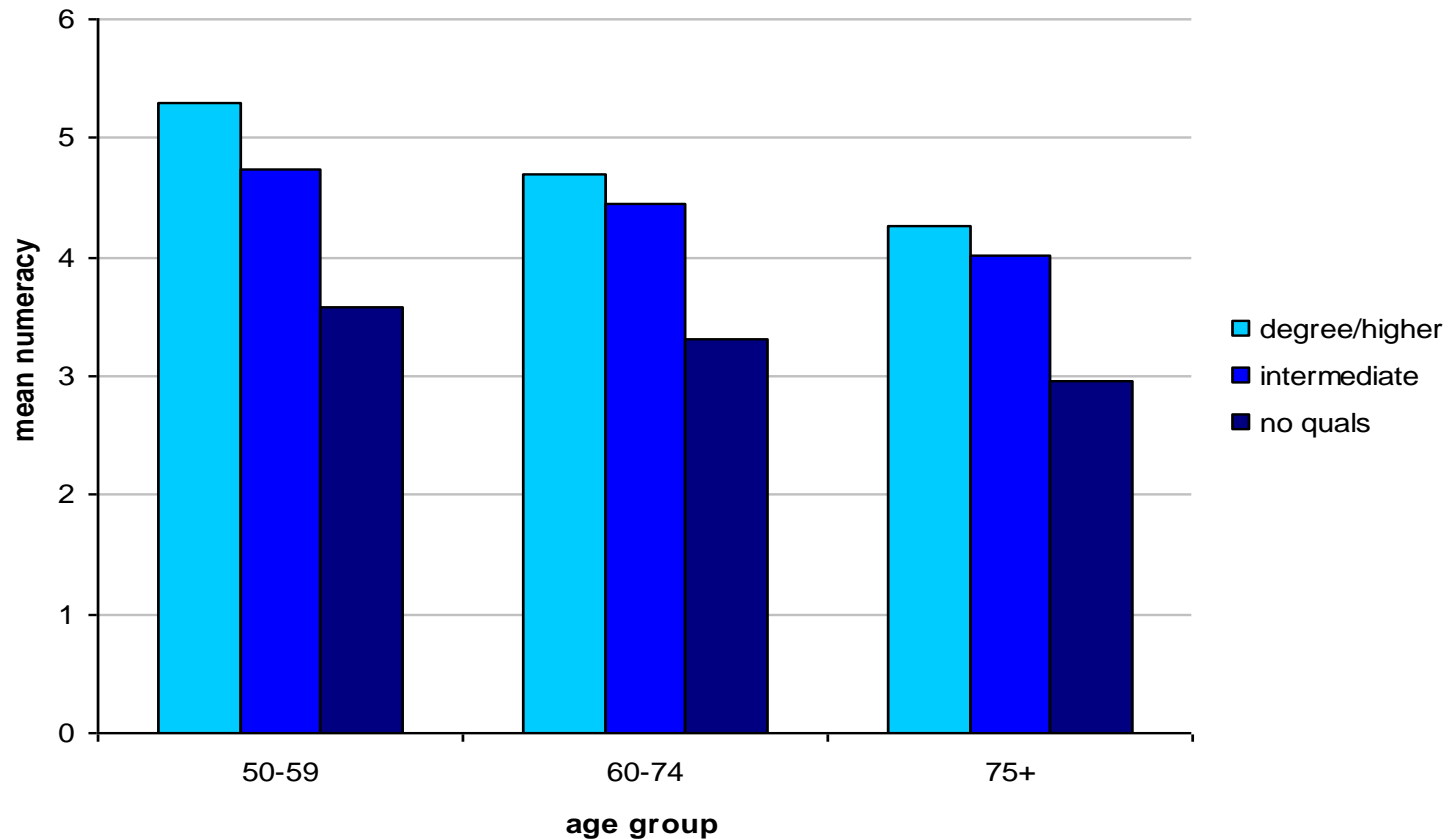
## English Longitudinal Study of Ageing (ELSA)



# Numerical ability by age and education

English Longitudinal Study of Ageing (ELSA)

Women



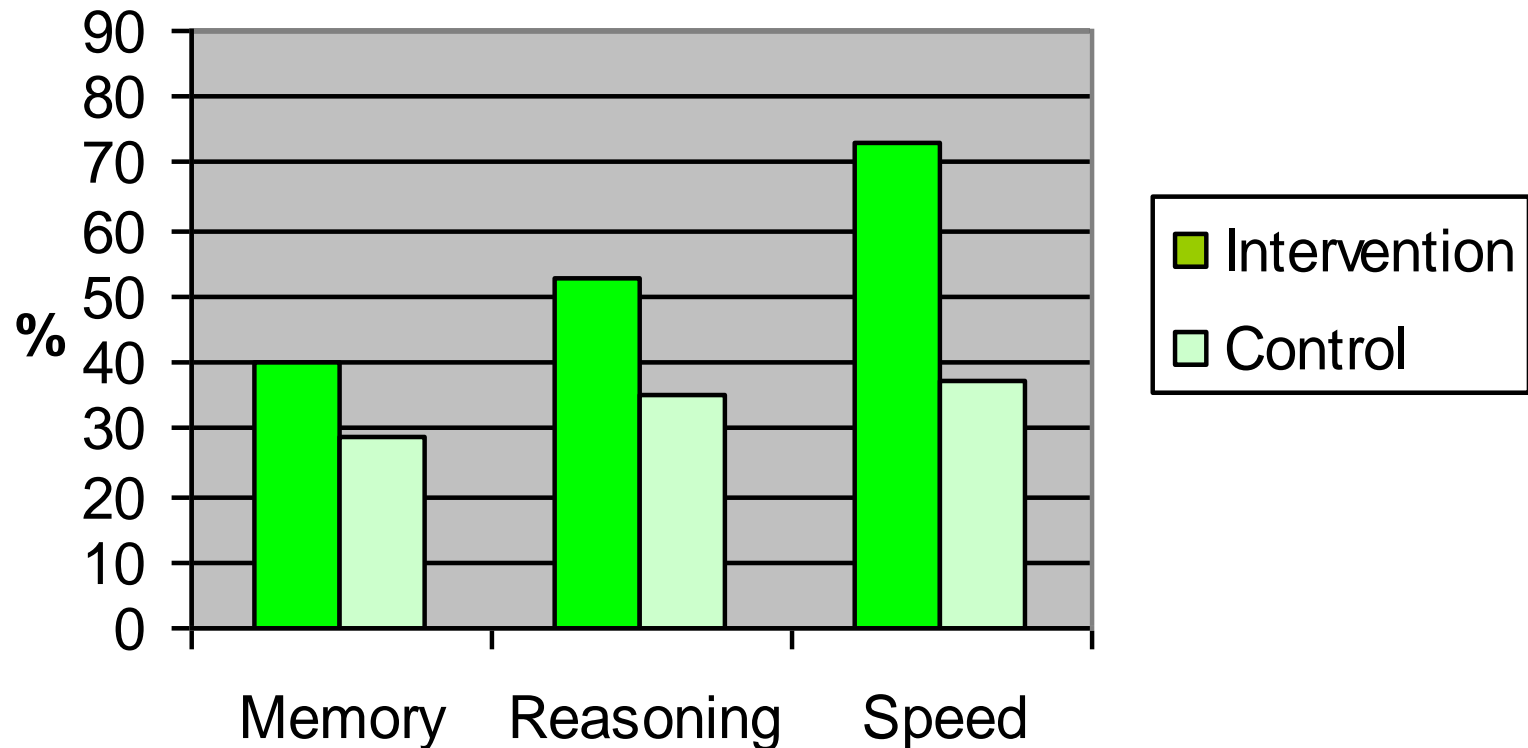
# **Role of modifiable lifestyle habits in preventing cognitive impairment**

Numerous studies have tracked cognitive change in older people.

They have found that higher levels of physical, mental or social activity reduce risk of cognitive impairment or dementia 5 or more years later.

# Effects of cognitive training with older adults

Results of the ACTIVE trial, 2002 (n = 2832, aged 65-94)



Percent showing reliable improvement at 2 years, following 10 or 14 intervention sessions

# The ageing brain

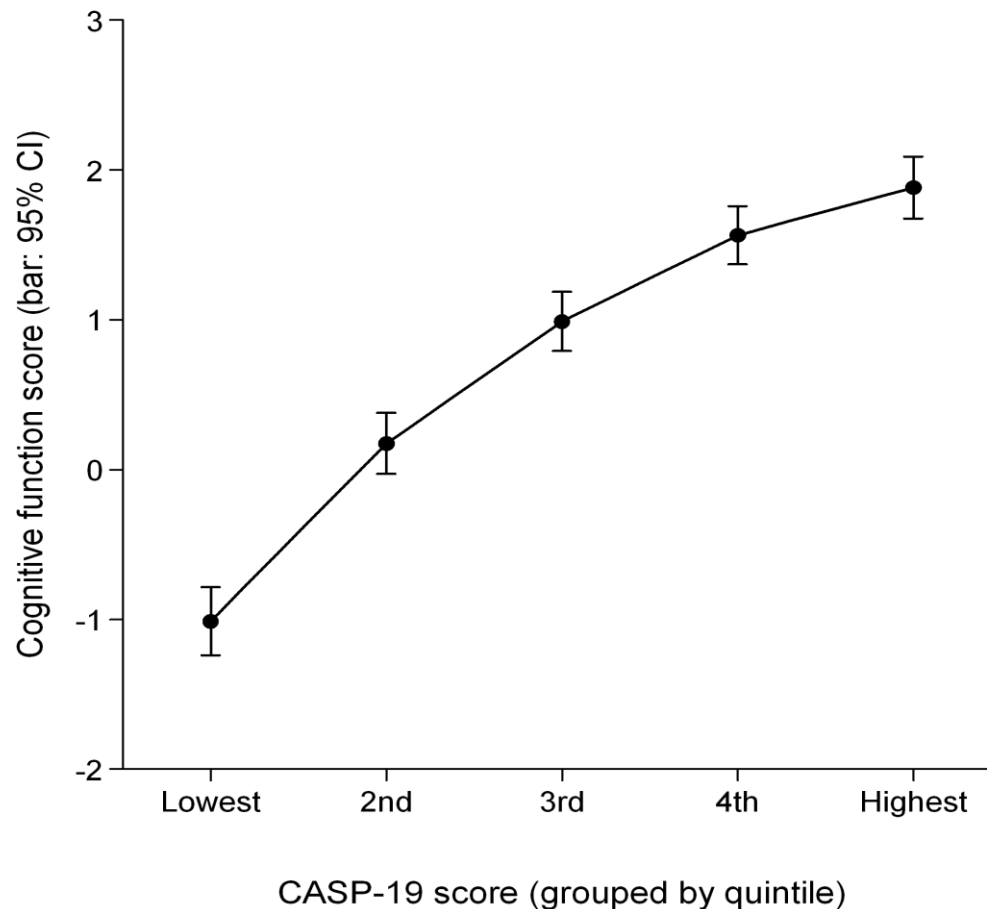
- Age-related loss of brain cells is far less than was once believed
- Neuroimaging reveals older adults show different patterns of activity to young adults
- New evidence suggests potential for re-organisation, plasticity, neurogenesis

# The psychology of ageing

- Positive attitudes
- Well-being and survival
- Social stereotypes

# Association between psychological well-being and cognitive function

English Longitudinal Study of Ageing (ELSA)



# Positive mental states broaden and build cognitive processes

Studies using techniques to induce different moods have shown that compared to neutral or negative mood, people in a positive mood:

- have a broader focus of attention
- generate more ideas
- are more resilient in stressful situations

# Sample of positive and negative items from the GHQ-30 (Goldberg,1972)

## Negative Items

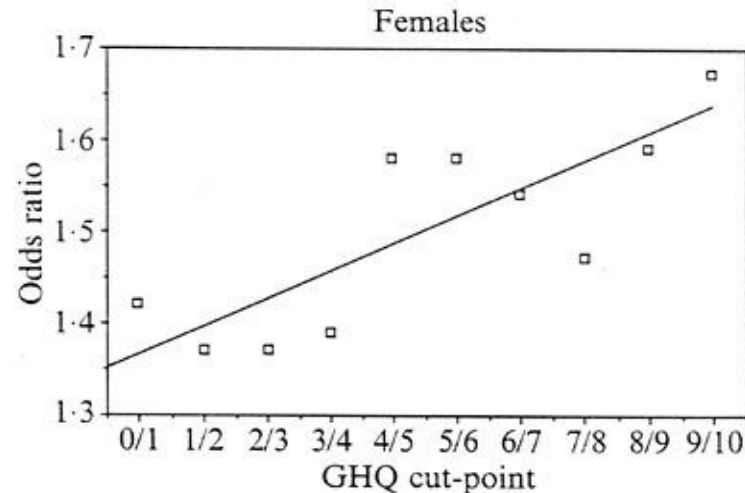
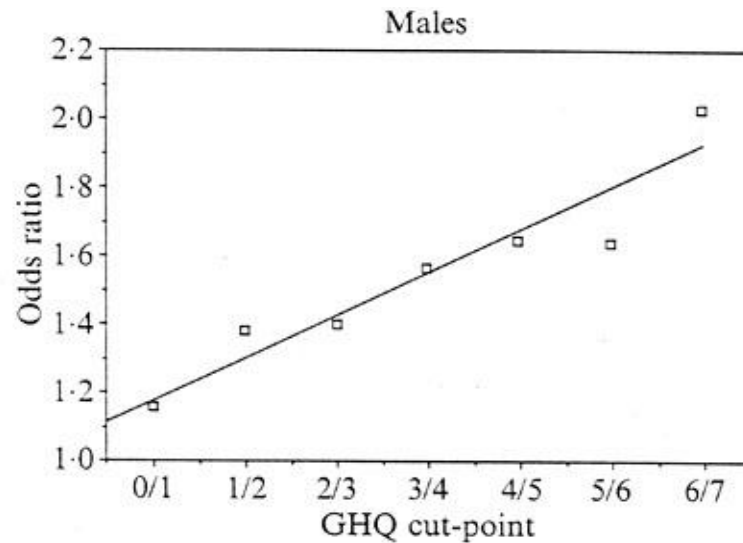
- ...lost much sleep over worry
- ...felt constantly under strain
- ...finding life a struggle all the time
- ...been feeling unhappy and depressed
- ...been losing confidence in yourself
- ...felt that life is entirely hopeless

## Positive Items

- ...managing to keep yourself busy and occupied
- ...able to feel warmth and affection for those near to you
- ...felt you are playing a useful part in things
- ...able to enjoy your normal day-to-day activities
- ...able to face up to your problems
- ...feeling reasonably happy all things considered

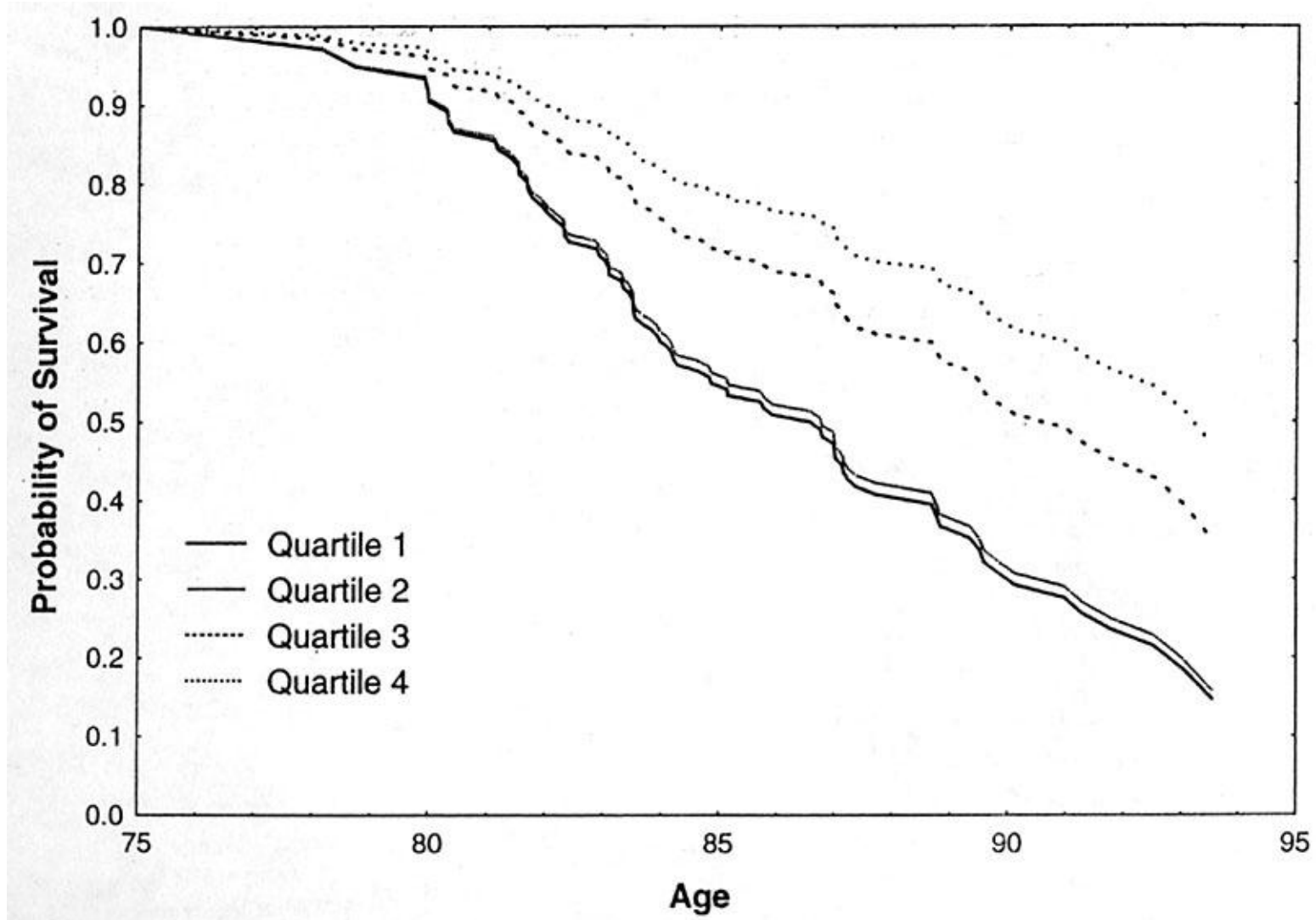
# Odds ratio for 7-year survival by different GHQ cut-points

Huppert & Whittington, Psychological Medicine, 1995



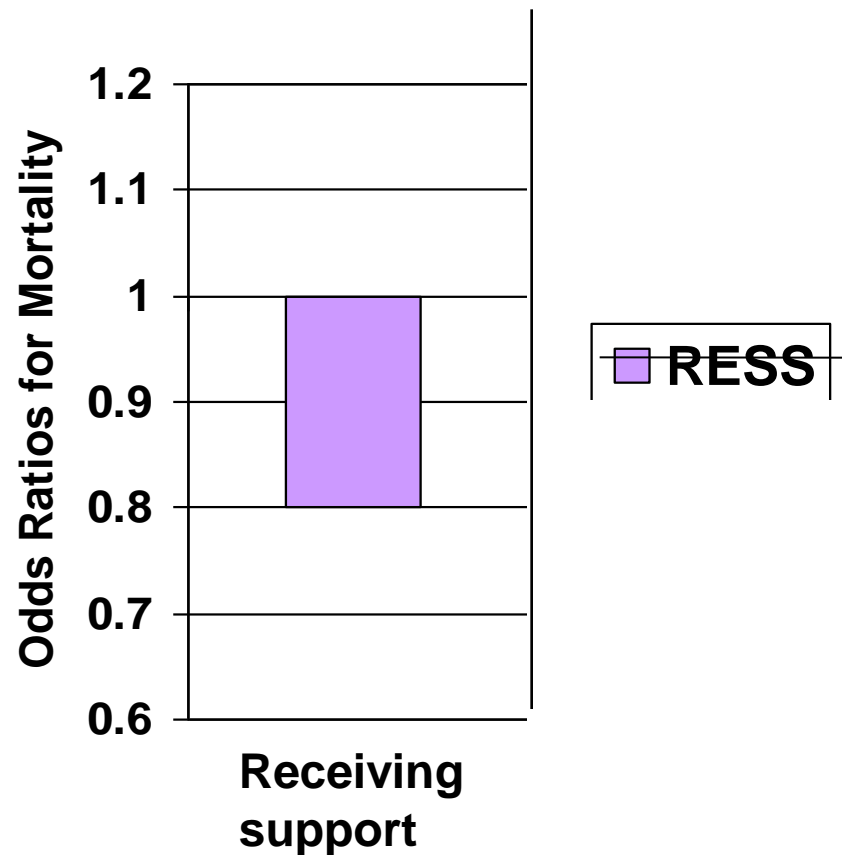


# Positive emotions in early life



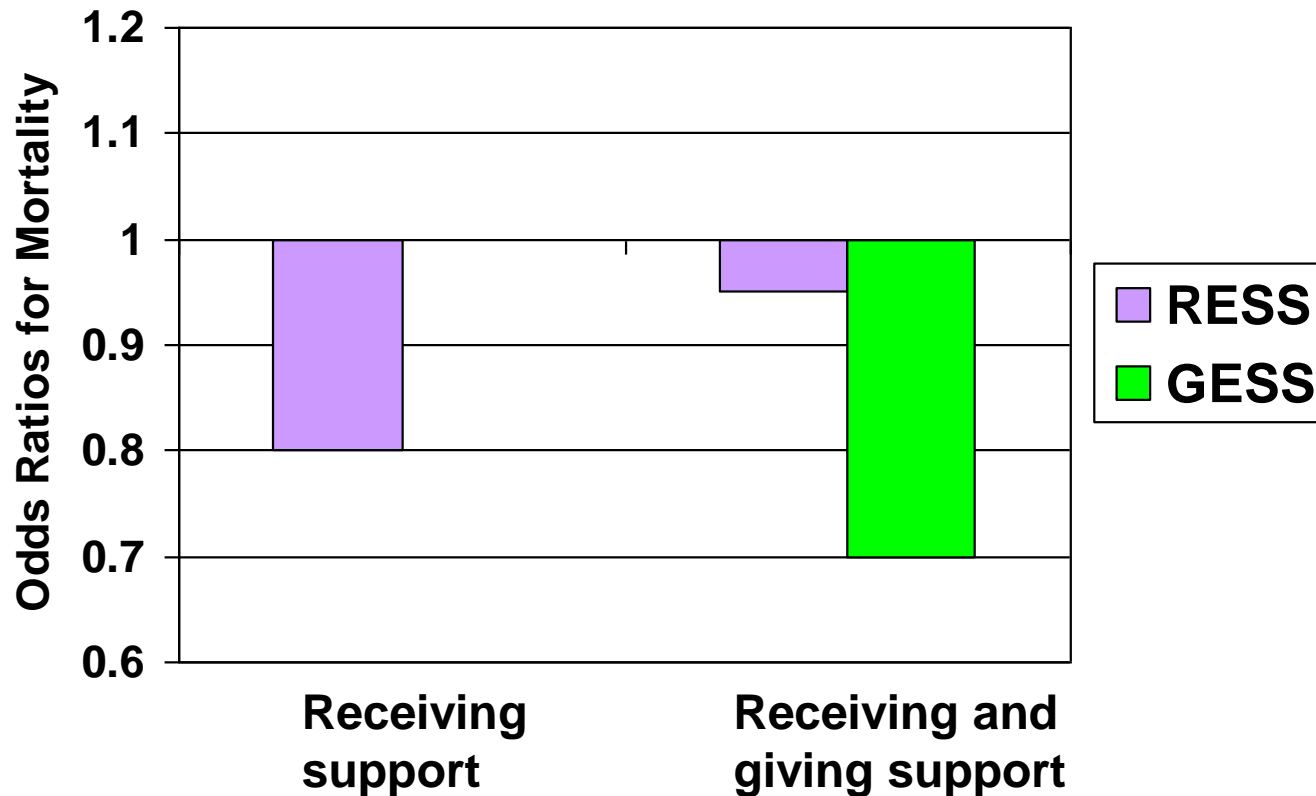
Quartile rankings of the number of positive emotion sentences in autobiographies written in early life and the probability of survival in later life for 180 participants in the Nun Study

# Receiving support is beneficial for survival



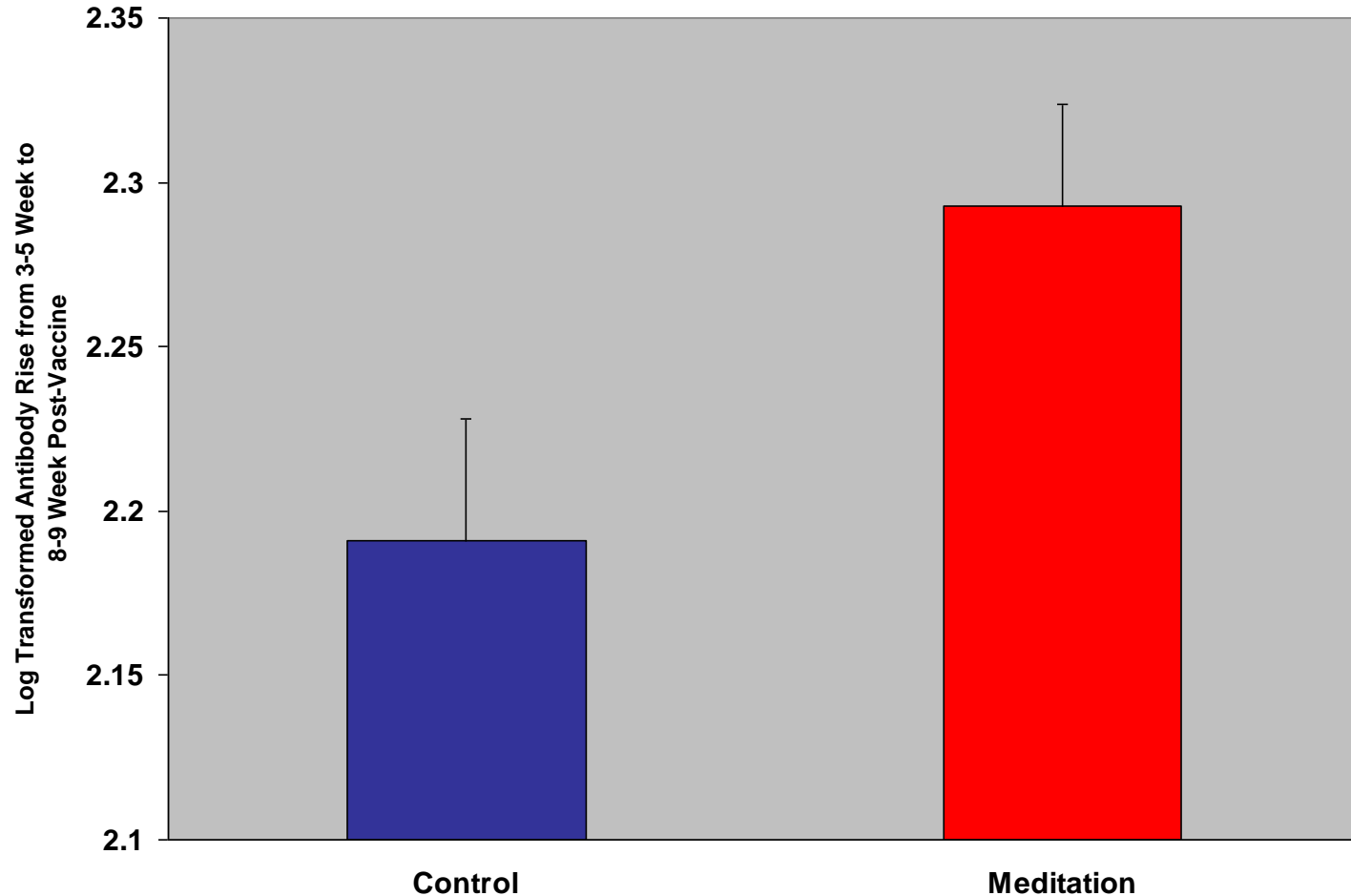
Results of hierarchical logistic regression (Brown et al. Psychol Science, 2003)  
CLOC Study, 423 couples, 5 year follow-up

# Giving support is more beneficial than receiving it



Results of hierarchical logistic regression (Brown et al. Psychol Science, 2003)  
CLOC Study, 423 couples, 5 year follow-up

# Meditation effects on antibody titers to influenza vaccine



**Do social attitudes affect  
our well-being as we age?**





**HAZARD!**  
**Old People**  
**Feeling Young!**

# What is the effect of age stereotypes?

Becca Levy and colleagues at Yale University have conducted a series of experiments comparing the effects of positive and negative age stereotypes on:

- Memory
- Numerical ability
- Self confidence
- Cardiovascular response to stress

# Negative age stereotypes

Sample of words used for subliminal priming:

- confused
- dying
- dependent
- senile

# Positive age stereotypes

Sample of words used for subliminal priming:

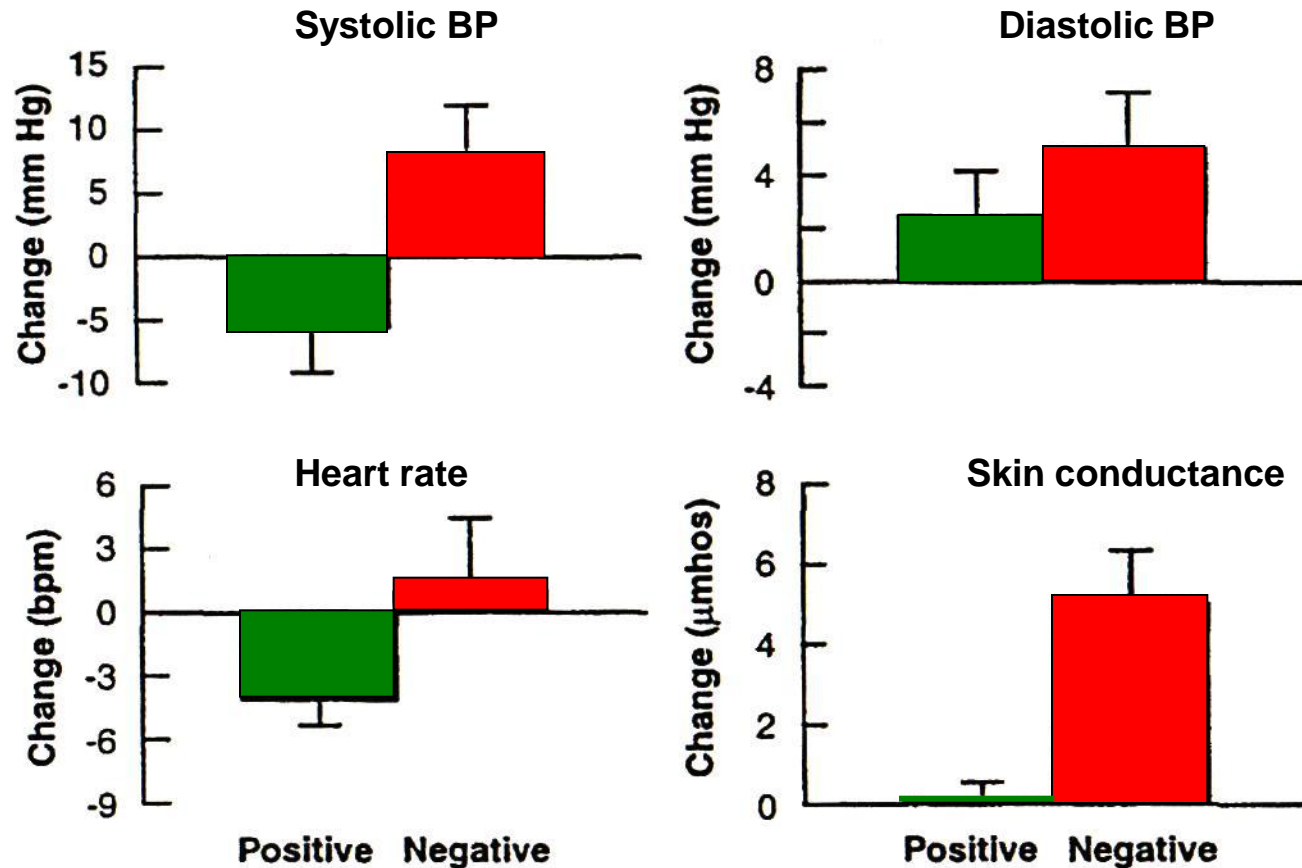
- wise
- astute
- enlightened
- sage

# Age stereotypes have a powerful effect on the behaviour and health of older people

- Negative stereotypes impaired capability, confidence and recovery from stress
- Positive stereotypes had beneficial effects
- Age stereotypes can produce a downward spiral or increase functioning and well-being

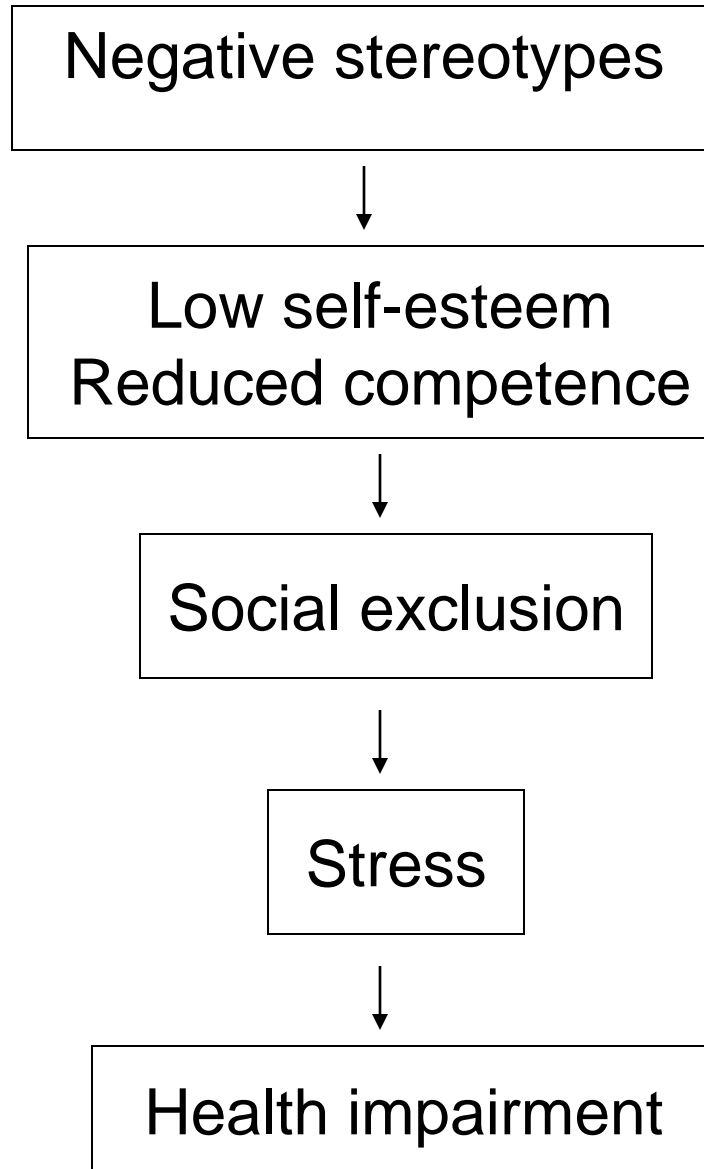
# Influence of ageing stereotypes on cardiovascular response to stress

Levy et al J.Gerontol 2000

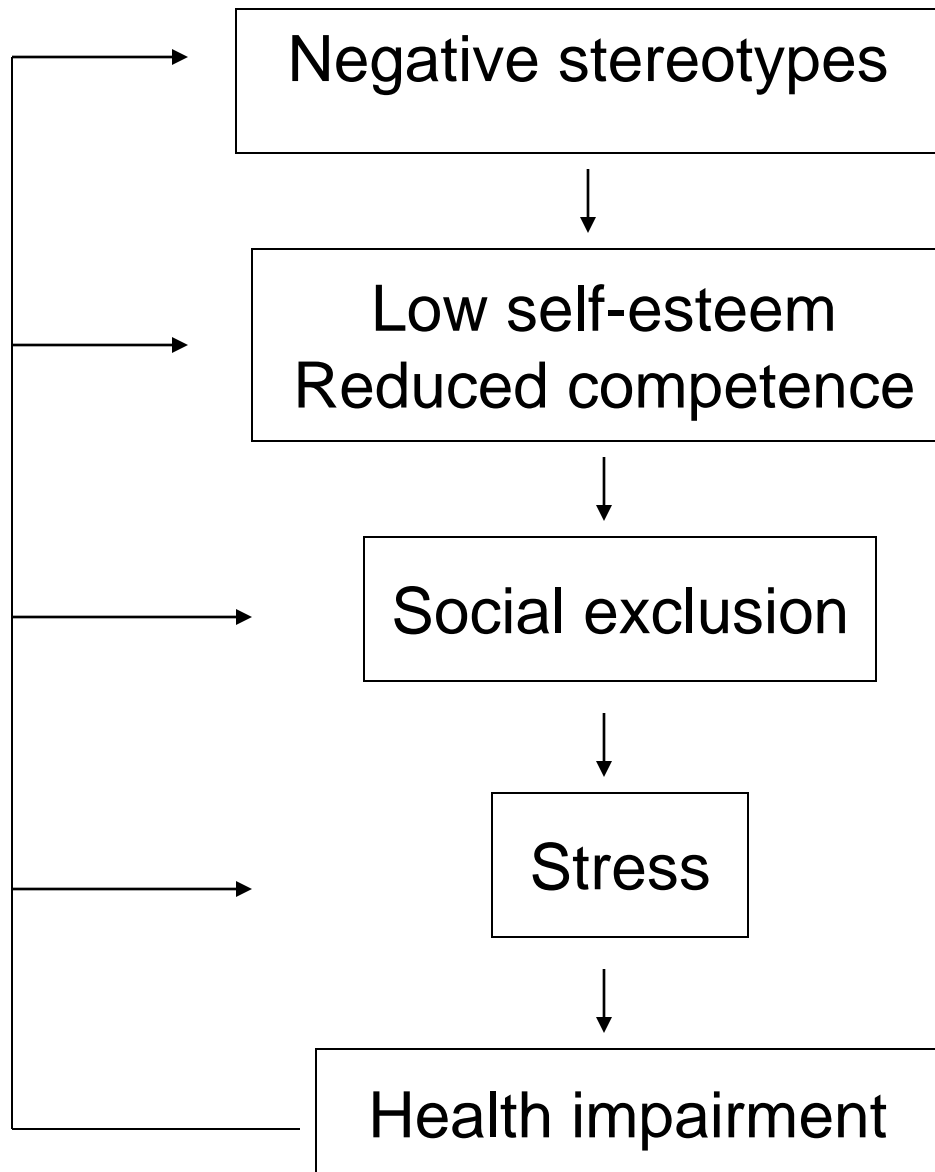


Change from baseline

# Damaging effects of ageism



# Damaging effects of ageism



# **UK Government Foresight Project on Mental Capital and Well-being**

## **Aim**

Using the latest science and technology to make recommendations about how to enhance the mental capital and well-being of the nation.

# UK Government Foresight Project on Mental Capital and Well-being

## Method

80 state-of-the-science reviews, 12 international workshops, 400 experts from around the world

Themes focussed on:

- learning, especially early years
- well being in the workplace
- the ageing population

**What are the main factors  
which lead to well-being?**

# Five ways to well-being

Commissioned by the Foresight Project to summarise the evidence from the Mental Capital and Wellbeing Project into 5 key messages



Five ways  
to wellbeing

# Connect...

Connect with the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

Five ways  
to wellbeing

## Be active...

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and one that suits your level of mobility and fitness.

Five ways  
to wellbeing

## Take notice...

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

Five ways  
to wellbeing

## Keep learning...

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.

## Five ways to wellbeing

### Give...

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.

# Conclusions

- People are living longer, healthier, more productive lives
- Social structures and social attitudes lag behind the new realities of ageing
- Negative age stereotypes are outdated and dangerous
- Negative age stereotypes impair performance, confidence and physiological functions. This reinforces negative stereotypes
- Positive attitudes to ageing reflect the new reality and reinforce health and capability
- Encouraging positive attitudes is a matter of urgency

