

# Sustained enjoyment of life and mortality at older ages: analysis of the English Longitudinal Study of Ageing

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## Background

- Wellbeing is associated with reduced risk of all cause mortality and the incidence of specific conditions such as CHD
- Several studies have also documented protective associations between various aspects of wellbeing and mortality
- In England high enjoyment of life among those aged 50 and over was associated with better survival

# Life expectancy at the age of 50 in England according to enjoyment of life



# Objectives

- To explore whether sustained enjoyment of life over a four year period is associated with better survival
- To test whether the effects are independent of demographic, health, functional, and emotional characteristics

## Main findings

- People reporting high enjoyment of life on 2 or 3 occasions were less likely to die compared to those who never reported high enjoyment of life.
- Health characteristics explained some of the relationship between sustained enjoyment of life and mortality.

# Methods

## Data

- 9365 participants of ELSA who were alive between waves 1 and 3 (2002-2003 and 2006-2007)
- 1310 deaths occurred between 2006 and March 2013 (follow-up time 7 years)

## Enjoyment of Life

*“I enjoy the things that I do”*

*“I enjoy being in the company of others”*

*“On balance, I look back on my life with a sense of happiness”*

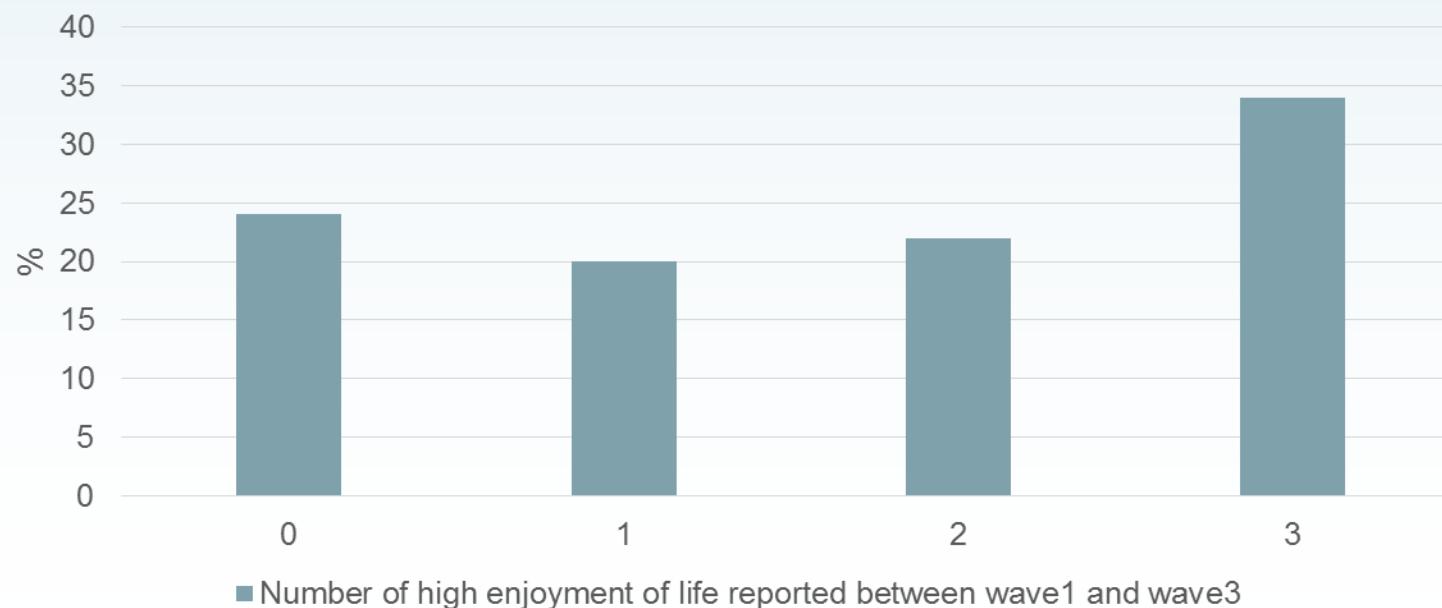
*“I feel full of energy these days”*

At each wave we created a variable as follows:

“Low enjoyment” and “High enjoyment” of life

## Sustained Enjoyment of Life

- We generated a sustained enjoyment variable by summing the number of reports of high enjoyment of life between 2002 and 2006; scores could range from none to three reports for each individual.



# Characteristics considered

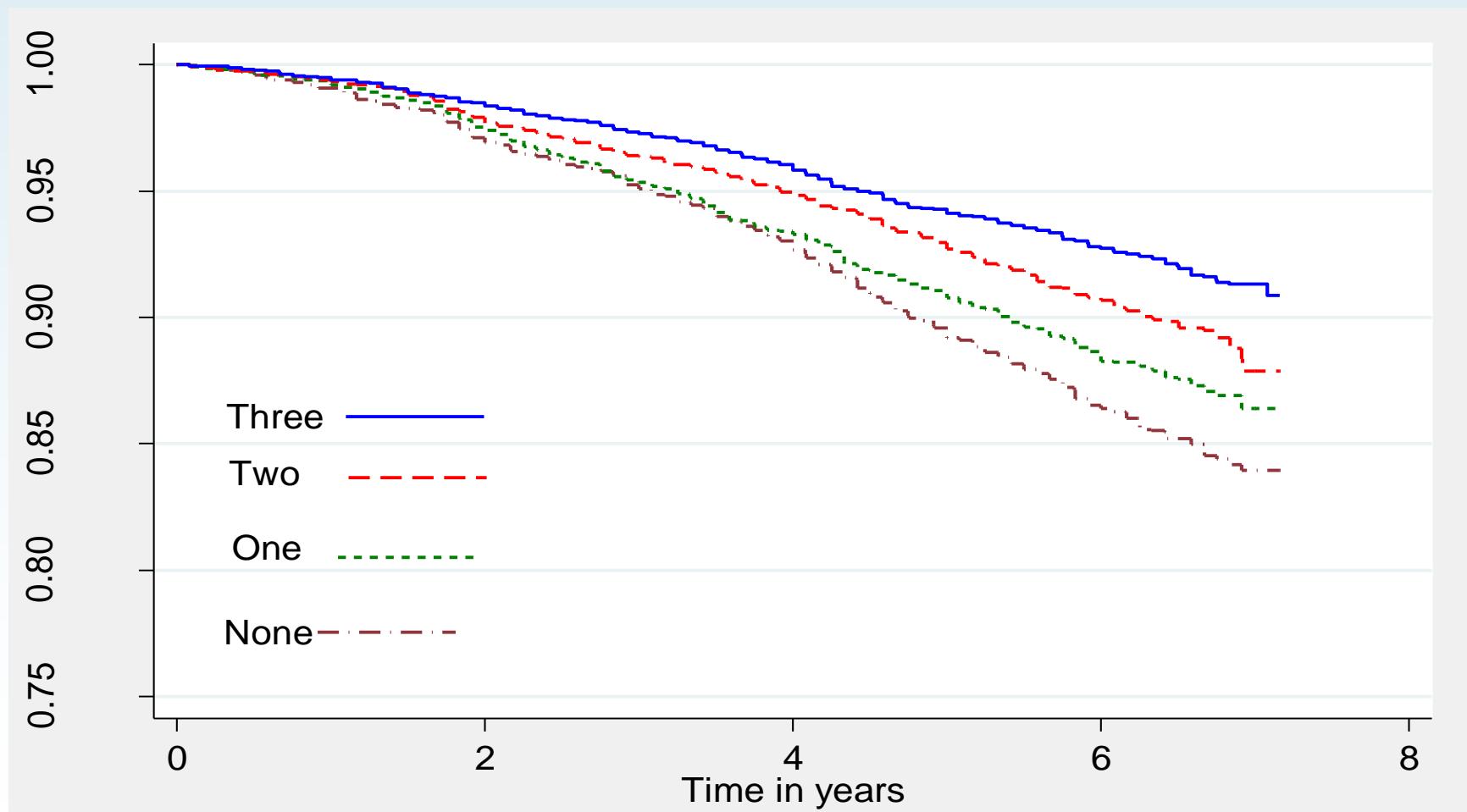
- **Demographic:** Age, sex, ethnicity, marital status, employment status, education and wealth
- **Health:** self-rated health, limiting longstanding illness, coronary heart disease, cancer, diabetes, stroke, arthritis, chronic lung disease, and limitations with ADLs and mobility
- **Emotional:** Doctor diagnosed depression and depressive symptoms

# Results

## Sustained enjoyment of life by baseline characteristics

- The number of reports of high enjoyment of life was greater in women, and in participants who were married or cohabiting, well educated, wealthier, younger, and currently employed
- Baseline health profiles were more favourable in those who reported more sustained enjoyment of life.
- People who never reported enjoyment of life more likely to have depressive illness and current depressive symptoms.

# Survival curves according to the number of reports of enjoyment of life



## Additional considerations

- The conclusions were the same whether high enjoyment was reported on consecutive or non-consecutive waves and whether a single report of high enjoyment occurred on waves 1, 2, or 3.
- Serious illness and terminal decline undoubtedly impair enjoyment of life, which could lead to an association between lack of enjoyment and mortality. We excluded deaths that occurred within two years of the third and final assessment of enjoyment in 2006 and we found similar results

# Summary

- Sustained positive wellbeing over several years is related to lower mortality
- These effects remained significant after adjusting for demographic factors and health status, and also for physical functional impairment and depressive symptoms

## Possible reasons

- Enjoyment of life might exert an influence through associations with healthy lifestyle.
- There could be direct biological markers that contribute to protective associations. Several aspects of wellbeing are associated with better health which might reduce the risk of life threatening illness if sustained over time.

# Conclusions

- The results add a new dimension to understanding the significance of wellbeing for health outcomes by documenting the importance of sustained enjoyment of life over time.
- Promoting positive aspects of wellbeing, such as enjoyment of life, over many years can reduce the risk of death, illness and encourage healthy lifestyles



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