CLOSER Conference

Ageing

Chair: **Amanda Sacker**

- Beyond "Social Syndrome": An interplay among education, social class and wealth, predicting dementia risk in the English Longitudinal Study of Ageing
  Dorina Cadar
- Retirement and Health: Evidence from England
  Liam Rose
- Job loss and Aging in the Philippines
  Mae Abigail Oberos
- Supporting ageing parents and changes in quality of life in Sweden and Denmark
  Thijs Van Den Broek

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Beyond "social syndrome": an interplay among education, social class and wealth predicting dementia risk in the English Longitudinal Study of Ageing

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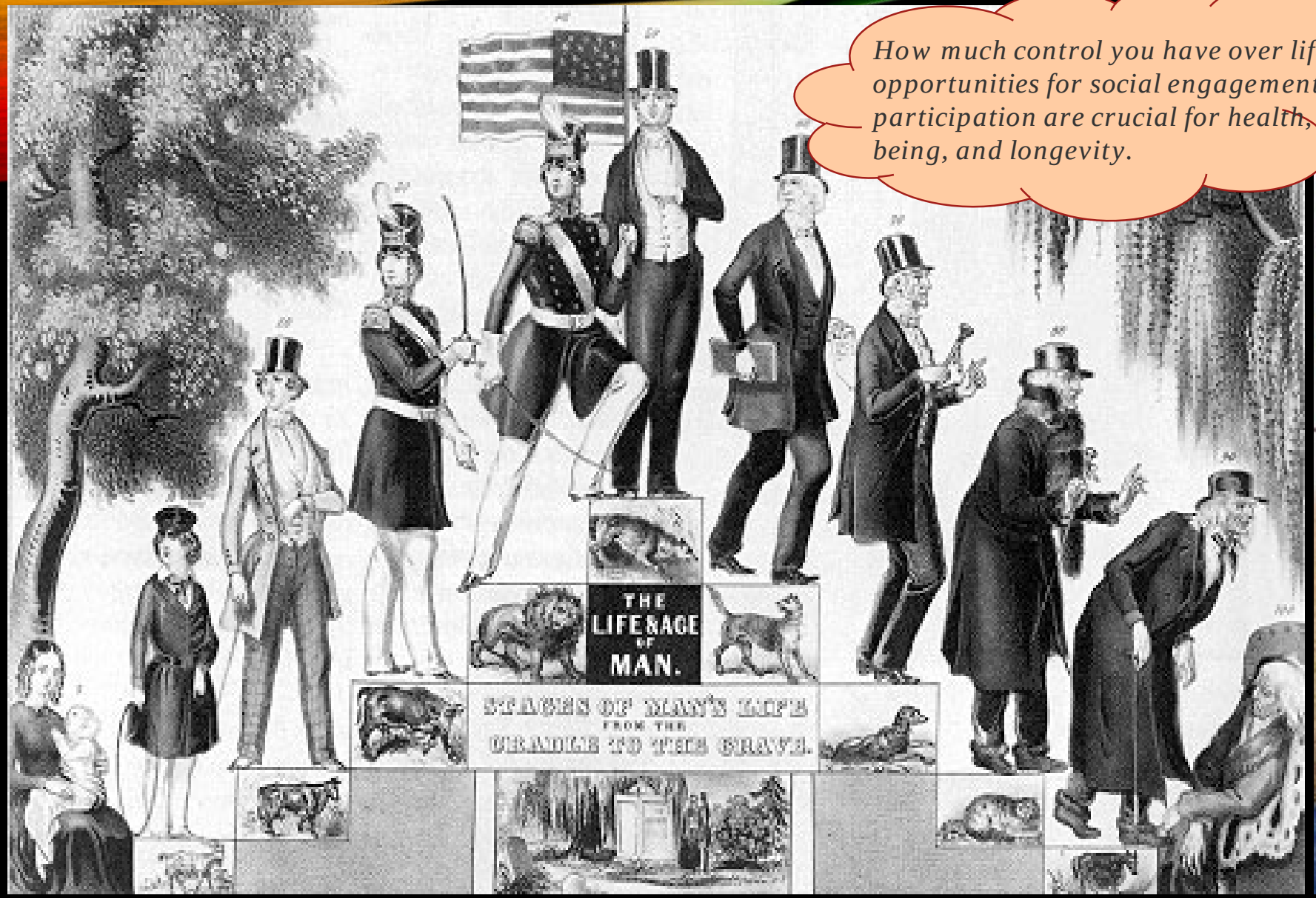
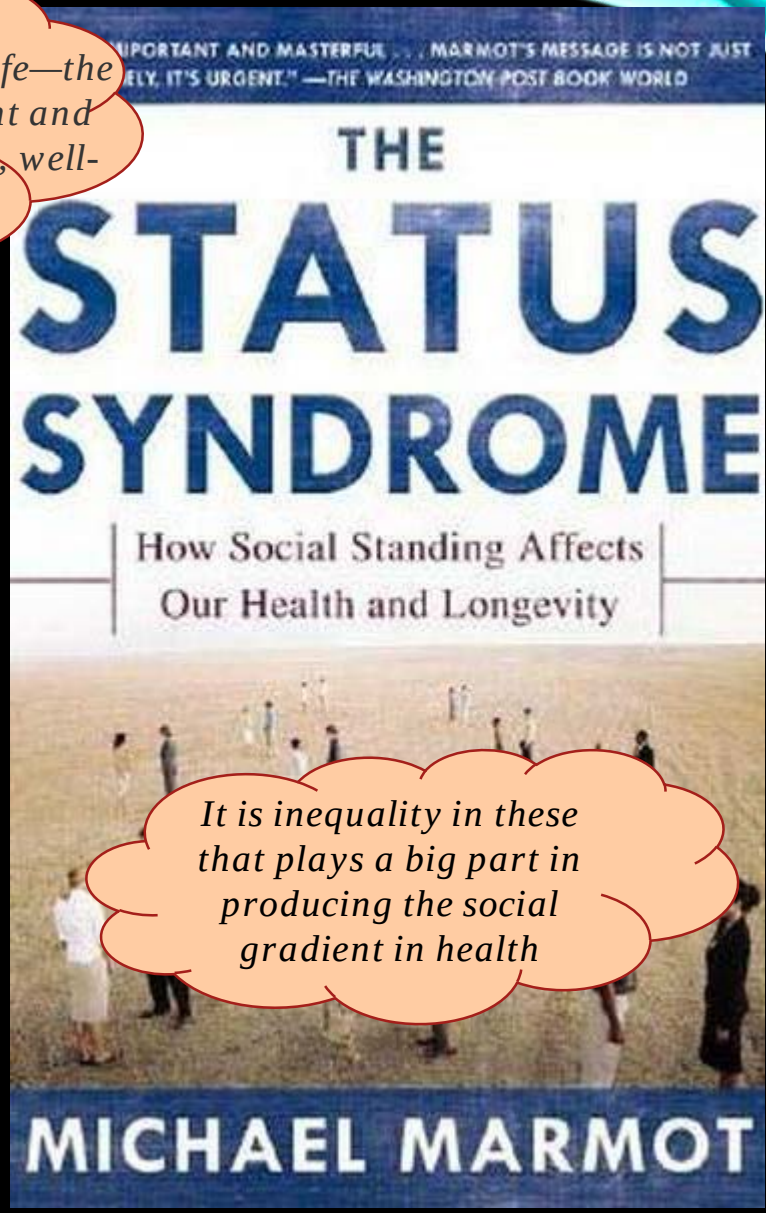
CLOSER Conference 1-2nd November 2017

Overview

- Dementia a global health challenge
- Risk factors associated with dementia
- Socioeconomic disparities and dementia prevalence in ELSA



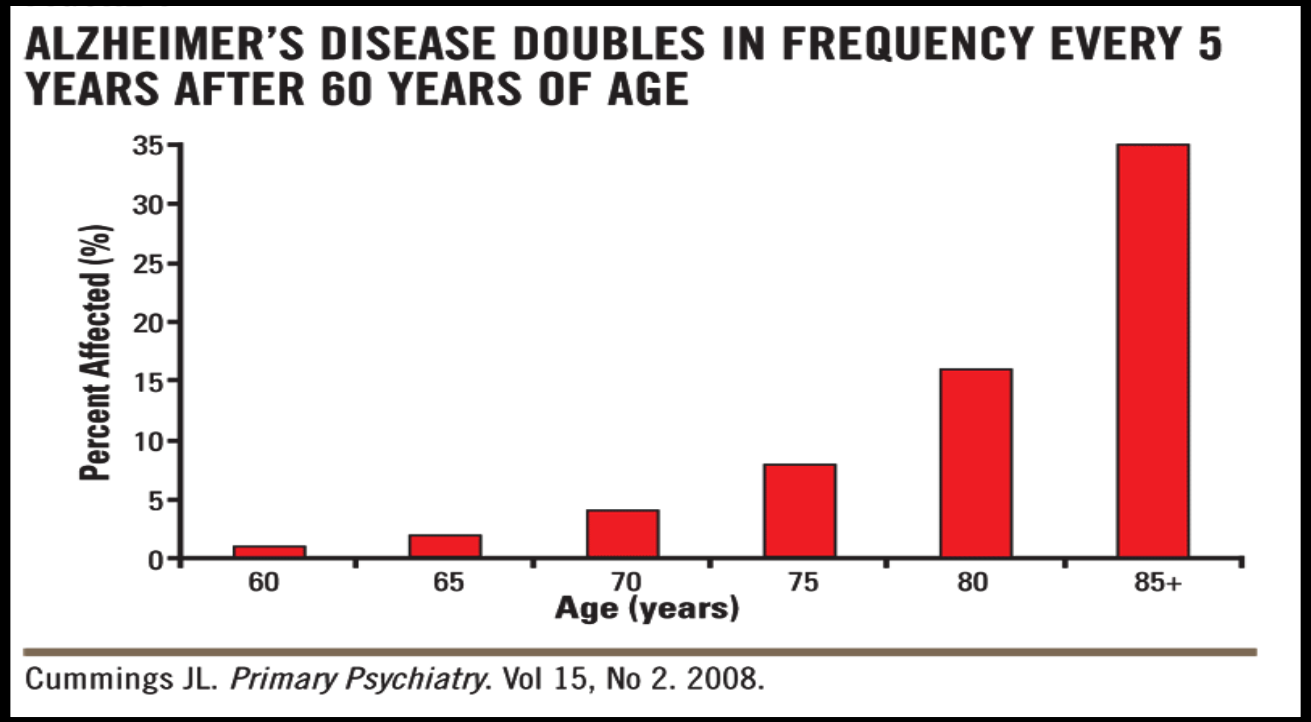
How much control you have over life—the opportunities for social engagement and participation are crucial for health, well-being, and longevity.

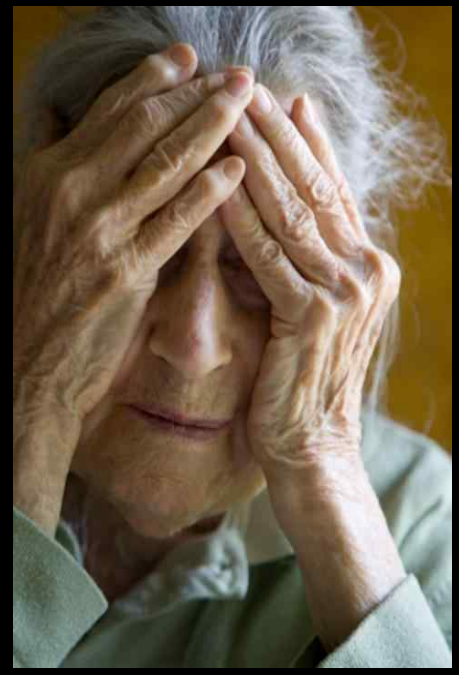


It is inequality in these that plays a big part in producing the social gradient in health

Hans Werner: How human systems develop, age and end

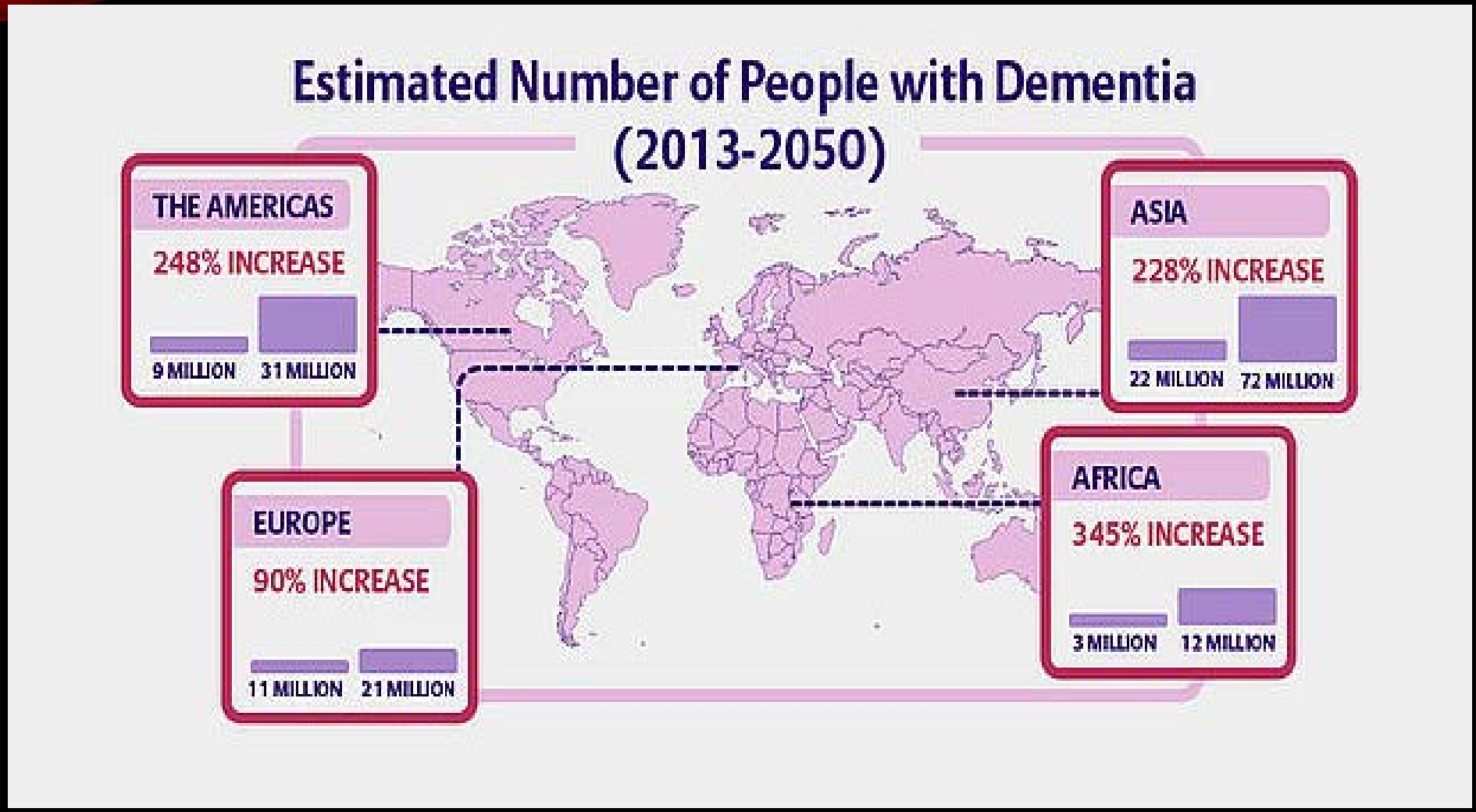
Background





- 1% at age 60 years have Alzheimer's disease
- Worldwide - 44 million people with dementia
- UK: 770 to 800 000 people with dementia diagnosis

Dementia: not Just a Rich-Country Disease Anymore

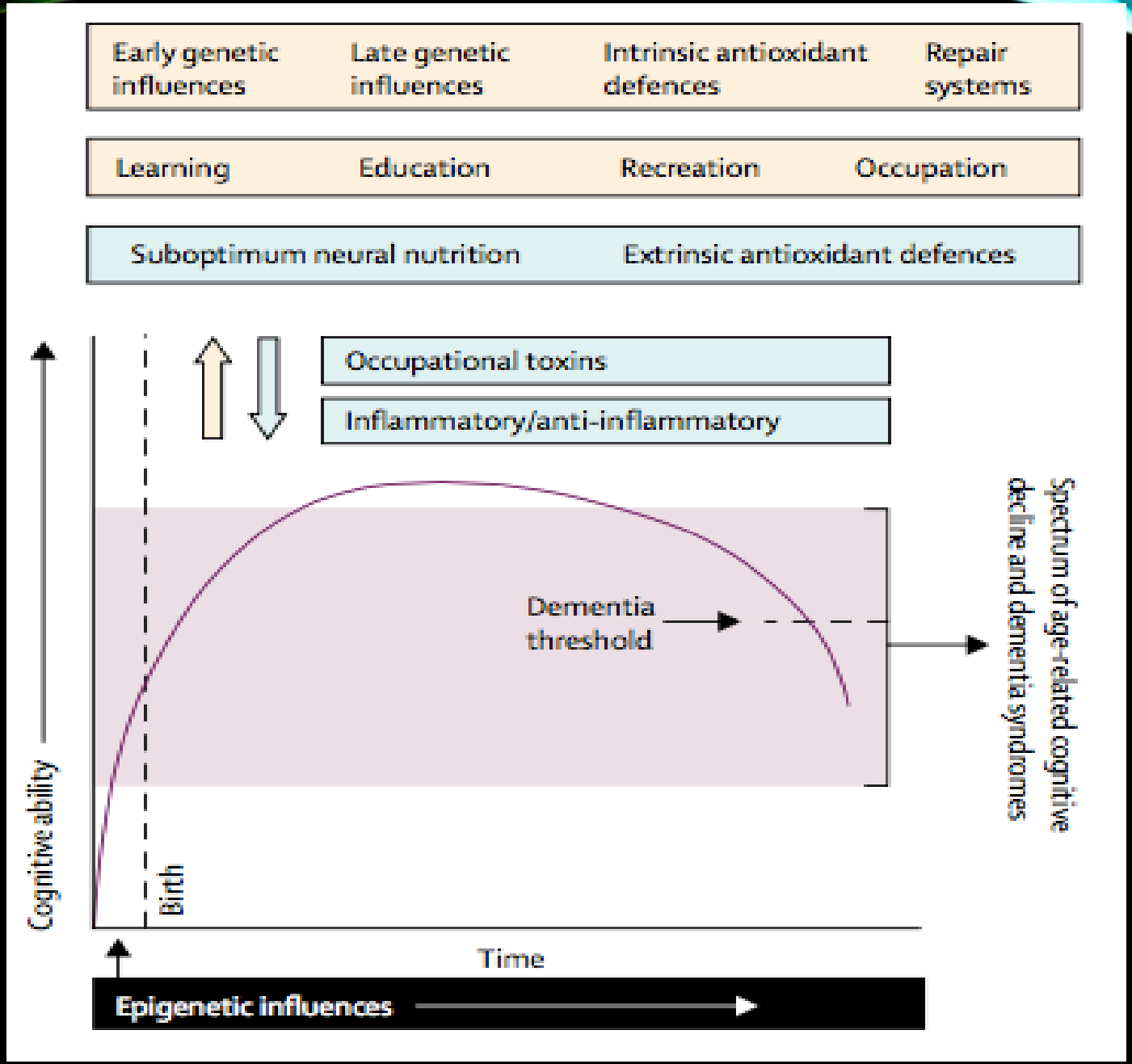


Modifiable risk factors (Environmental influences)

- Socioeconomic factors
- Lifestyle behaviours
- Cardiometabolic risk factors

Non-modifiable risk factors

- Age
- Ethnicity
- Genetics (APOE4)



Lawrence J Whalley – Life course approach

DEMENTIA

9 WAYS TO REDUCE YOUR RISK

1 IN 3

cases of dementia could be prevented by addressing these lifestyle factors

INCREASE

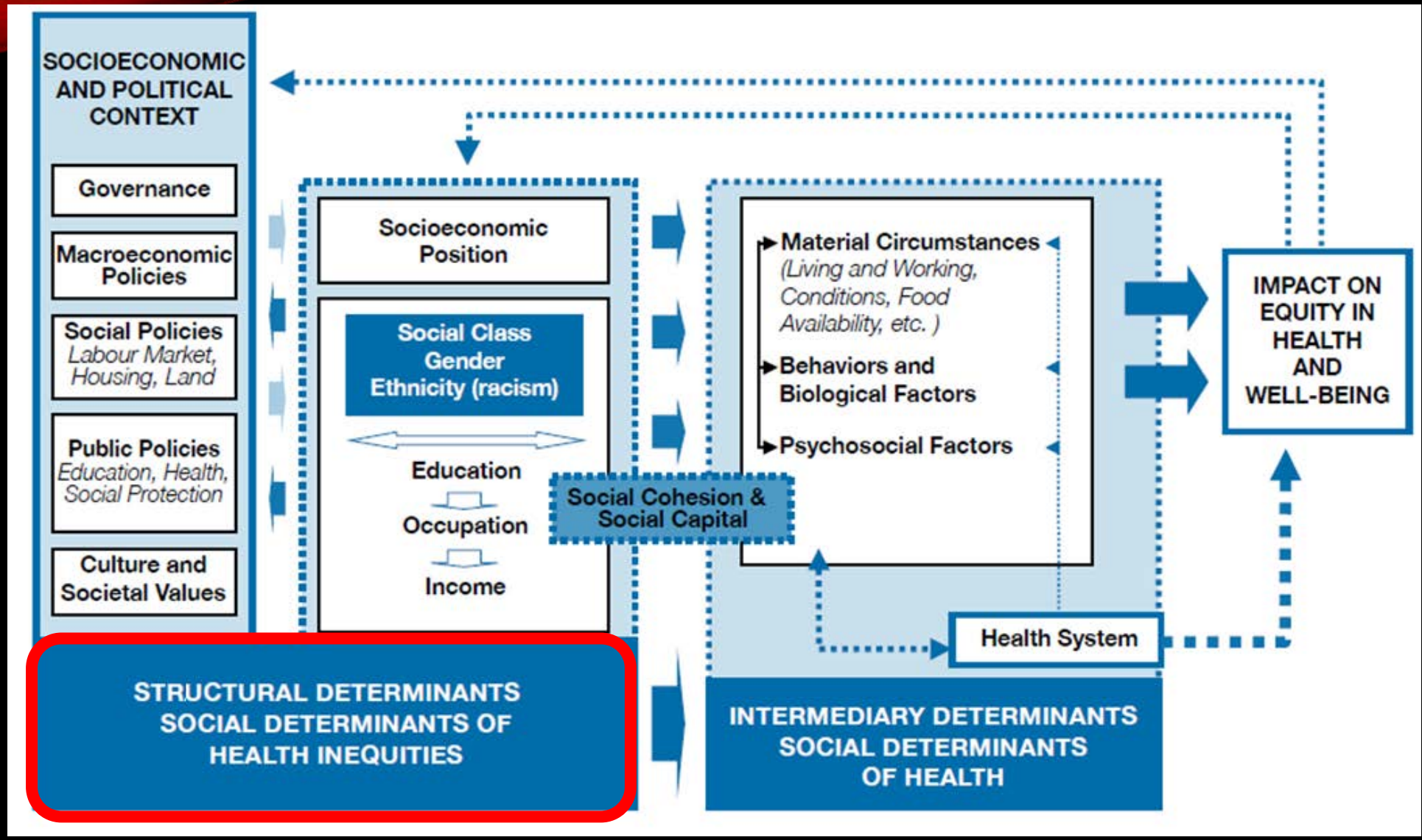
- Education
- Physical Activity
- Social Contact

DECREASE

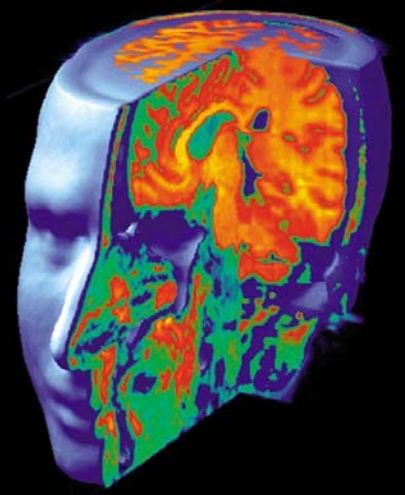
- Hearing Loss
- Hypertension
- Obesity
- Smoking
- Depression
- Diabetes

Source: Lancet Commission on Dementia Prevention and Care
Credit: Keck Medicine of USC

SES Structural influences



Why education?

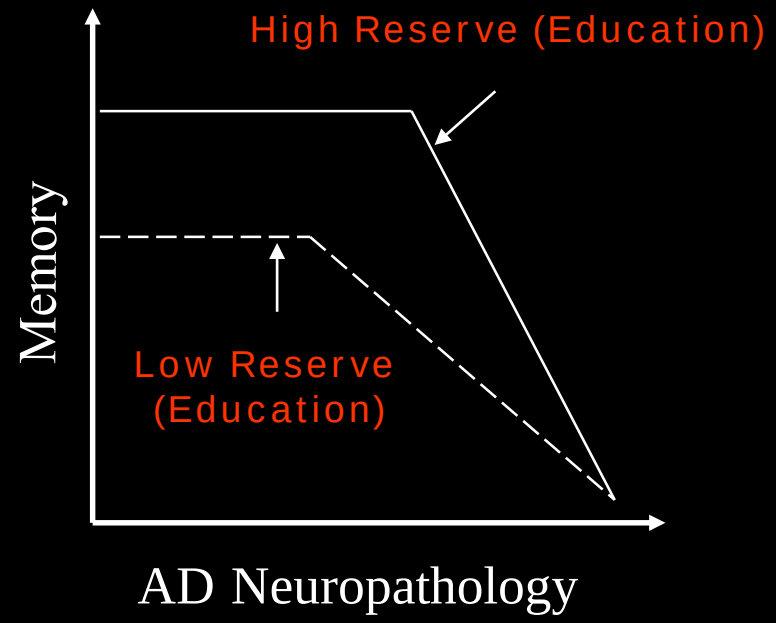


Education - a marker of cognitive reserve *(Stern, 2009)*

What is cognitive reserve?

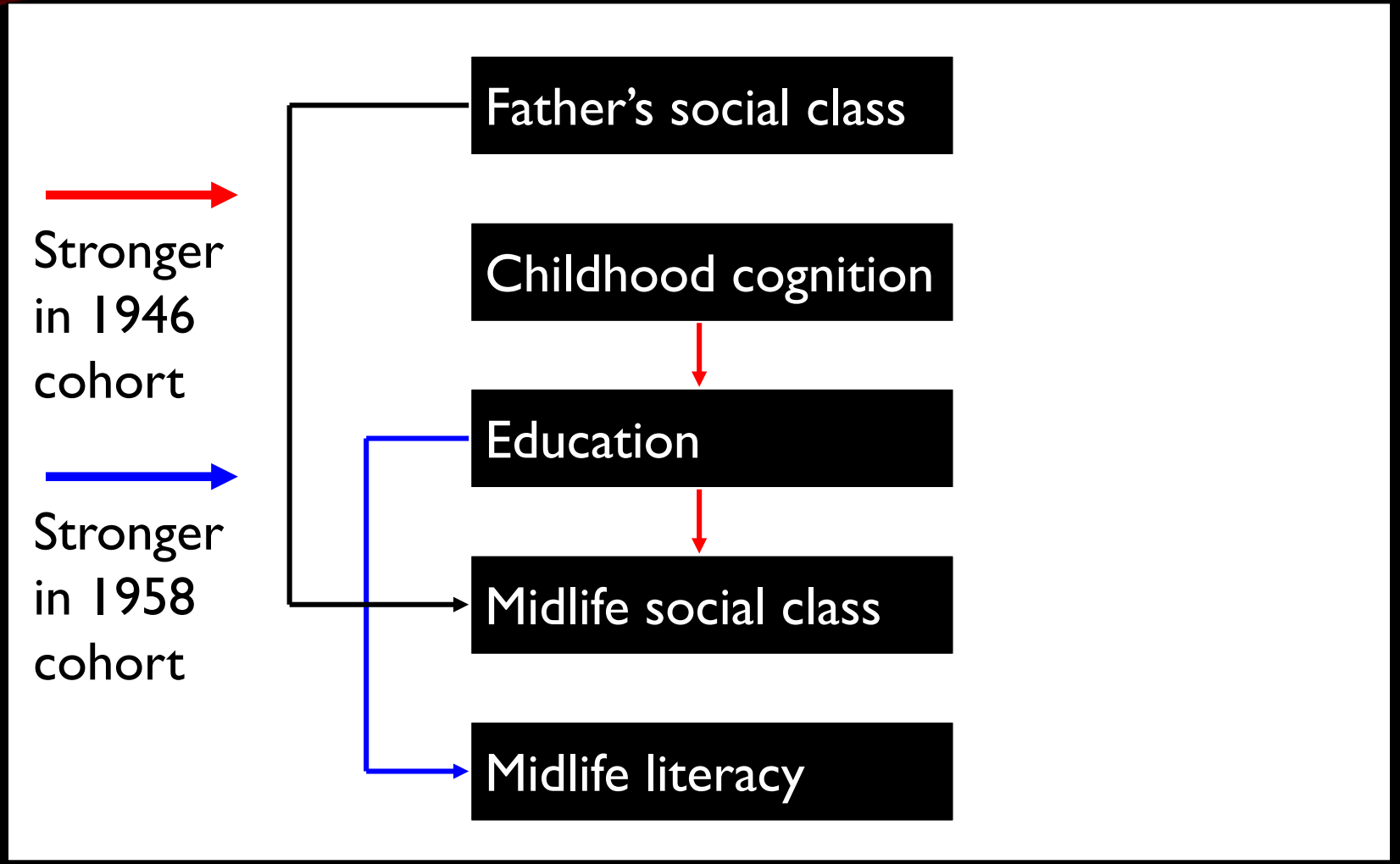
Individuals with a greater cognitive reserve (CR) capacity (higher education) will have a lower risk of developing dementia than individuals with less cognitive reserve.

- ✓ **higher CR - associated with a delay in dementia**
- ✓ **compensatory mechanisms when facing the growing neuropathological load *(Rapp, 2013, Tervo, 2004)***
- ✓ **higher CR - exhibit a better cognition but faster decline, once a certain threshold of dementia is reached *(Wilson, 2004, Hall, 2007)***



Stern et al, Neurology 1999

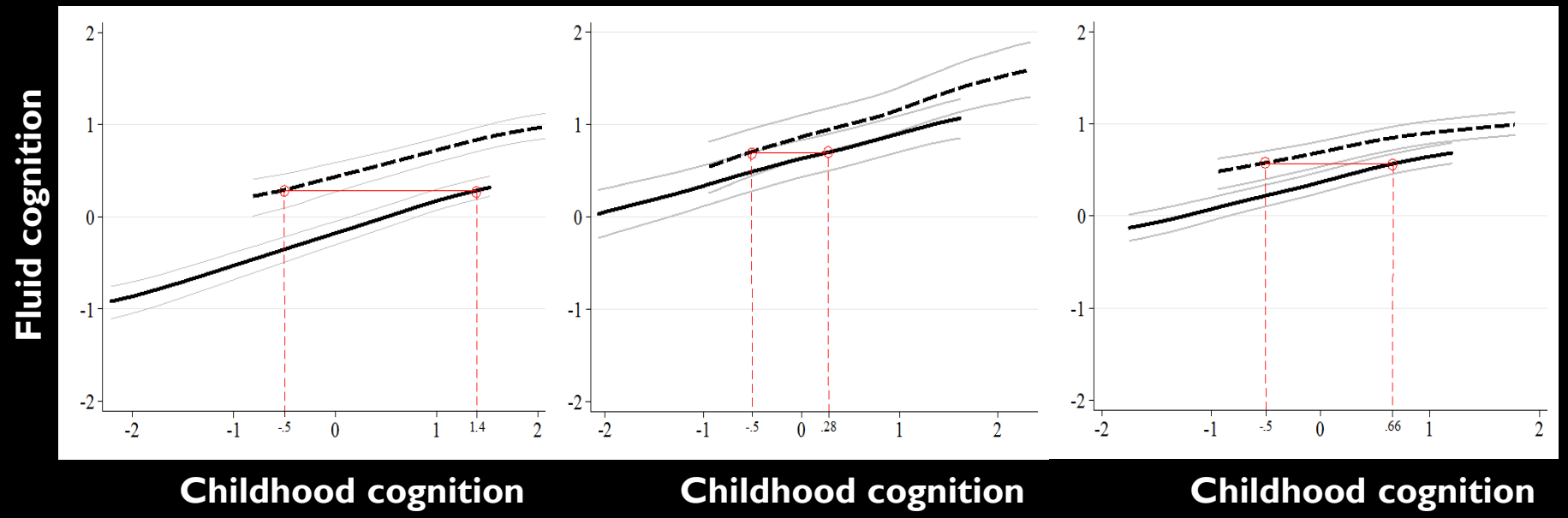
Education and midlife cognition



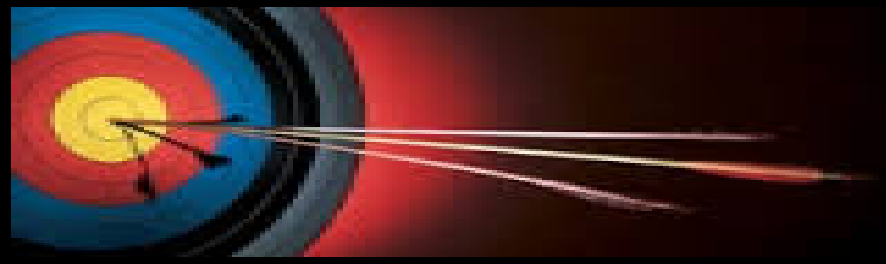
Richards, Power & Sacker, J Epidemiol Community Health 2009

Education and midlife cognition

Wisconsin 1939 birth cohort **NSHD 1946 birth cohort** **NCDS 1958 birth cohort**



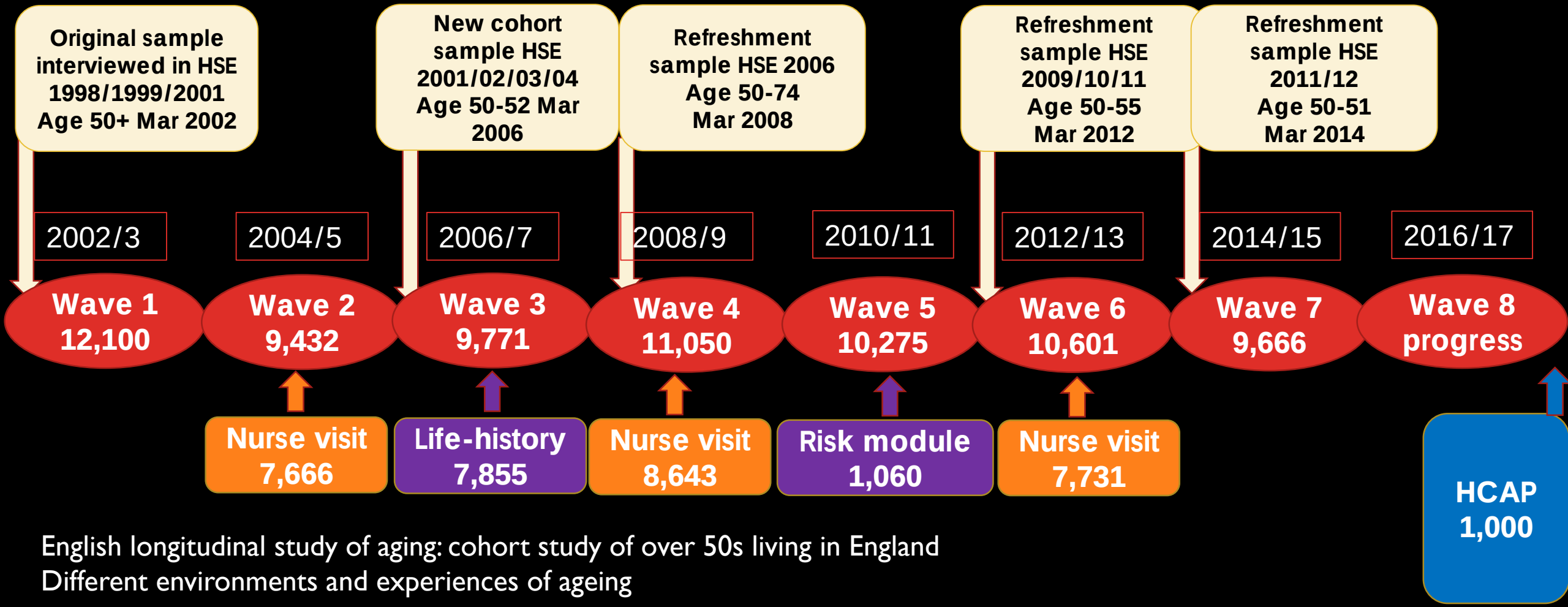
Clouston et al. International Journal of Epidemiology 2012



Aim:

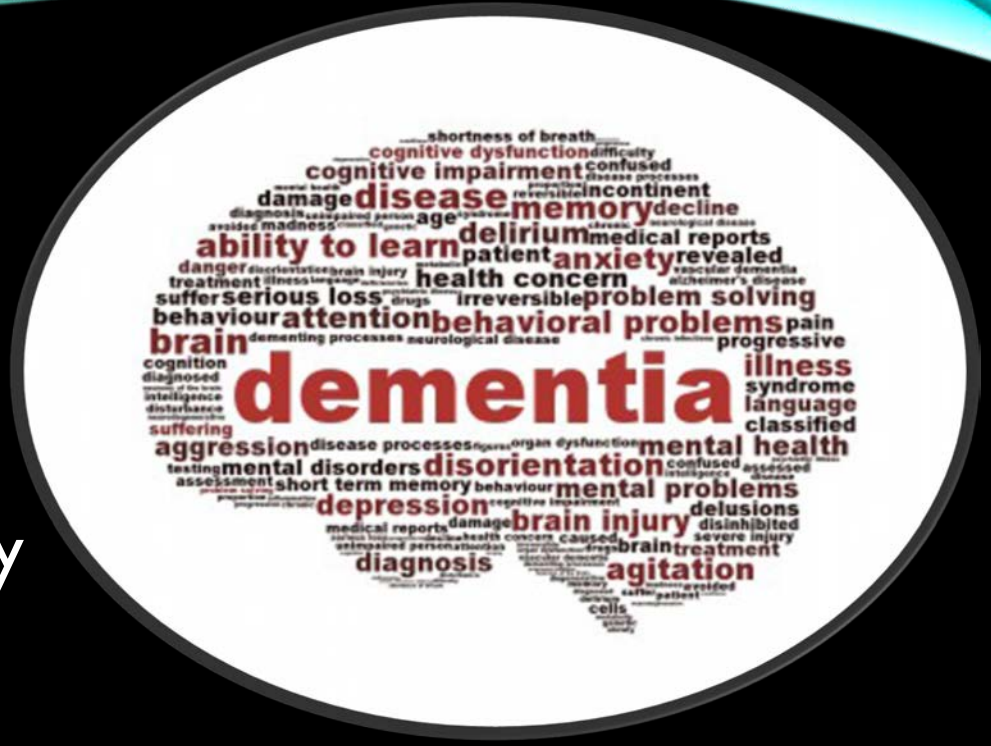
To investigate the role of multiple markers of socioeconomic status (e.g. education, occupation and wealth) in relation to dementia prevalence in the English Longitudinal Study of Ageing (ELSA)

ELSA - TIMELINE



English longitudinal study of aging: cohort study of over 50s living in England
Different environments and experiences of ageing

Methods



Participants

11,357 individuals aged 50 + at study entry

Dementia

Self-report dementia diagnosis made by a physician coupled with a score of 3.38 or higher on the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) *Jorm &Jacomb, 1989*.

Methods

Statistical analysis

The associations between baseline education, occupation and household wealth were examined in relation to dementia prevalence (by wave 7 - 2014/15) using Logistic regression.

Descriptive results

The scale of the challenge in ELSA

N (overall sample aged 50+)=11,357
N (dementia)= 698 (6%)
Mean time in study 8 years

Follow-up 12 years to 2002-2014

Dementia

By sex

310 males
388 females

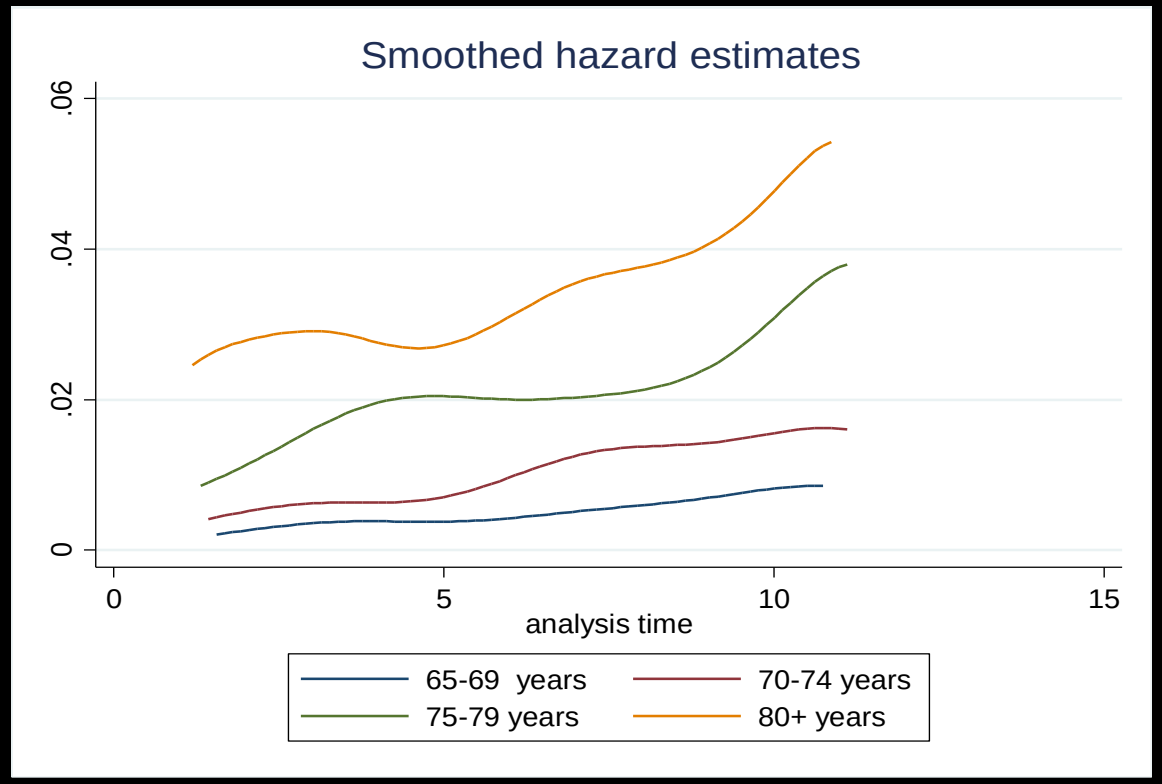
By educ

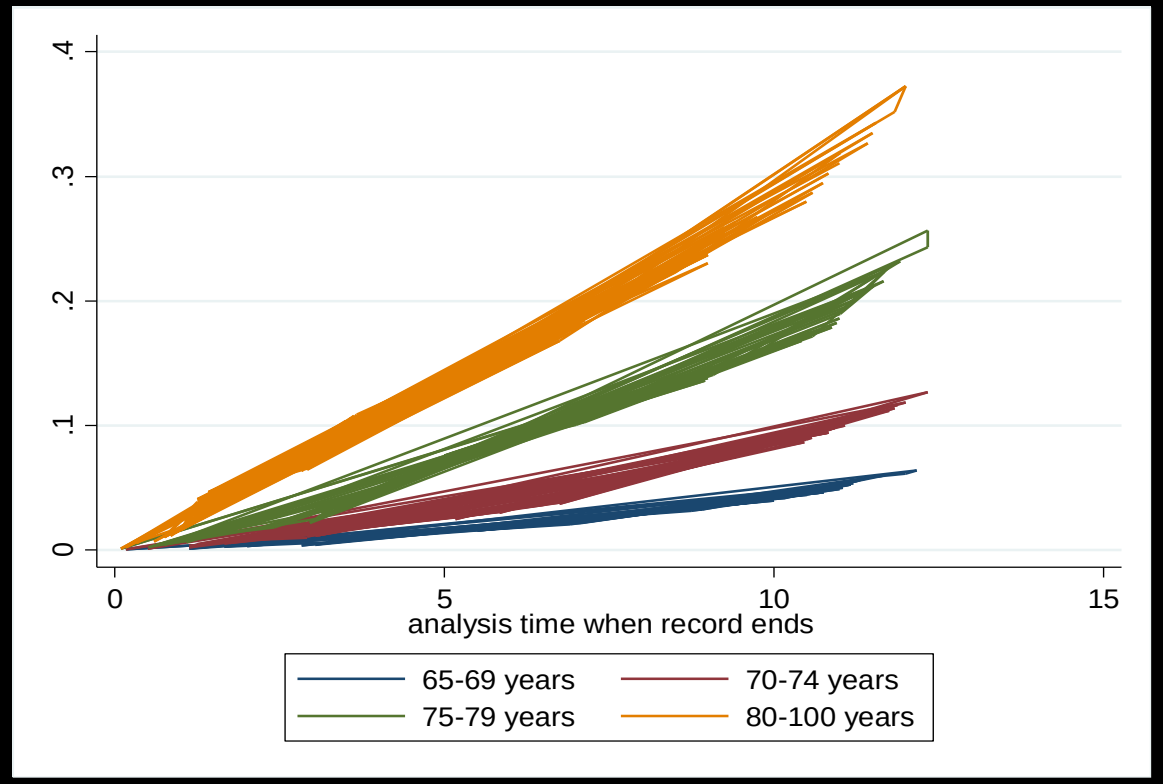
CSL: 409

A level: 181

College: 108

Dementia incidence rates ELSA





Cumulative dementia incidence rates by age-groups in the overall ELSA

Dementia risk by SES indicators in ELSA- men

		Model 1 Age adjusted		Model 2 Fully adjusted	
Indicator		**OR**	**95% CI**	**OR**	**95% CI**
Education	No qualification	1	-	1	-
	A levels	0.81	0.61-1.07	0.88	0.65-1.19
	College/ degree	0.58	0.41-0.82	0.62	0.41-0.95
Occupation	Semi-routine	1	-	1	-
	Intermediate	0.87	0.63-1.21	0.86	0.58-1.27
	Managerial	0.85	0.63-1.13	0.82	0.58-1.16
Wealth (quintile)	Lowest	1	-	1	-
	2	0.97	0.68-1.40	1.04	0.70-1.51
	3	0.84	0.58-1.21	0.93	0.62-1.38
	4	0.66	0.45-0.97	0.78	0.50-1.21
	Highest	0.70	0.48-1.09	0.80	0.51-1.27

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	Highest	0.70	0.48-1.09	0.80	0.51-1.27

Dementia risk by SES indicators in ELSA- women

		Model 1 Age adjusted		Model 2 Fully adjusted	
Indicator		**OR**	**95% CI**	**OR**	**95% CI**
Education	No qualification	1	-	1	-
	A levels	0.86	0.66-1.12	0.87	0.65-1.17
	College/ degree	1.17	0.86-1.61	1.42	0.93-2.16
Occupation	Semi-routine	1	-	1	-
	Intermediate	0.87	0.63-1.21	1.02	0.69-1.49
	Managerial	0.84	0.63-1.13	0.95	0.65-1.38
Wealth (quintile)	Lowest	1	-	1	-
	2	1.14	0.83-1.54	1.14	0.83-1.57
	3	0.94	0.67-1.30	0.96	0.67-1.35
	4	1.06	0.76-1.48	1.02	0.71-1.47
	Highest	0.77	0.53-1.13	0.73	0.48-1.10

Conclusions

- In a nationally representative sample, the prevalence of dementia was slightly higher in women compared to men.

- We observed that dementia risk appeared to be patterned by individual-level characteristics such as education levels in men. Having a higher education seem to be protective against dementia, independent of other SES indicators such as occupation and wealth, and health conditions.

Strengths and limitations

+ Detailed assessment of SES indicators across various stages of life (young adulthood, adulthood and later life)
+ Temporal relationship between exposure and outcome

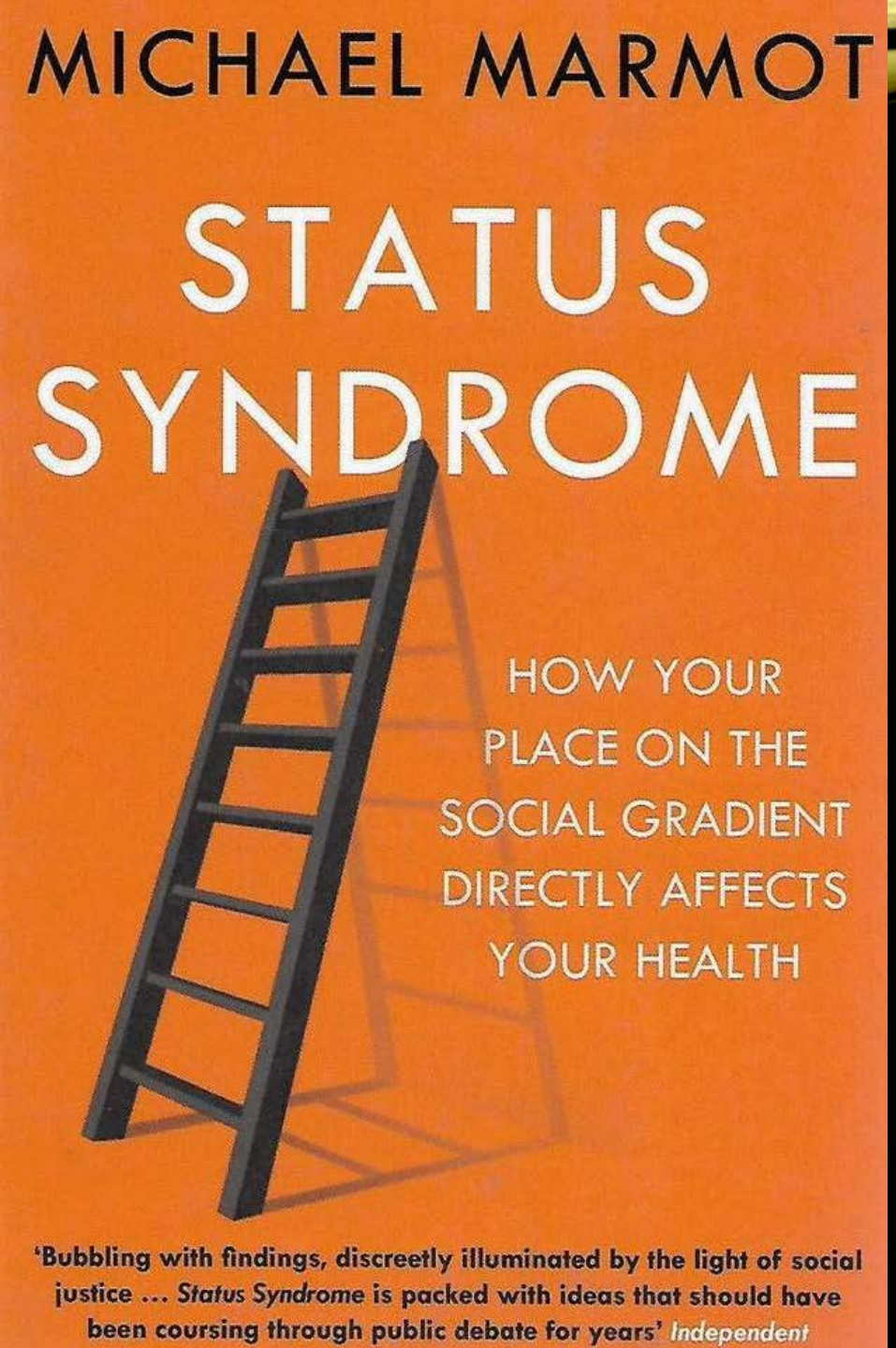
- Dementia ascertainment (a challenging process)
- Due to relative small sample of diagnosed dementia cases we did not explore the typology of dementia (e.g. Alzheimer, vascular, mixed)
- 99% of ELSA are white British, so no ethnic variation

Conclusions

- This could be a specific cohort effect considering that this English population was born and educated in the period surrounding the Second World War in Britain (with restricted access to education for women)

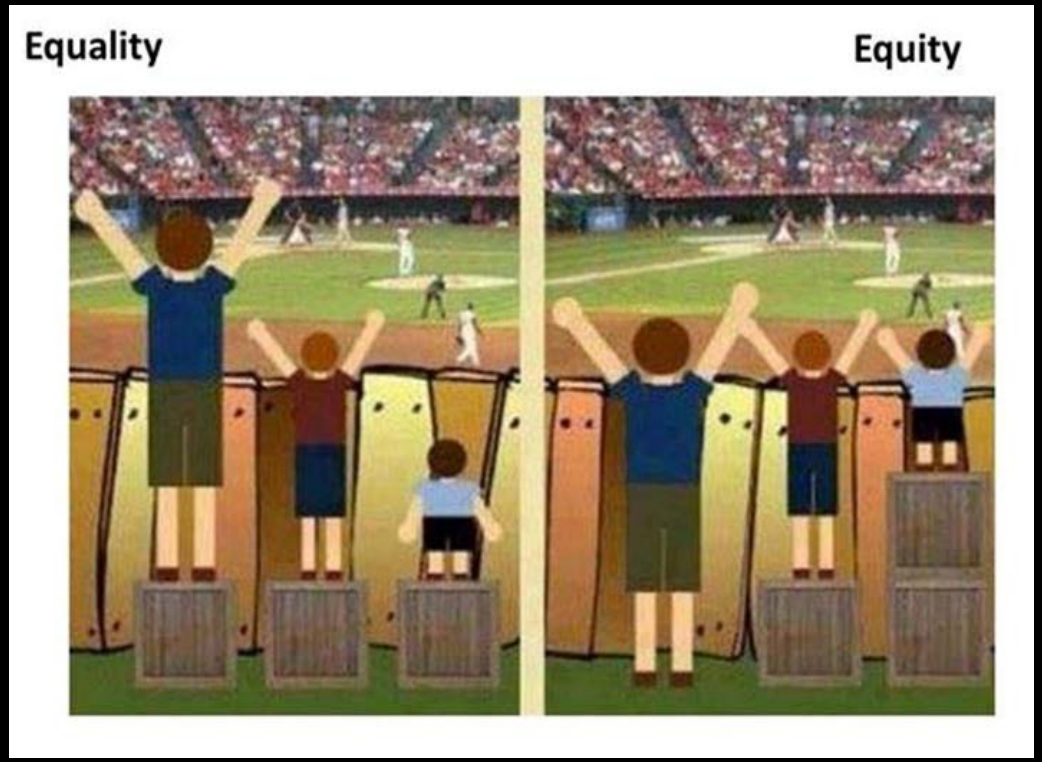
- This work highlights the importance of education to later health and the relevant impact of the health inequalities.

Public health is not about swim lanes…



"*Public health is what we, as a society, do collectively to assure the conditions in which (all) people can be healthy.*"

-Institute of Medicine (1988), *Future of Public Health*



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UCL

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University of Exeter

Carole Brayne
University of Cambridge

David Weir
University of Michigan

Ken Langa
University of Michigan

Ian Deary
University of Edinburgh

NIH National Institute on Aging
Turning Discovery Into Health

Thank you!

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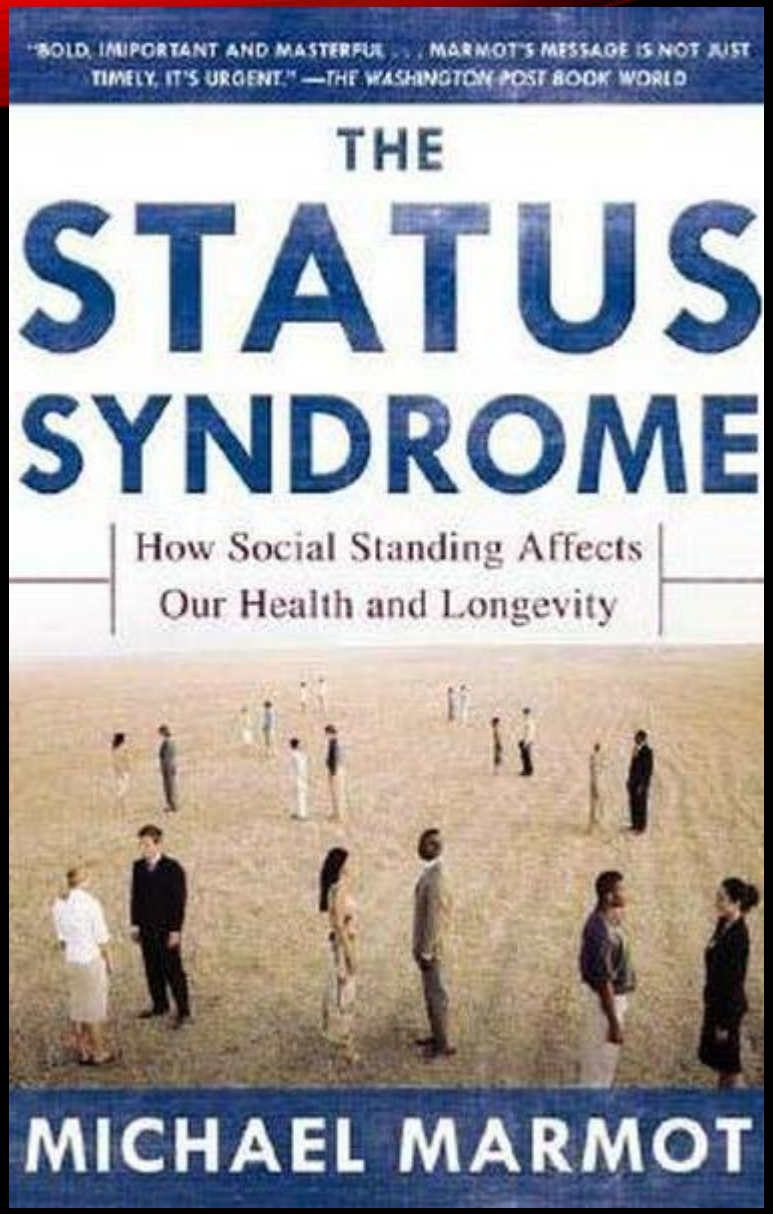
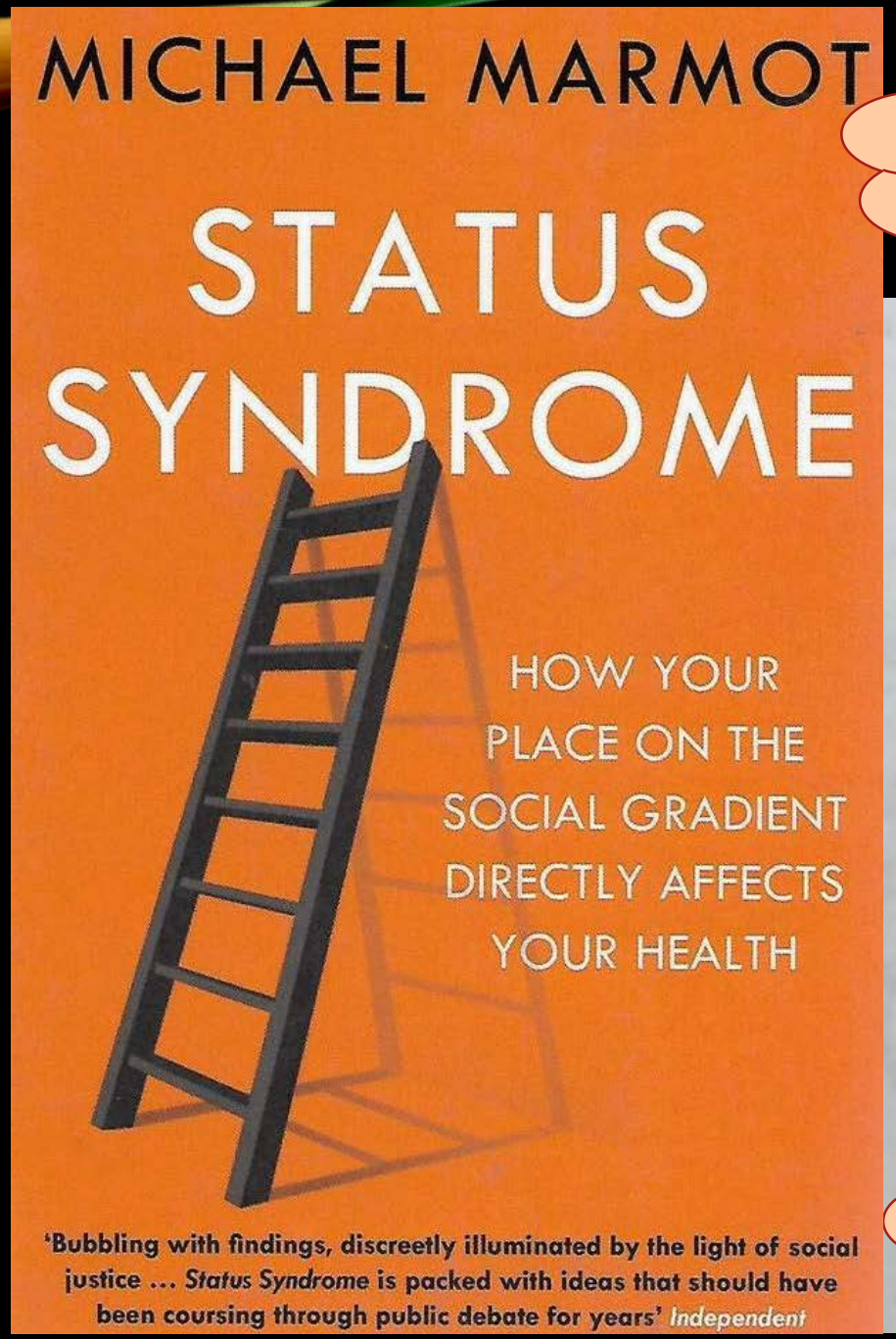
UCL

NIH National Institute on Aging

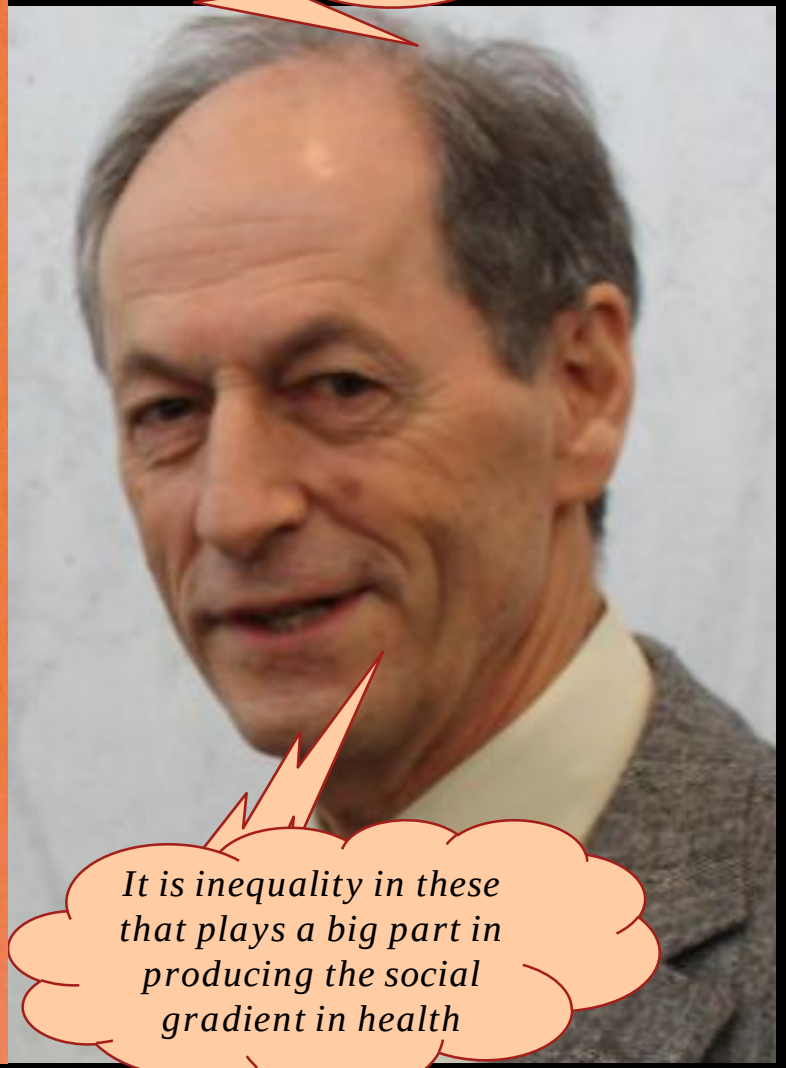
NatCen National Centre for Social Research

ELSA English Longitudinal Study of Ageing



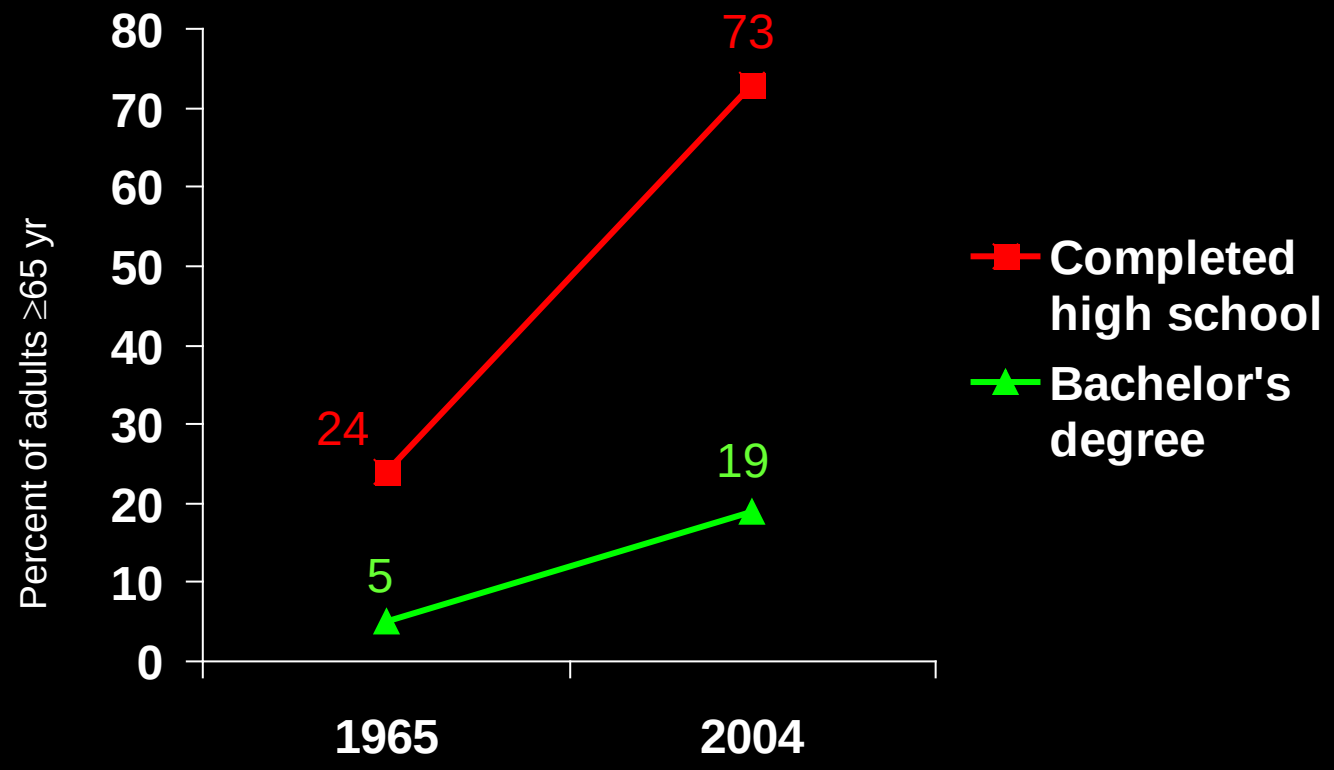


How much control you have over life—the opportunities for social engagement and participation are crucial for health, well-being, and longevity.



It is inequality in these that plays a big part in producing the social gradient in health

EDUCATION & LITERACY (1 OF 2)



EMPLOYMENT

- Employment of older adults declined throughout most of the past century, but this trend reversed during the last 20 yr
- Growth in the number of older adults who are employed is expected to continue
- In 2005, an estimated 5.3 million older adults were working or actively seeking work
  - About 1 in 5 older men
  - About 1 in 10 older women

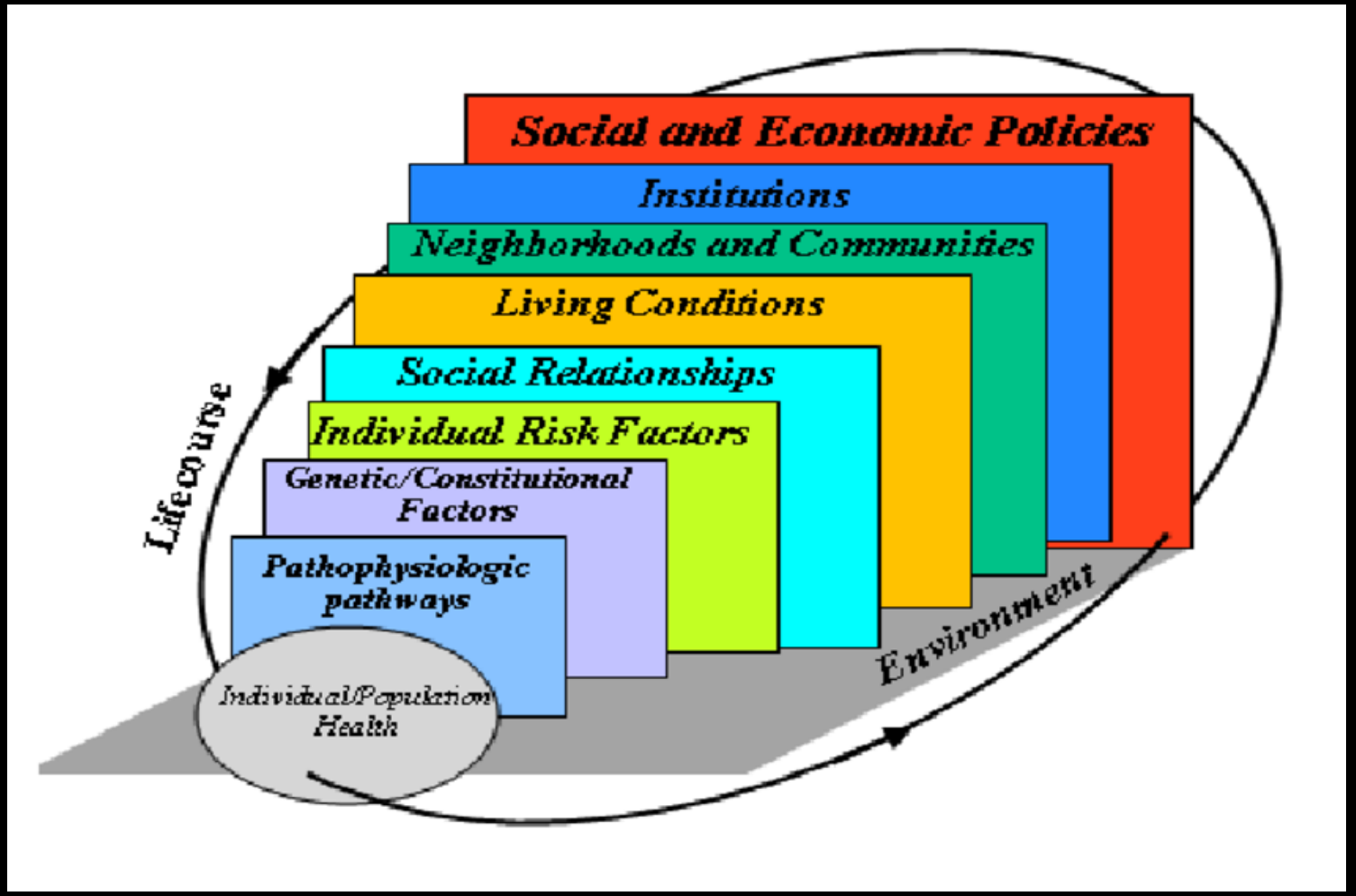
EDUCATION & LITERACY (2 OF 2)

•Despite gains in education level, older adults still rank below working-age adults:

- Far lower education and literacy levels
- Half as likely to have a personal computer and use the Internet
- Lower average levels of health literacy

Lifecourse influences

Factors contributing to health and health inequalities are seen from both an upstream and downstream perspective, in a multilevel structure.



Kaplan. Norsk Epidemiology 2007

Retirement and Health

Evidence from England

Liam Rose, UC Santa Cruz

UCL CLOSER Inequalities Conference, November 2017

Why Study Retirement and Health

- Life expectancy has gone up dramatically, and health conditional on age has improved
- Public social security schemes that guide the retirement age have been slow to adjust
  - Budget shortfalls push governments into action
- Ambiguity in the Literature
  - Tendency to focus on one set of outcomes

Two Main Questions

- Does leaving the labour force have an effect on an individual's health?
- If so, what is the pathway?
  - Health-related behaviors (e.g. Eibach 2015)
  - Health care utilization (e.g. Gorry et al 2016, Insler 2014)
  - Effect of additional income
  - Changes in environment (Time use, physical and mental exertion)

Behavioural & Cognitive Outcomes

Positive

Charles (2004), Gorry et al (2016), Midanik et al. (1995)

Negative

Bonsang et al (2015), Rohwedder and Willis (2010), Bosse et al. (1987)

Null

Coe and Zamarro (2011)

Health Outcomes

Positive

Coe and Zamarro (2011), Gorry et al (2016), Johnston and Lee (2009), Halberg et al (2015)

Negative

Dave et al (2008)

Null

Bound and Waidmann (2007), Neuman (2008)

Mortality

Positive

Bloeman et al (2015), Halberg et al (2015)

Negative

Fitzpatrick and Moore (2016), Kuhn et al (2010)

Null

Bound and Waidmann (2007), Hernaes et al (2013)

Panel/IV/RD | Cross-sectional | Cross-country | Program-induced retirement

Approaches

RD in Age

Familiar regression discontinuity approach around age of retirement (In UK, 65 for men and 60 for women).

Use refined age where available.

Fixed Effects - IV

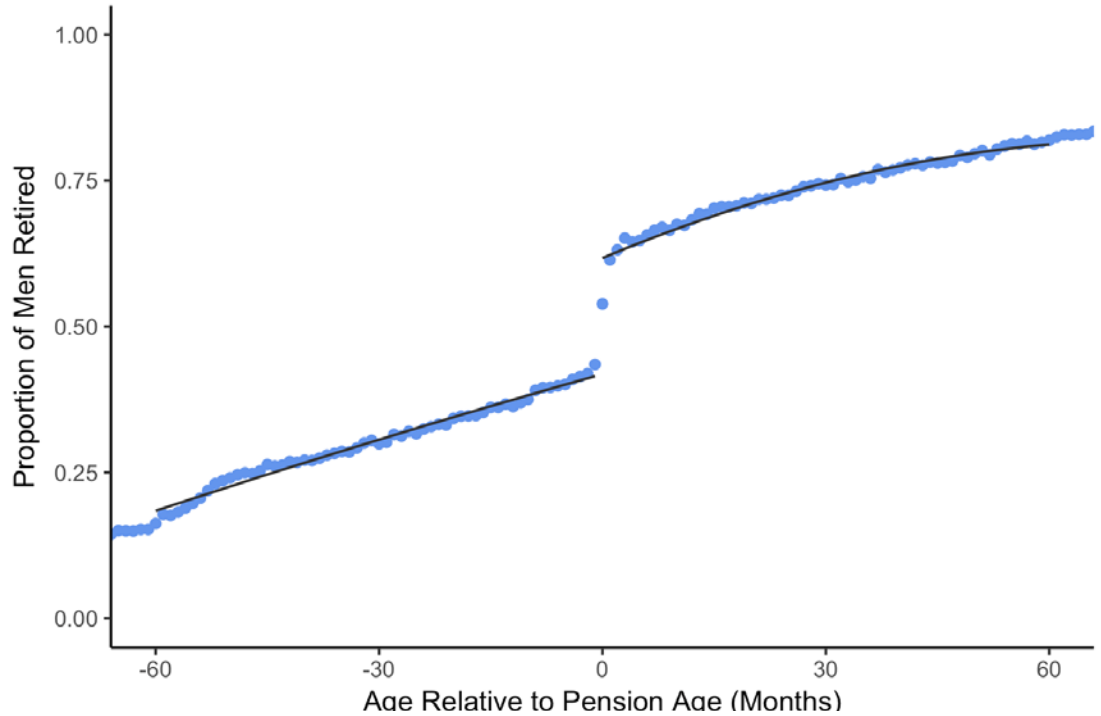
Instrument for the age(s) of retirement, using social security eligibility or similar instrument.

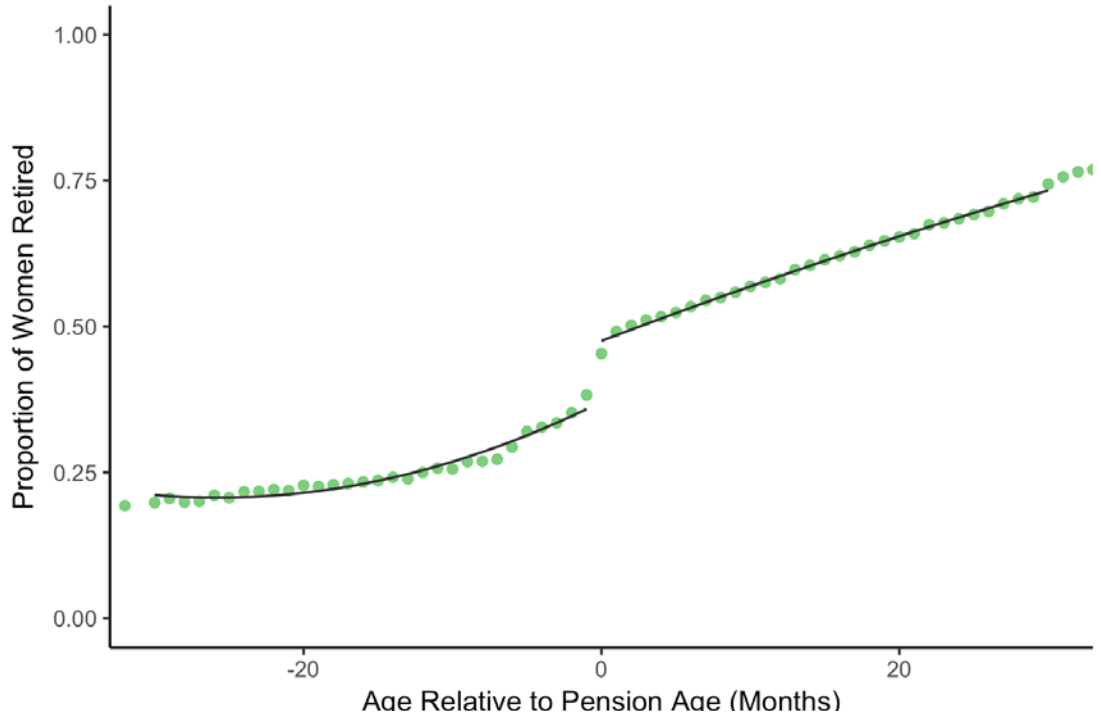
$$R_{it} = \beta_0 + \beta_1 Z_{it} + u_i + n_t + \varepsilon_{it}$$

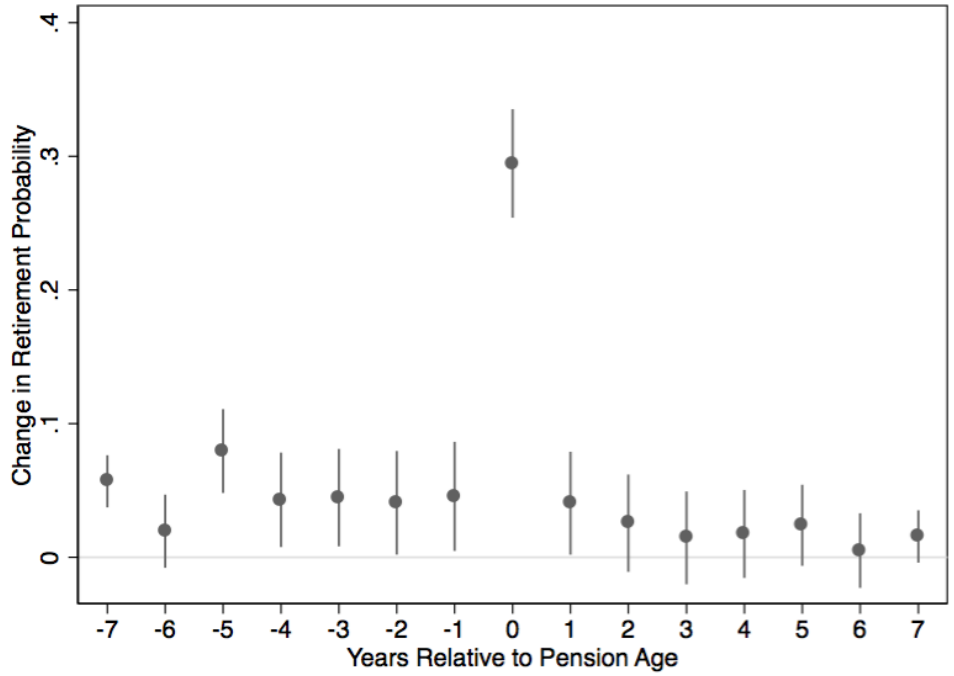
$$H_{it} = \beta_0 + \beta_1 \hat{R}_{it} + v_i + \eta_t + \epsilon_{it}$$

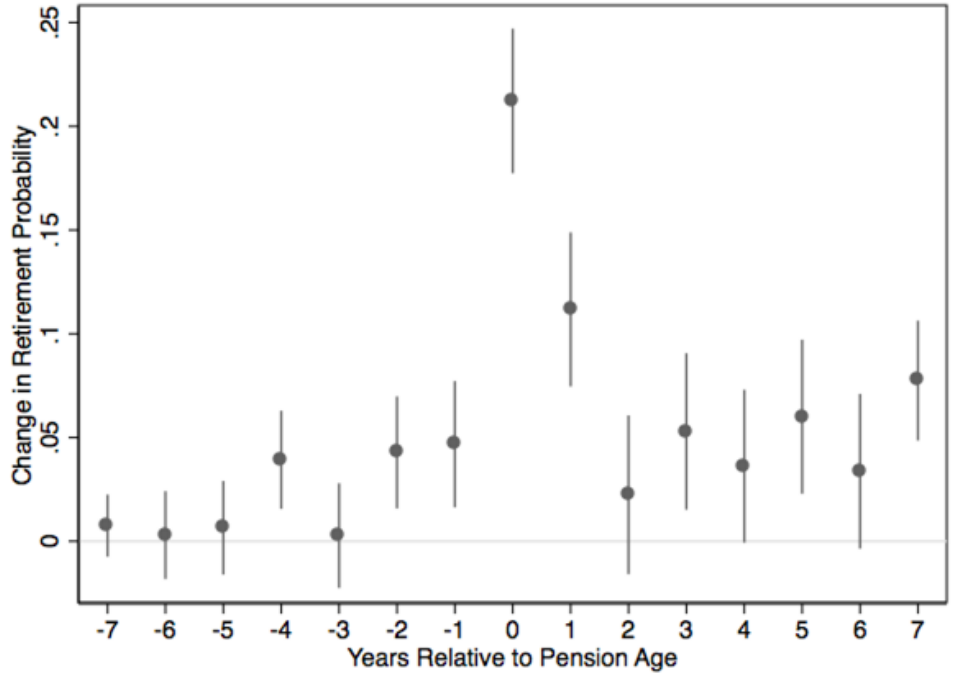
Data Sources

- British Household Panel Survey (BHPS) [n=393,346 i=31,411]
- Health Survey for England (HSE) [n=149,305]
- English Longitudinal Study of Aging (ELSA) [n=99,480 i=16,569]
- General Household Survey
- Census of England and Wales
- Vital Statistics


Proportion of Men Retired
1.00
0.75
0.50
0.25
0.00
-60
-30
0
30
60
Age Relative to Pension Age (Months)


Proportion of Women Retired
1.00
0.75
0.50
0.25
0.00
-20
0
20
Age Relative to Pension Age (Months)


Change in Retirement Probability
0
.1
.2
.3
.4
-7
-6
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
Years Relative to Pension Age


Change in Retirement Probability
0
.05
.1
.15
.2
.25
-7
-6
-5
-4
-3
-2
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0
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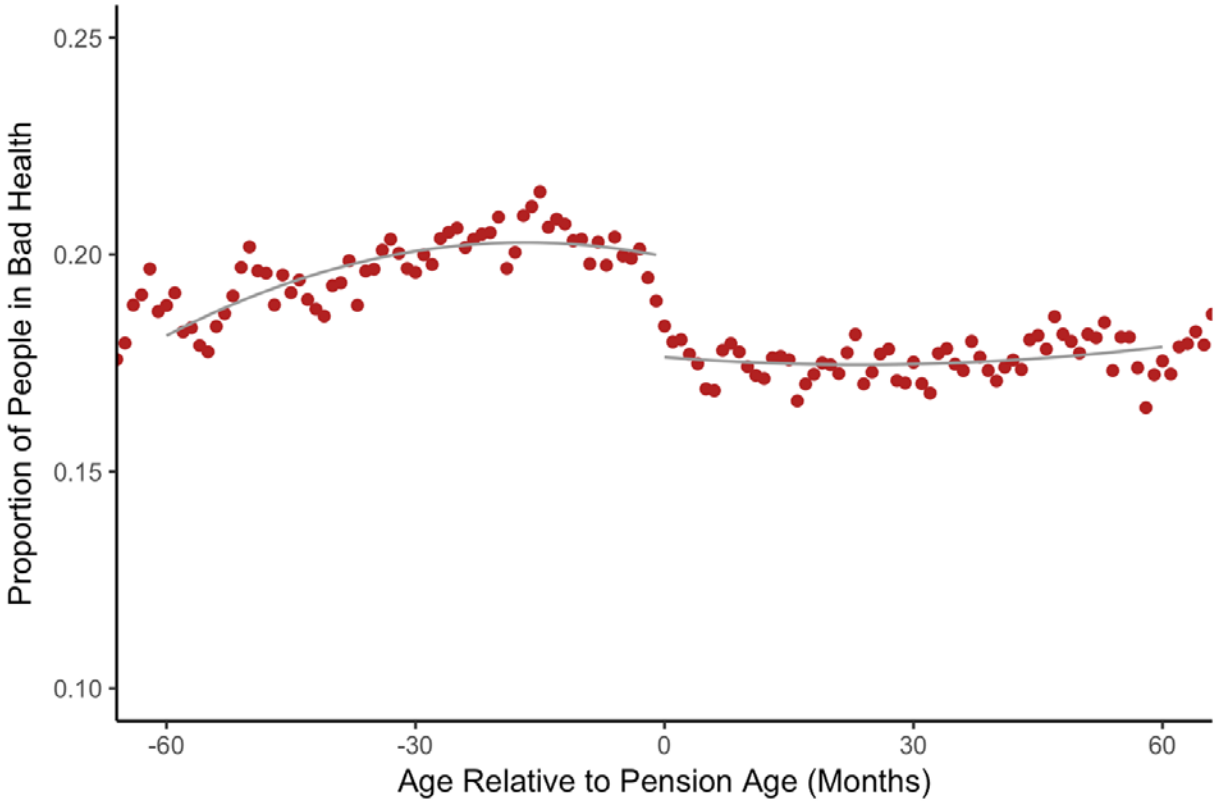
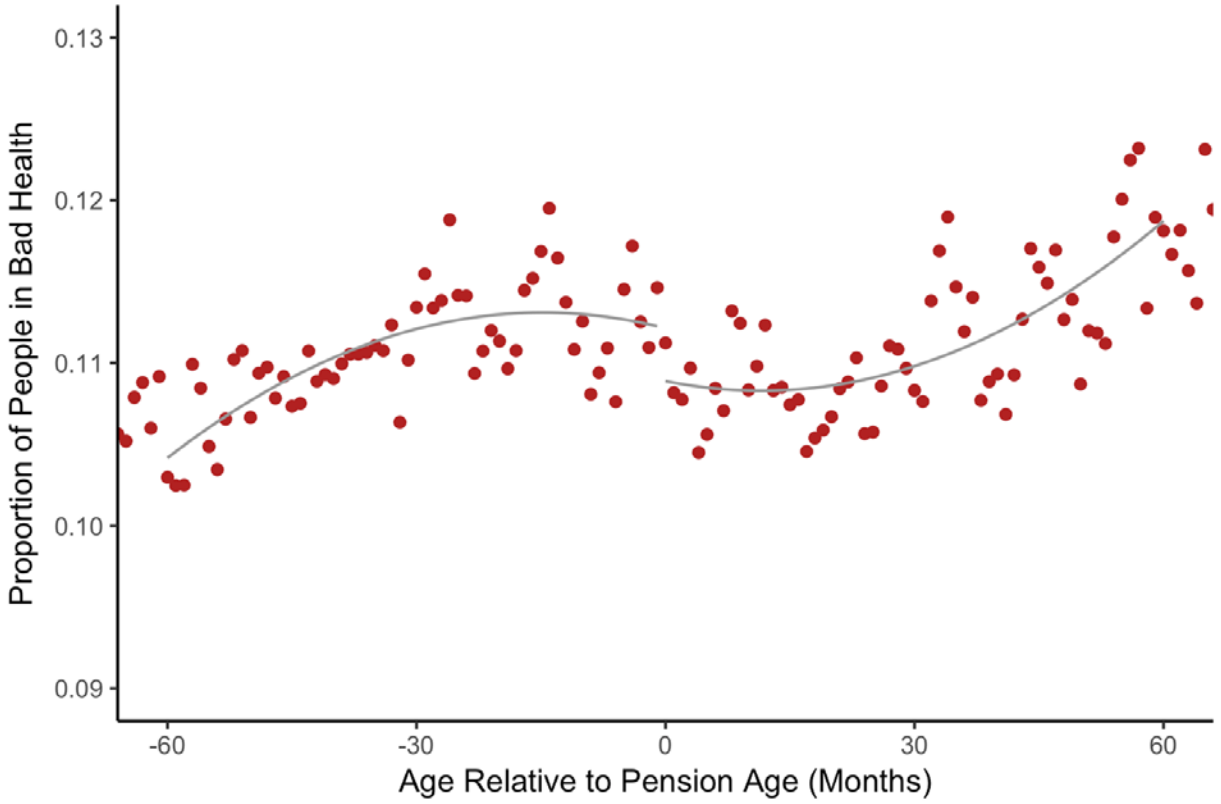
7
Years Relative to Pension Age





Proportion of men reporting “bad” or “very bad” health from the 2001 Census (left) and 2011 Census (right). FE-IV estimates from BHPS listed in table.

Bad	-0.0933***	Long-Term Illness	-0.0958***
	(0.0283)		(0.0327)

Health Outcomes and Utilization

	Memory Score	Verbal Score	Limit Daily Activities	Any Health Problem	Any Health Prob	Pulse	Hospital	GP
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)
State Pension Age	0.112	0.252	-0.0847	-0.0949	0.005	-1.881***	0.037	-0.020
	(0.514)	(0.0808)	(0.0879)	(0.0705)	(0.022)	(0.478)	(0.026)	(0.058)

- Find no evidence of significant changes to:
  - Cognition
  - Mental health measures
  - Health care utilization

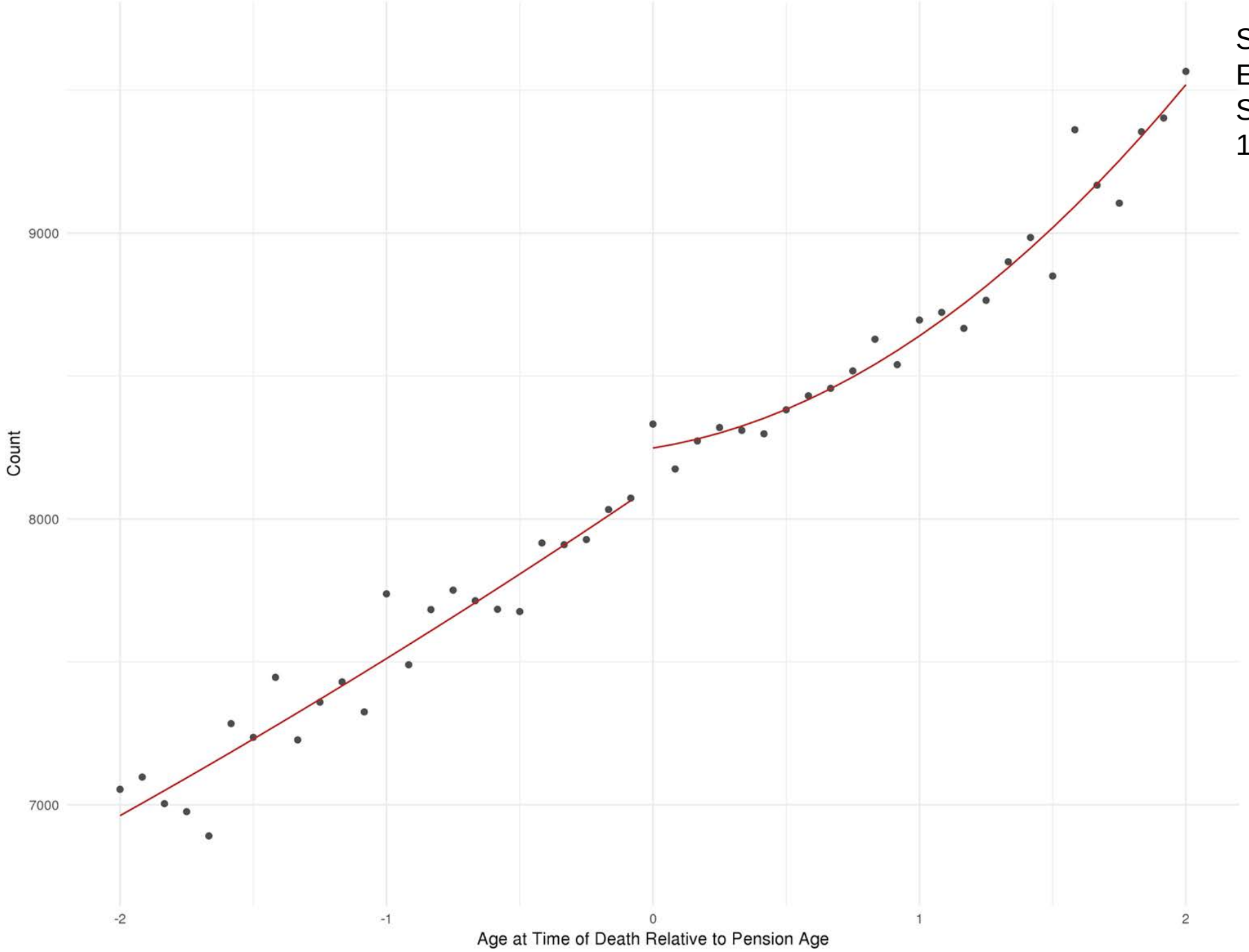
Behavioral Outcomes

	# of Drinking Days/Week	Cigarette Intensity	See Friends and Family Weekly	Eat Out Frequently	Any Health Prob	Life Satisfaction	Sleep	Leisure
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
State Pension Age	-0.072	-0.003	-0.111***	0.149***	0.005	0.141**	9.924***	16.451***
	(0.095)	(0.039)	(0.017)	(0.049)	(0.022)	(0.065)	(2.748)	(4.014)

- Find no evidence of significant changes to:
  - Drinking, smoking, and exercising
- Evidence that men have higher life satisfaction, sleep more, and spend more time on non-social leisure

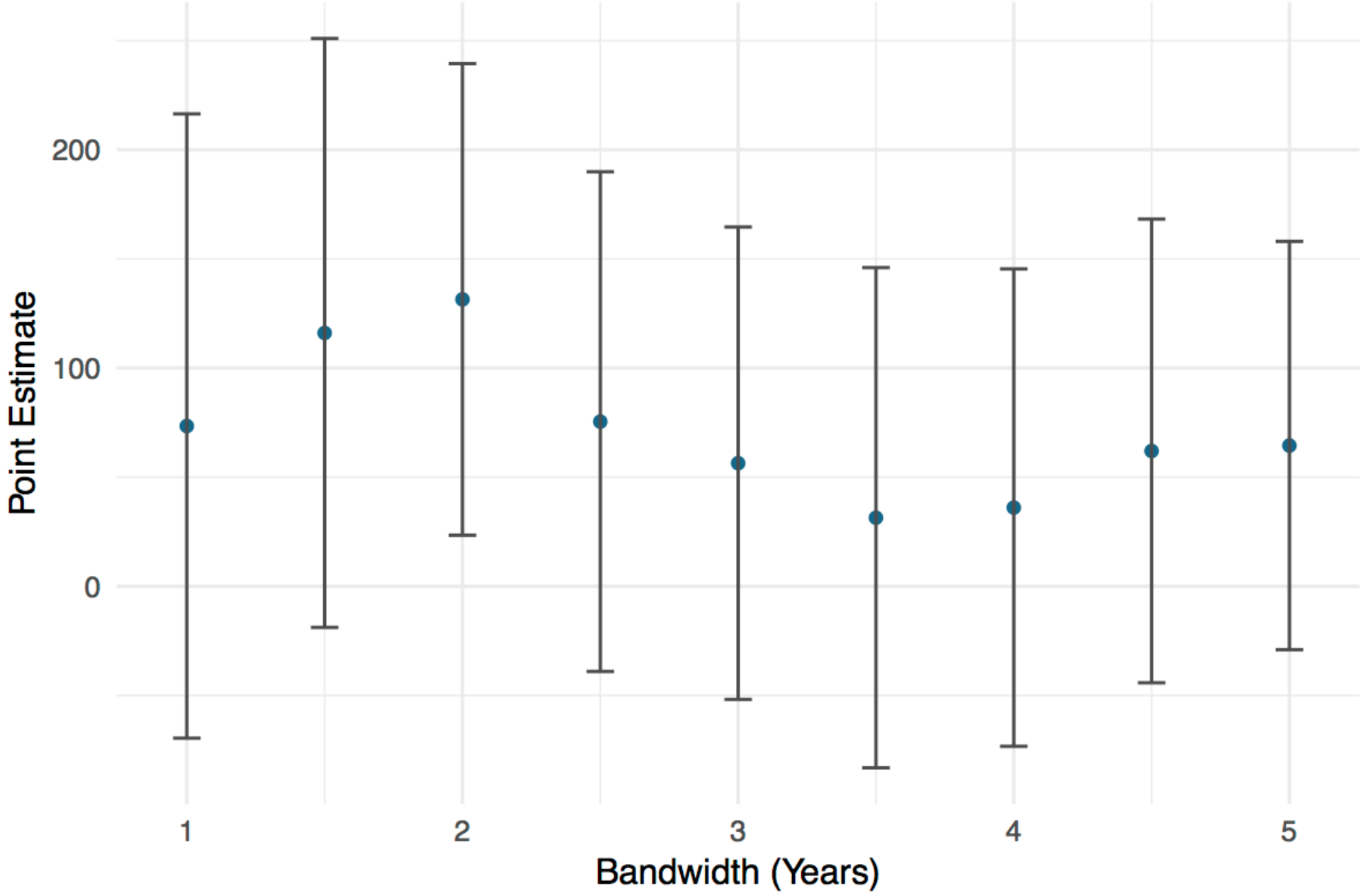
Mortality

All Causes, Men



Source: England Vital Statistics, 1990-2011.

Robustness, Men



Conclusion

- People report feeling healthier upon retirement, but little evidence of changes in key health outcomes
  - No effect on utilization and mortality
- Results may be driven by environment
  - Show lower pulse rates, improved life satisfaction, and more leisure and sleep
    - Fits into neuroscience literature on stress and health

Job Loss and Aging in the Philippines

Mae Abigail C. Oberos
International Institute of Social Studies
2017 CLOSER Conference
British Library, London UK
November 1-2, 2017

OUTLINE

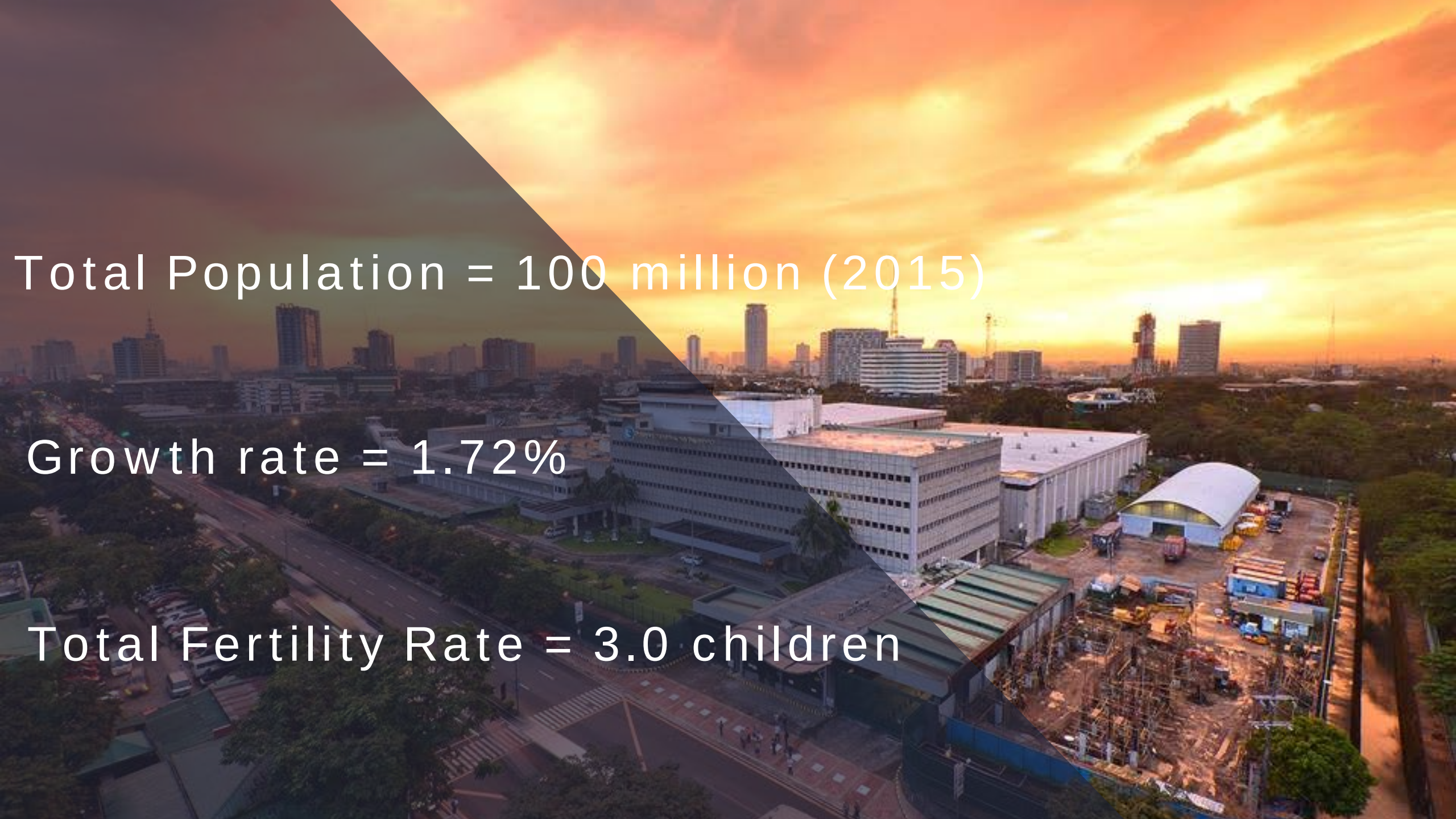
BACKGROUND

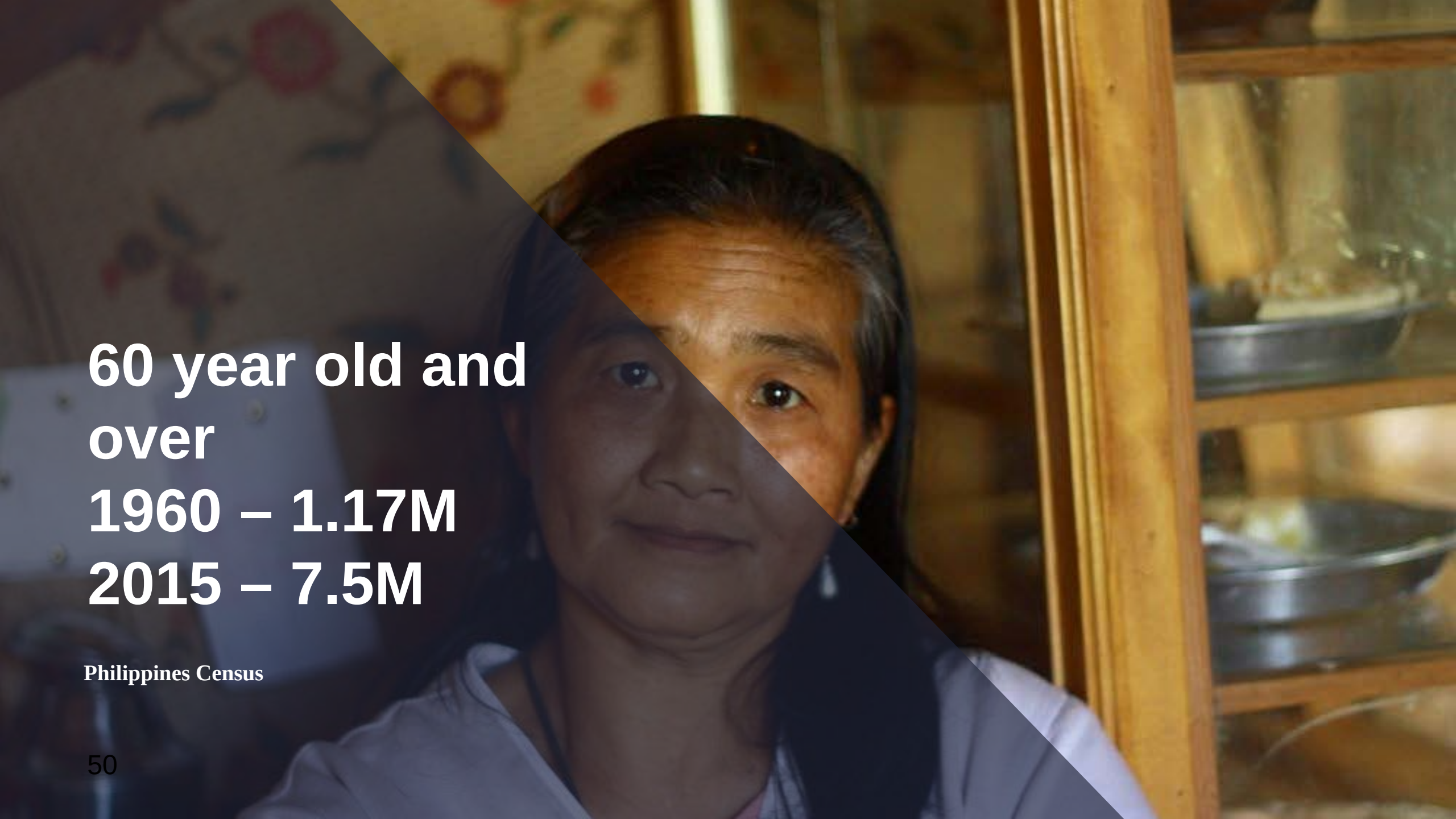
OBJECTIVES

DATA

METHODOLOGY

RESULTS

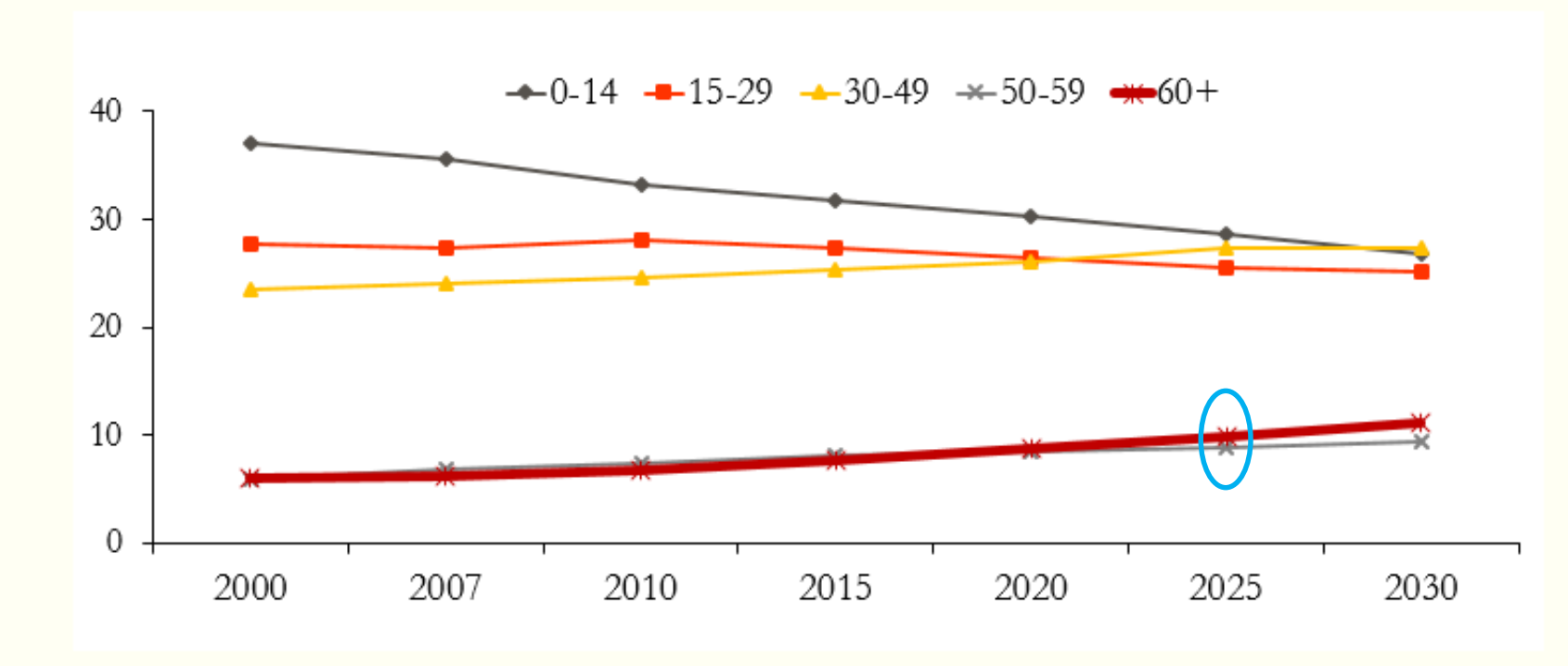

Total Population = 100 million (2015)
Growth rate = 1.72%
Total Fertility Rate = 3.0 children



60 year old and over
1960 – 1.17M
2015 – 7.5M

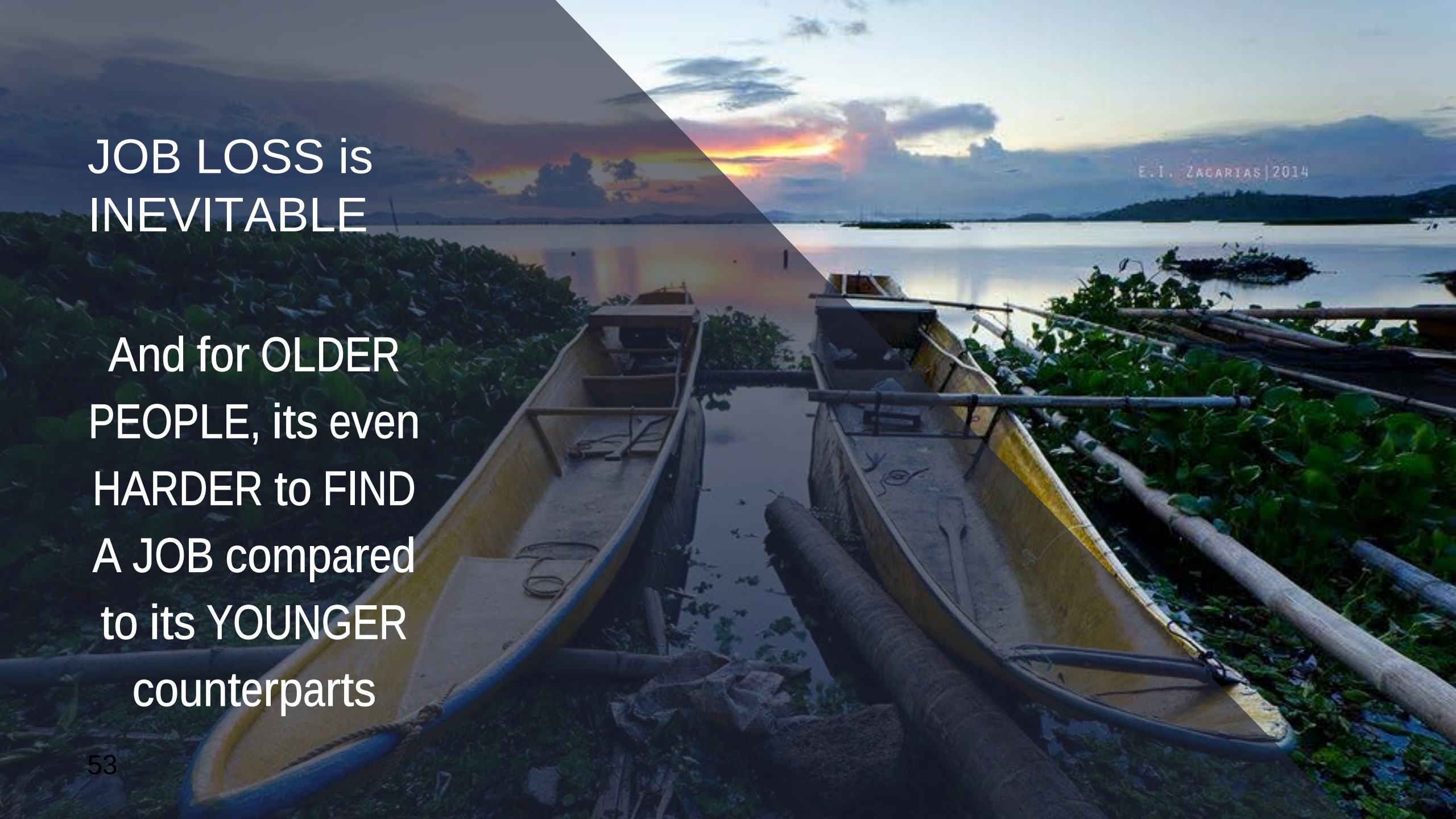
Philippines Census

Distribution of the population by age group



Source: Cruz and Camhol, 2014

“In the absence of formal pension coverage, the majority of persons in developing countries face considerable income insecurity during old age. For the unprotected—often small farmers, rural labourers and informal sector workers—the notion of retirement does not exist” – United Nations 2007



JOB LOSS is INEVITABLE

And for OLDER PEOPLE, its even HARDER to FIND A JOB compared to its YOUNGER counterparts

RESEARCH AIMS

To what extent does a prior job loss affect an older persons' employment probability?

- effect of a prior job loss to ones' employment probability
- effect of a prior job loss among older age groups
- demographic, housing characteristics and other factors mediating the job loss effect
- gender differences

DATA

2007 – 2008 Labor Force Survey – 45,000 households

METHODOLOGY

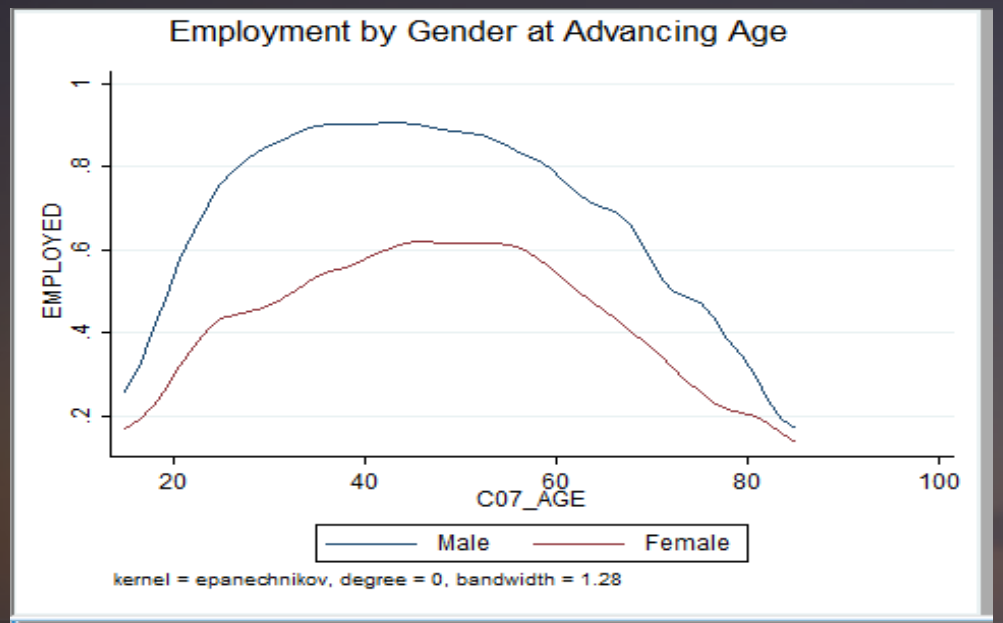
RANDOM AND FIXED EFFECTS REGRESSION MODELS

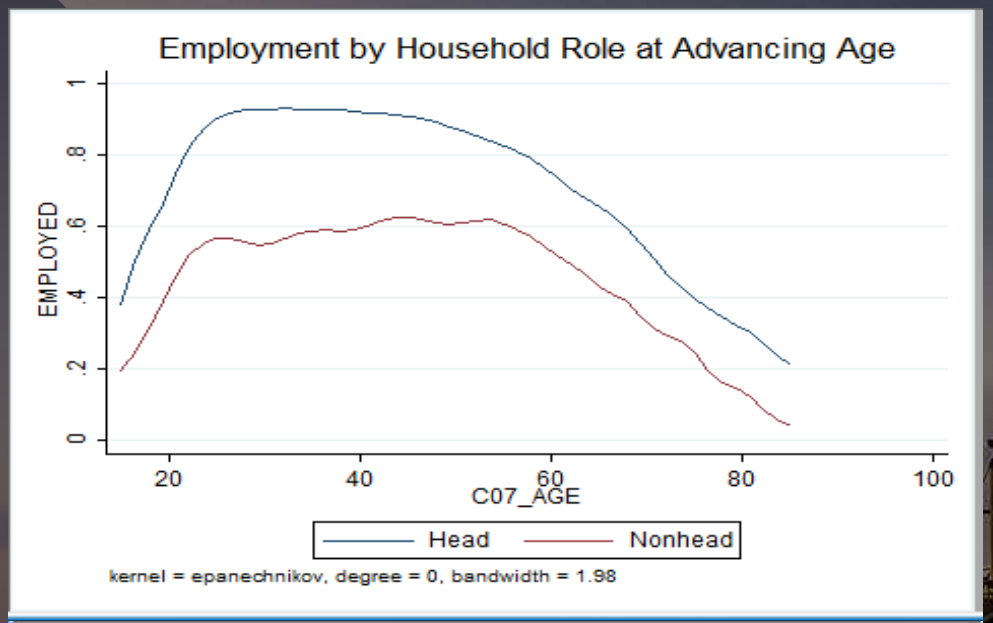
DEPENDENT:
Employment Likelihood

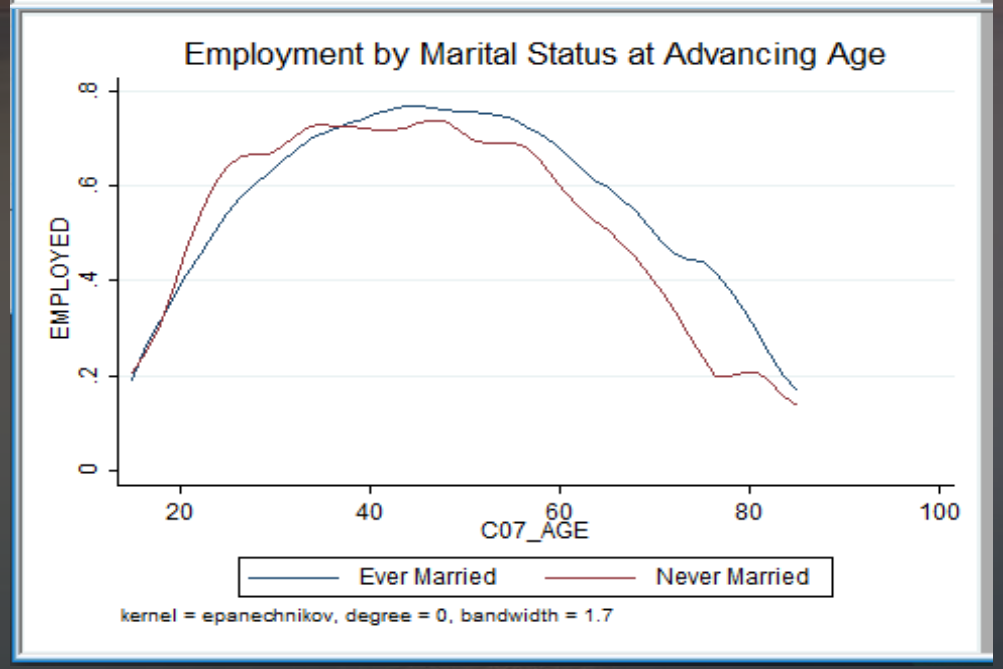
INDEPENDENT:
Job Loss
Demographics
HH characteristics
Labor Market Conditions

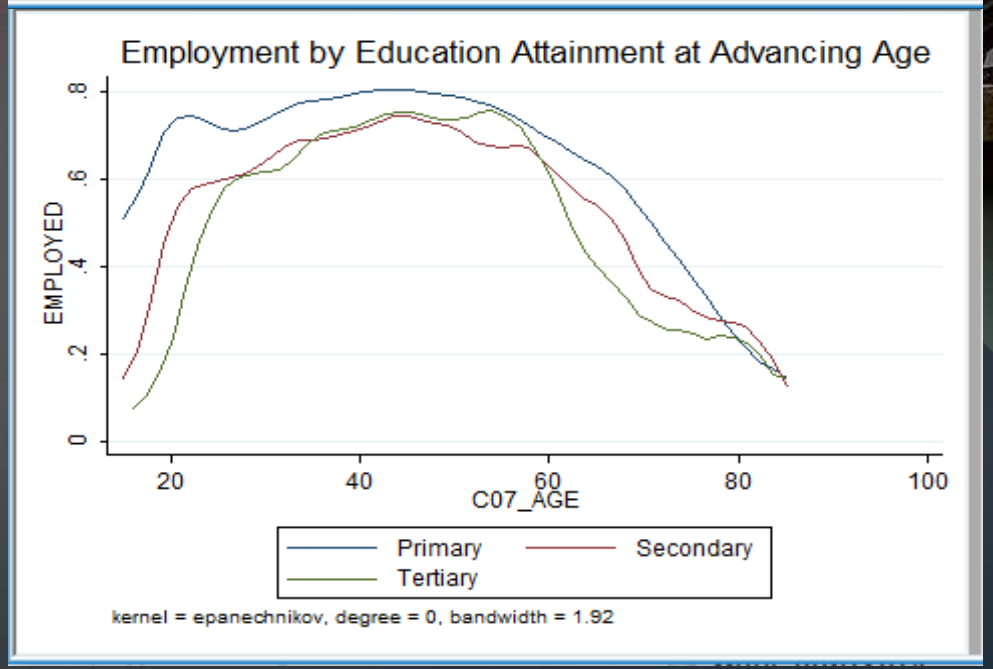
INDEPENDENT:
Older Age Groups
Job loss x Older Age Groups

EMPLOYMENT PATTERNS

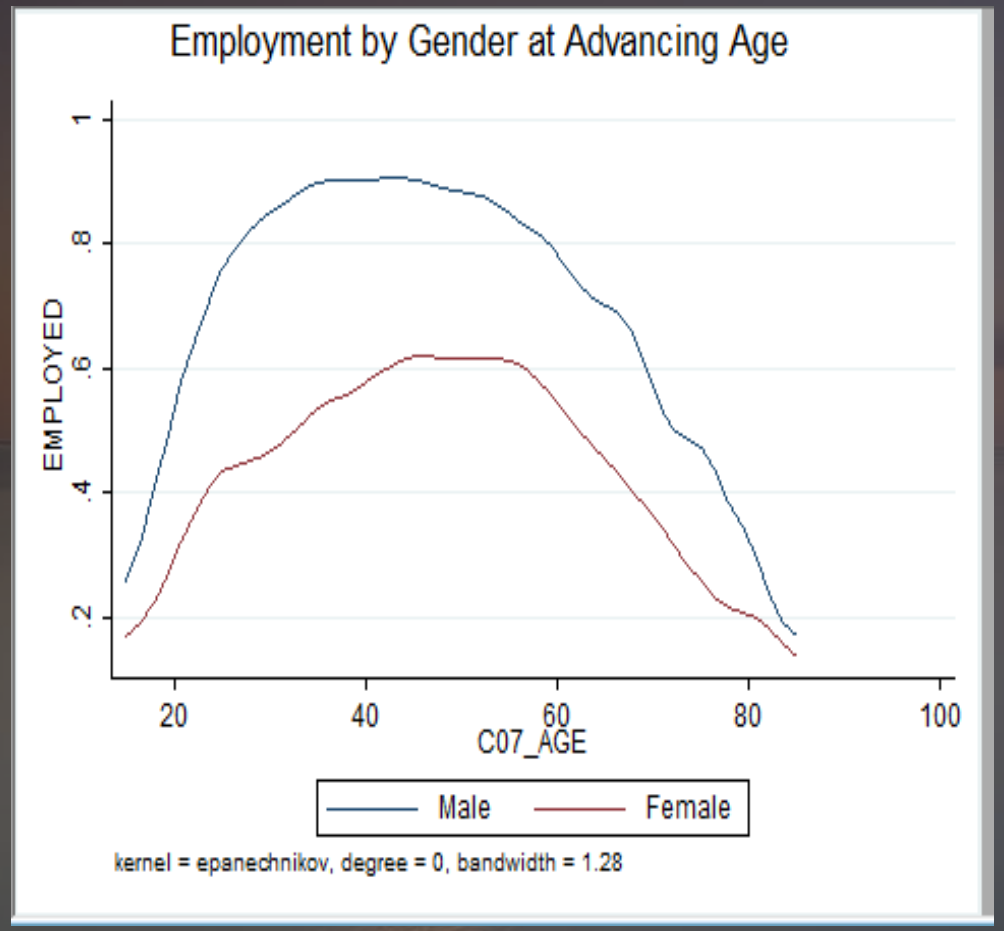


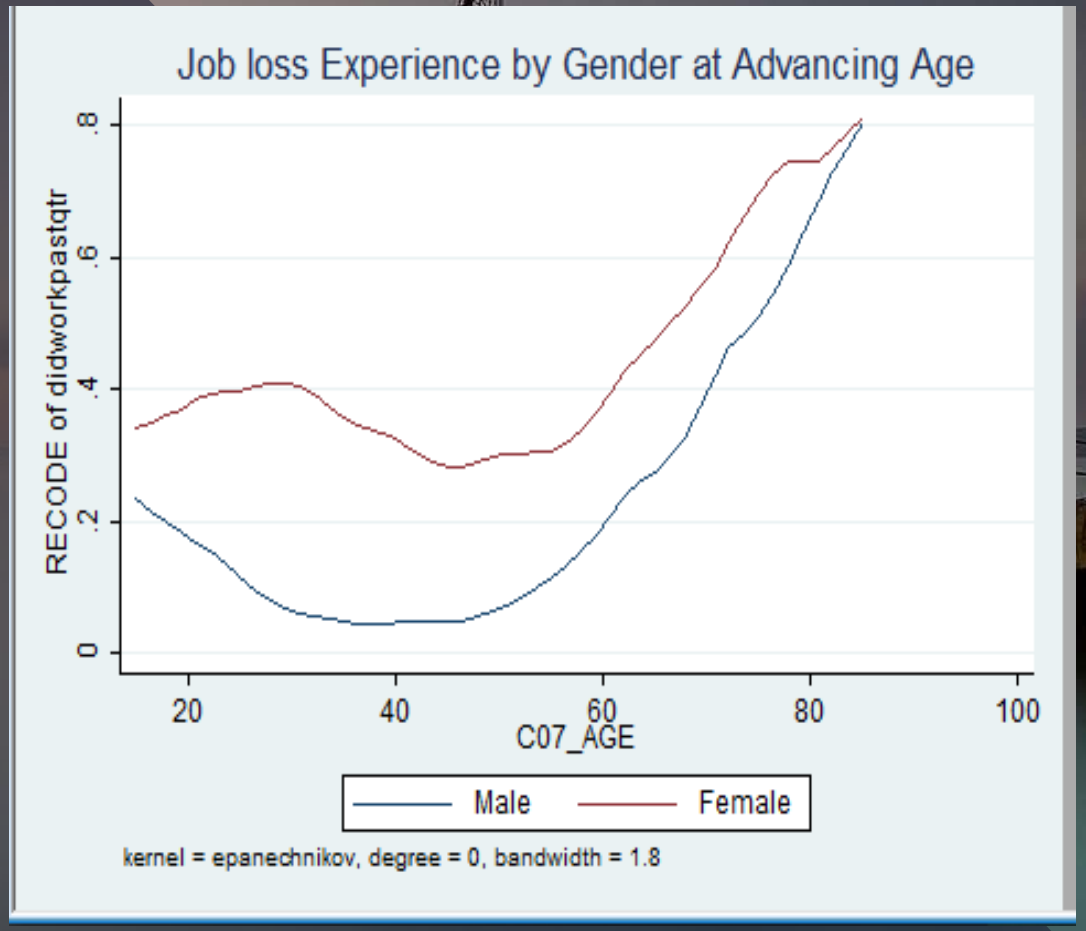




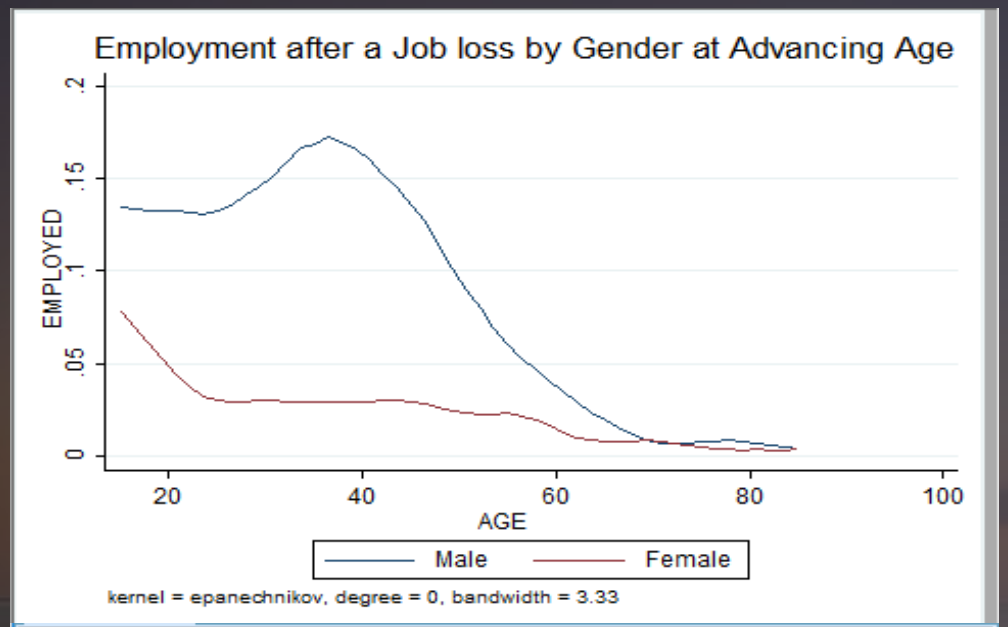


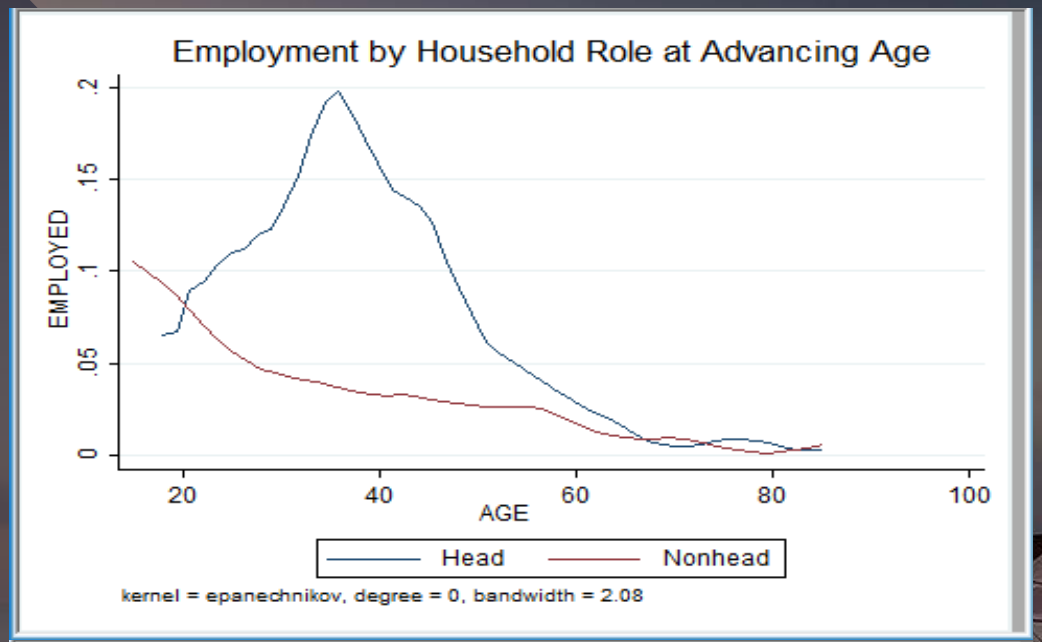
EMPLOYMENT PATTERNS

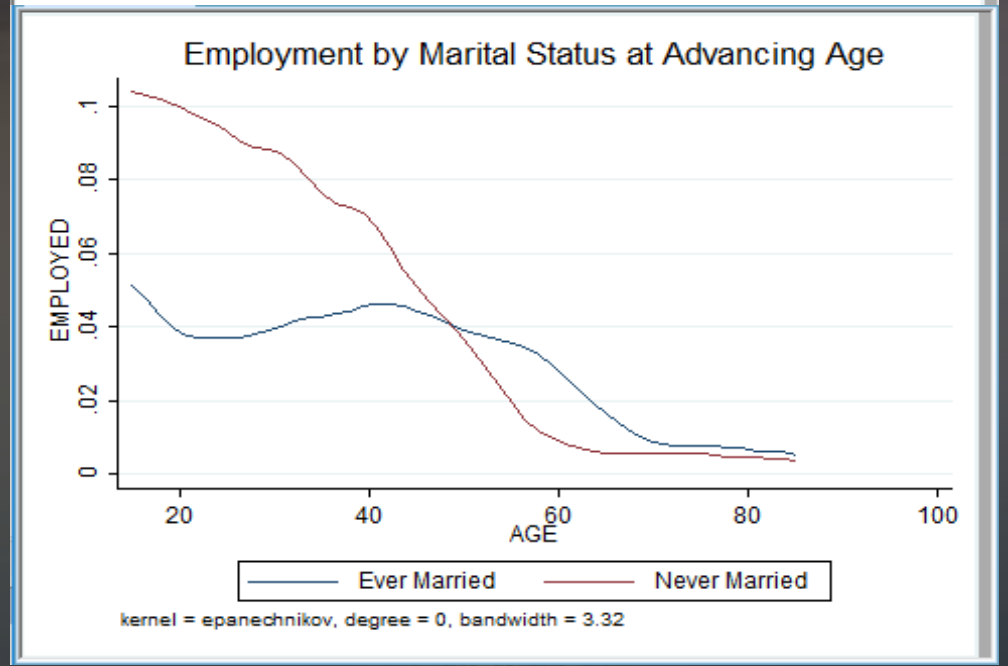


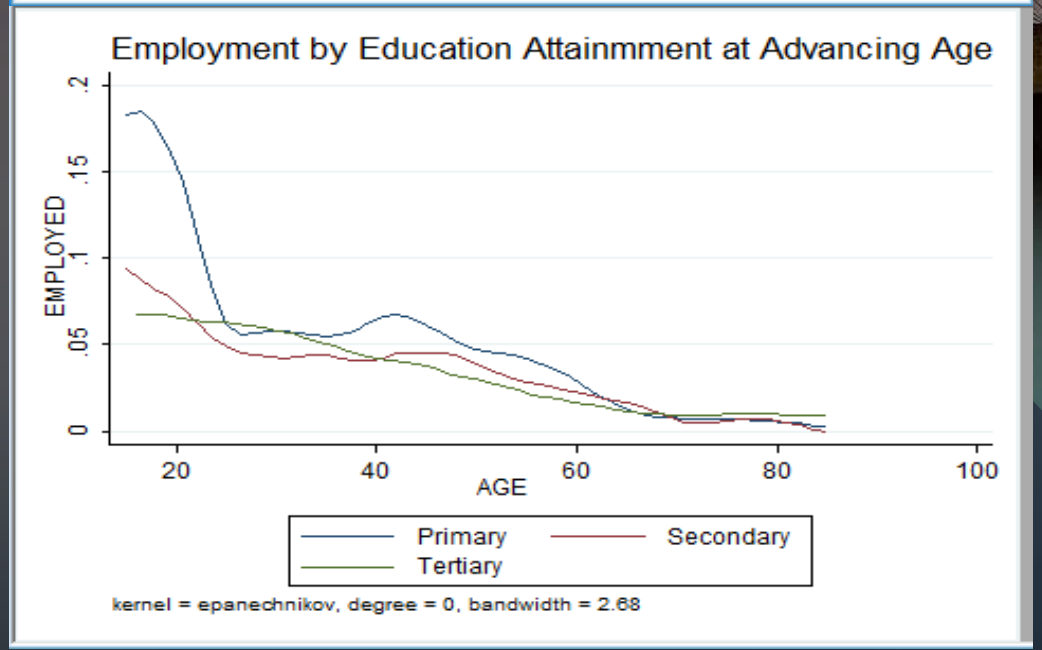


AFTER A JOB LOSS









RESULTS

Explanatory Variables	FE 1	FE 2	FE 3 (Male==1)	FE 4 (Male==0)
Had prior Job loss	**-0.61**	**-0.58**	**-0.52**	**-0.61**
	(0.003)**	(0.004)**	(0.007)**	(0.007)**
Demographic Characteristics				
Male	*Omitted*	*Omitted*	*Omitted*	*Omitted*
Age	0.004	-	-	-
	(0.000)**			
Age Squared	-0.000	-	-	-
	(0.000)**			
Household Head	*Omitted*	*Omitted*	*Omitted*	*Omitted*
Ever Married	-0.002	0.002	.018	-.028
	(0.007)	(0.007)	(0.008) **	(0.011) **
Base: No education				
Had at least primary education	-0.004	-0.004	-.016	.013
	(0.014)	(0.014)	(.019)	(.021)
Had at least secondary education	-0.006	-0.006	-.017	.008
	(0.015)	(0.015)	(.019)	(.023)
Had at least tertiary education	0.003	0.003	-.013	.022
	(0.016)	(0.016)	(.021)	(.024)

RESULTS

Explanatory Variables	FE 1	FE 2	FE 3 (Male==1)	FE 4 (Male==0)
Household Characteristics				
Household Size	*Omitted*	*Omitted*	*Omitted*	*Omitted*
Total no. of employed in the household	0.828 (0.001) **	0.824 (0.001) **	.066 (.001) **	.104 (.002) **
Proportion of Children aged 7yo and below	0.110 (0.015) **	0.110 (0.015) **	.086 (.018) **	.142 (.022) **
Type of Industry and Labor Market Condition				
Base: *Agriculture*				
Services	-0.279 (0.003) **	-0.277 (0.003) **	-.255 (.004) **	-.303 (.006) **
Industry	-0.028 (0.005) **	-0.025 (0.005) **	.003 (0.006)	-.067 (.010) **
Unemployment Rate	-0.002 (0.000)	-0.002 (0.000)	-0.002 (0.002) **	.001 (.002)

RESULTS

Explanatory Variables	FE 1	FE 2	FE 3 (Male==1)	FE 4 (Male==0)
Age Groups				
Base: *Age 15-39*				
Aged 40 – 50		.005	-.000	.007
		(0.007)	(0.009)	(.011)
Aged 51 – 60		-.000	-.003	-.000
		(.010)	(.013)	(.016) **
Aged 61 – 70		-.013	-.014	-.012
		(.014)	(.018)	(.022)
Aged 71 and above		-.045	-.013	-.067
		(.020) **	(.027)	(.032) **
Job loss X Age Groups				
Prior Job loss x Aged 40 – 50		-.052	-.057	-.031
		(.007) **	(.014) **	(.010) **

RESULTS

Explanatory Variables	FE 1	FE 2	FE 3 (Male==1)	FE 4 (Male==0)
Prior Job Loss x Aged 51 – 60		-.067	-.108	-.039
		(.008) **	(.013) **	(.011) **
Prior Job Loss x Aged 61 – 70		-.075	-.139	-.041
		(.009) **	(.014) **	(.013) **
Prior Job Loss x Aged 71 and above		-.034	-.116	.010
		(.011) **	(.015) **	(017)
Constant	.80	.87	.90	.83
No. of observations	77,855	77,855	41,081	37,774
R-squared	74.9	75.	67.0	76.7

*Author's calculation from the sample. Significant at **=5% * 10%, enclosed in parenthesis are standard errors*

RESULTS

Being a **MALE or EVER MARRIED** increases employment probability

LOWER EDUCATION gives lower reduction in employment probabilities than higher education

RESULTS

Increasing household size decreases likelihood of employment

Increasing proportion of children 7 y.o and below decreases likelihood of employment

RESULTS

Increasing unemployment rate decreases likelihood of employment

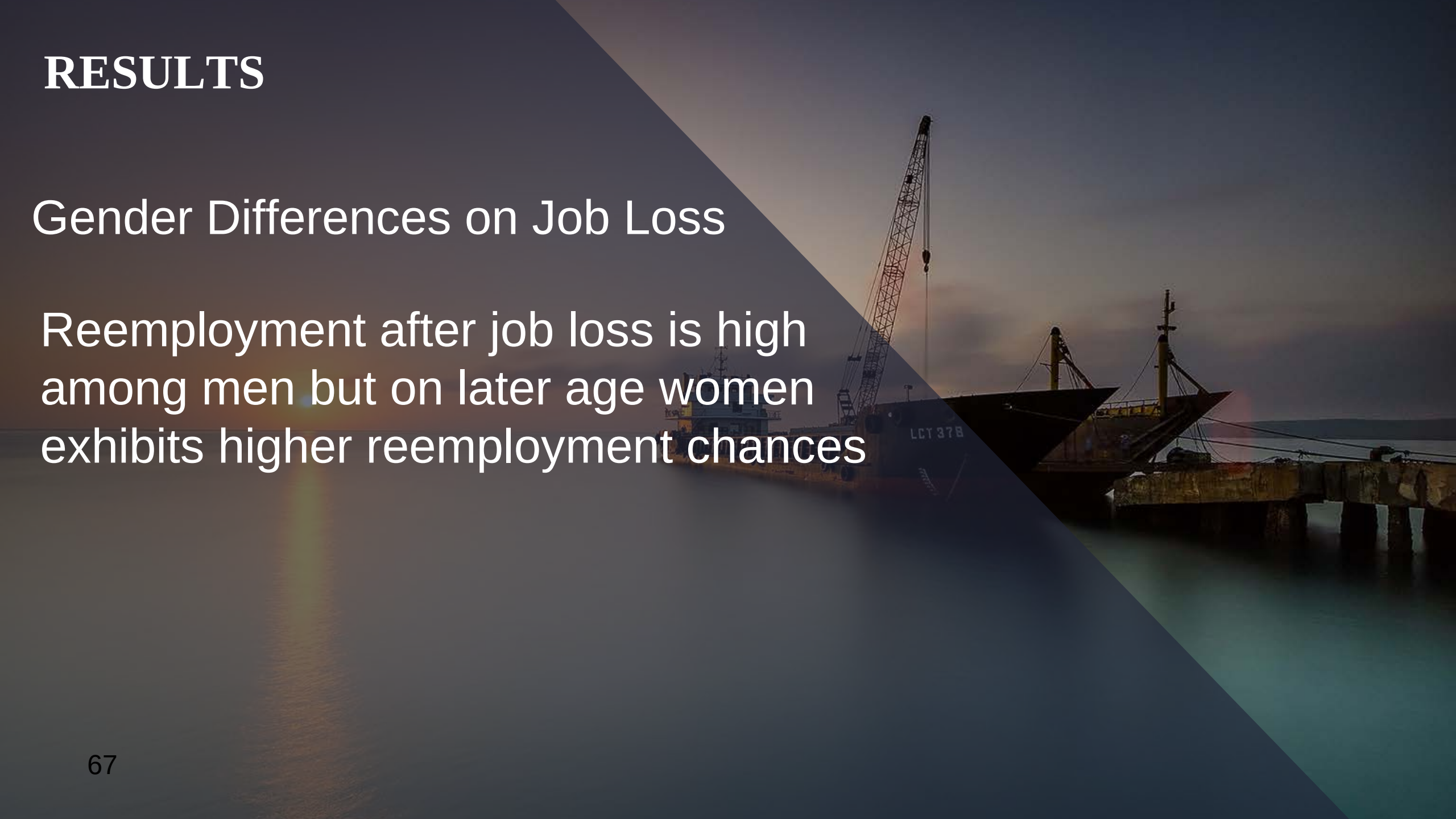
Job loss effects magnifies with age

Job losses are largely observed from the service sector workers

RESULTS

Gender Differences on Job Loss

Reemployment after job loss is high among men but on later age women exhibits higher reemployment chances



THE END.

THANK YOU!
MARAMING SALAMAT PO!

CLOSER Conference, London, 1 November 2017

Supporting ageing parents and changes in quality of life in Sweden and Denmark

Thijs van den Broek & Emily Grundy

LSE THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

erc European Research Council

alpha Ageing, Lifecourse and Population Health Analysis

Informal care provision in context

- Adult children's provision of care to ageing parents and the impact that caregiving has on their lives may depend on the long-term care context.
- State supported care services more widely available -> less pressure on family members to take on care tasks
- This may make caregiving less detrimental for wellbeing.

“Scandinavian model of public services”

- Sweden and Denmark traditionally both characterized by “abundant availability of care services” (e.g., Antonnen & Sipilä, 1996)
- Relatively low pressure to provide informal care
- But considerable retrenchment in Sweden in the 1990s and more recently in Denmark

Informal caregiving: A source of stress

- Caregiver stress (Pearlin et al., 1990)
  - Primary stressors: care recipients' health limitations and extent and type of care needed
  - Secondary stressors: changes in self-perception, conflict with family and work responsibilities
- Stress is detrimental for quality of life (Litzelman et al., 2014)

Hypotheses

H1. Providing support to ageing parents is detrimental for quality of life.

Choice whether or not to provide care

- Role captivity makes caregiving particularly stressful (Pearlin et al., 1990)
- Organization of LTC shapes extent to which caregiving is matter of choice (see Leitner, 2003)

	Low coverage of long-term care services	High coverage of long-term care services
Low support for informal caregivers	Implicit familialism	De-familialism
High support for informal caregivers	Explicit familialism	Optional familialism

Hypotheses

H1. Providing support to ageing parents is detrimental for quality of life.

H2. Negative association between providing support to ageing parents and quality of life is stronger in Sweden than in Denmark.

Hypotheses

H1. Providing support to ageing parents is detrimental for quality of life.

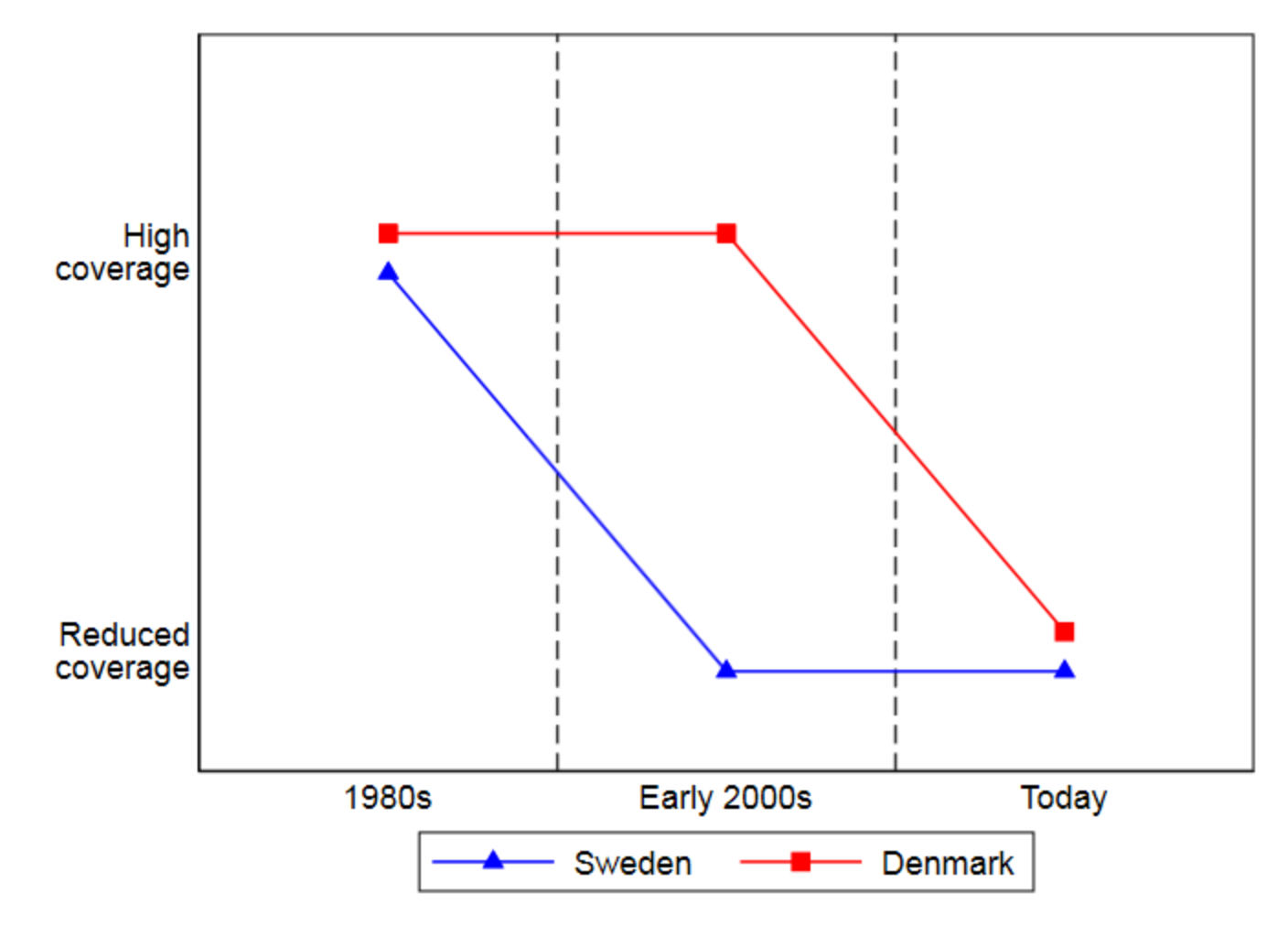
H2. Negative association between providing support to ageing parents and quality of life is stronger in Sweden than in Denmark.

H3. Country difference in the impact of caregiving on quality of life has become smaller over the course of the 21st century

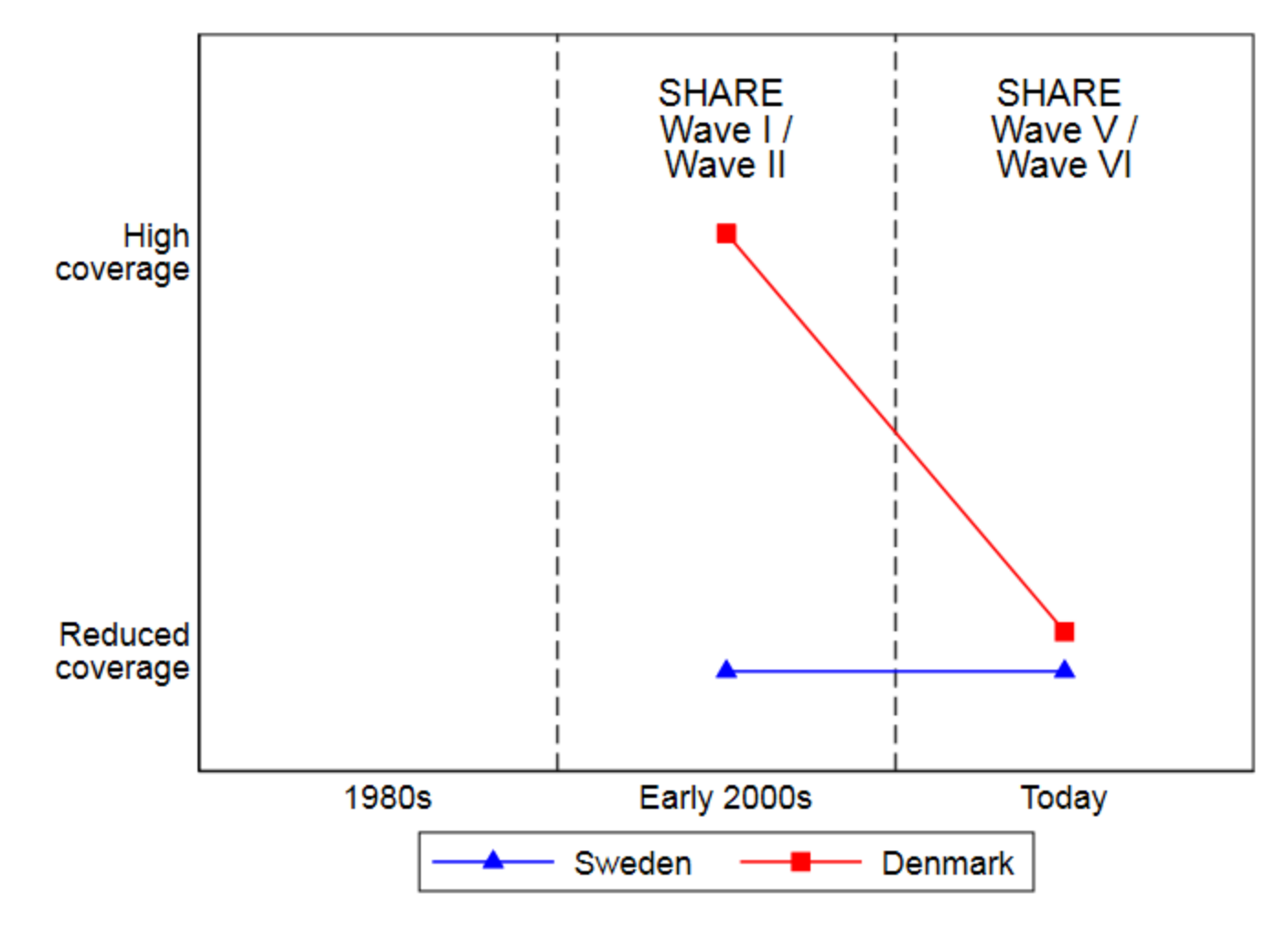
Data

- Survey of Health, Aging and Retirement in Europe (SHARE)
- Wave I+II (2004-2007) or Wave V+VI (2013-2015)

Long-term care coverage



Long-term care coverage



Data

- 2,166 observations for 1,083 men and women aged 50-75 who had at least one living parent at baseline and follow-up and had not provided support to parents in the 12 months prior to the baseline interview
- Multiple imputation was used to deal with missing information on variables of interest (14.3% of observations (n=309))

Main measures

- Quality of Life: CASP-12 (range: 12-48; α=.80)
- Provision of support/care: provided help with personal care and/or household support to a father and/or mother in less than good health between baseline and follow-up
- Parental health limitations: At least one living parent in poor / fair health

Methods

- Fixed effects regression; all time-invariant characteristics are accounted for
- First model: caregiving effect constrained not to vary by country or period
- Second model: caregiving effect varies by country
- Third model: country difference in caregiving effect varies by period (Wave I+II vs Wave V+VI)
  (difference-in-difference)

Results FE regression Quality of Life

	b	(SE)	b	(SE)
Parent support	-0.83*	(0.37)		
Parent support x Denmark				
Follow-up	-0.04	(0.17)		
Age:				
50-54	Ref.			
55-59	0.19	(0.35)		
60-64	0.81	(0.55)		
65-69	0.86	(0.80)		
70-75	0.78	(1.54)		
Lives with partner	-0.66	(0.60)		
Employed	0.74	(0.48)		
One parent deceased	0.59	(0.59)		
At least one parent with less than good health	0.18	(0.24)		

Notes: *Data are from SHARE Waves I, II, V, VI; n=2,166; Multiple imputation using chained equations was used to deal with missing values; Robust standard errors; * p < 0.05, ** p<0.01*

Hypotheses

H1. Providing support to ageing parents is detrimental for quality of life.

Results FE regression Quality of Life

	b	(SE)	b	(SE)
Parent support	-0.83*	(0.37)	-1.47**	(0.52)
Parent support x Denmark			1.32*	(0.63)
Follow-up	-0.04	(0.17)	-0.04	(0.17)
Age:				
50-54	Ref.		Ref.	
55-59	0.19	(0.35)	0.17	(0.35)
60-64	0.81	(0.55)	0.77	(0.55)
65-69	0.86	(0.80)	0.87	(0.80)
70-75	0.78	(1.54)	0.80	(1.54)
Lives with partner	-0.66	(0.60)	-0.67	(0.60)
Employed	0.74	(0.48)	0.74	(0.48)
One parent deceased	0.59	(0.59)	0.61	(0.59)
At least one parent with less than good health	0.18	(0.24)	0.17	(0.24)

Notes: *Data are from SHARE Waves I, II, V, VI; n=2,166; Multiple imputation using chained equations was used to deal with missing values; Robust standard errors; * p < 0.05, ** p<0.01*

Hypotheses

H1. Providing support to ageing parents is detrimental for quality of life.

H2. Negative association between providing support to ageing parents and quality of life is stronger in Sweden than in Denmark.

Results FE regression Quality of Life

- Addition of 3-way interaction (support provision X country X period) not significant ($F(2,\ 1{,}082) = 0.49$, $p = .61$).
- The extent to which the effect differs between Sweden and Denmark did not change significantly over time (Δb: -.62, 95% CI: -3.47; 2.23)

Hypotheses

H1. Providing support to ageing parents is detrimental for quality of life.

H2. Negative association between providing support to ageing parents and quality of life is stronger in Sweden than in Denmark.

H3. Country difference in the impact of caregiving on quality of life has become smaller over the course of the 21st century

Discussion

- Particularly in Sweden, providing care to parents is detrimental for quality of life
- But no evidence that adverse effects of caregiving on quality of life became stronger when LTC coverage was reduced in Denmark
- “Optional familialism” (Leitner, 2003): generous provision of state supported care services + *support for caregivers*
- Denmark: training for informal caregivers & more generous care leave and pension credits (Courtin et al., 2014)

Thank you for your attention!

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