The influence of extended working lives on health and the implications for the socio-economic gradient

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Today, the focus will be on inequalities in:

i) Who works up to and beyond state pension age (SPa)? And has this changed over time?

ii) What are the consequences for later life health and wellbeing of working beyond SPa?

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Background

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- ✓ Much emphasis on what predicts retirement and retirement timing
  - Growing interest in what happens in years leading up to 'traditional' retirement ages
- ✓ Increases in the pension eligibility age increase the age at which workers retire. The trend toward working longer is relatively new. Little known about who works past Spa, and why
  - Life course factors, such as previous attachment to labour market, family experiences (marital & parental) (e.g. Wahrendorf et al. 2017; Finch 2014; Hank 2013)
  - Greatest labour market attachment throughout their lives? ['Attachment hypothesis']
  - Reduced resources in later life? ['Opportunity costs']
- ✓ 20th C social & demographic change has increased diversity in work and family experiences across the lifecourse.

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- ✓ Little known about consequences of working up to and beyond Spa for health and wellbeing
  - Evidence suggests that participation in paid work is beneficial for health. However, existing research on work and health
    - ❑ does not focus on those who work beyond State Pension Age (SPA);
    - ❑ lacks a life-course approach.
  - Focus on early retirement – evidence mostly shows retirement beneficial for psychological health (Westerlund et al. 2010) but less consistent for physical health (Calvo et al. 2013)

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How common is it to be in paid work in the ages leading up to and past SPa?

How are prior labour market experiences and current sociodemographic factors (including health) related to paid work in later-life?

Has this changed over time?

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Data and Methods

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- Retirement Survey: 1988/89,
- British Household Panel Survey (BHPS): 1999
- English Longitudinal Study of Ageing (ELSA): 2008/09

  - Retrospective life histories (children, marital, and labour)
  - Current demographic, health, and socio-economic characteristics
  - RS and BHPS: ‘usual social class’; RS: caring histories; ELSA: health in adulthood

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Data and Methods /2

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- Women 55-64 and men 60-69 at each time point
- 'Optimal matching analysis' (OMA) to summarise employment and family histories between the ages of 16-54 for women and 16-59 for men
- Paid work: month/week prior to interview
  - For women, part-time (PT <=20) or full-time (FT) employment

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Sample

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	Age	Survey	Cohort
Women	**55-64**	RS 1988/89	1924-1933
		BHPS 1999	1934-1943
		ELSA 2008/09	1944-1953
Men	**60-69**	RS 1988/89	1919-1928
		BHPS 1999	1929-1938
		ELSA 2008/09	1939-1948

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Labour Market (LM) Histories

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Women 16-54

1. FT throughout 16-54
2. Non-employed throughout
3. Family carer (FT to 21, out LM 22-54)
4. FT early exit (at 49)
5. Family carer (23-34) to FT
6. Family carer (26-32) to PT
7. PT throughout (PT 22-54)

Men 16-59

1. FT throughout 16-59
2. Non-employed
3. FT early exit (at 49)
4. Start at 23, FT 24-59

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Key Covariates

- Lifetime – Labour Market and Parental
- Age
- No partner, with partner in LM, and with partner not in LM
- Ever separated/divorced and ever widowed
- Care provision
- Tenure, education, income
- Health: SRH, health limitations, mobility
- Eligible for occupational pension
- Number of jobs ever held

Descriptive

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Percentages	Women 55-64		
	1988/89 RS (1924-34)	1999 BHPS (1935-44)	2008/09 ELSA (w4) (1944-53)
Not in paid work	64.5	64.7	48.9
Part-time	15.9	13.4	17.4
Full-time	19.6	21.9	33.6
Percentages	**Men 60-69**		
	1988/89 RS (1919-28)	1999 BHPS (1929-38)	2008/09 ELSA (w4) (1939-48)
Not in paid work	68.2	72.6	55.4
In paid work	31.8	27.4	44.6

Distribution of Labour Market History (%)

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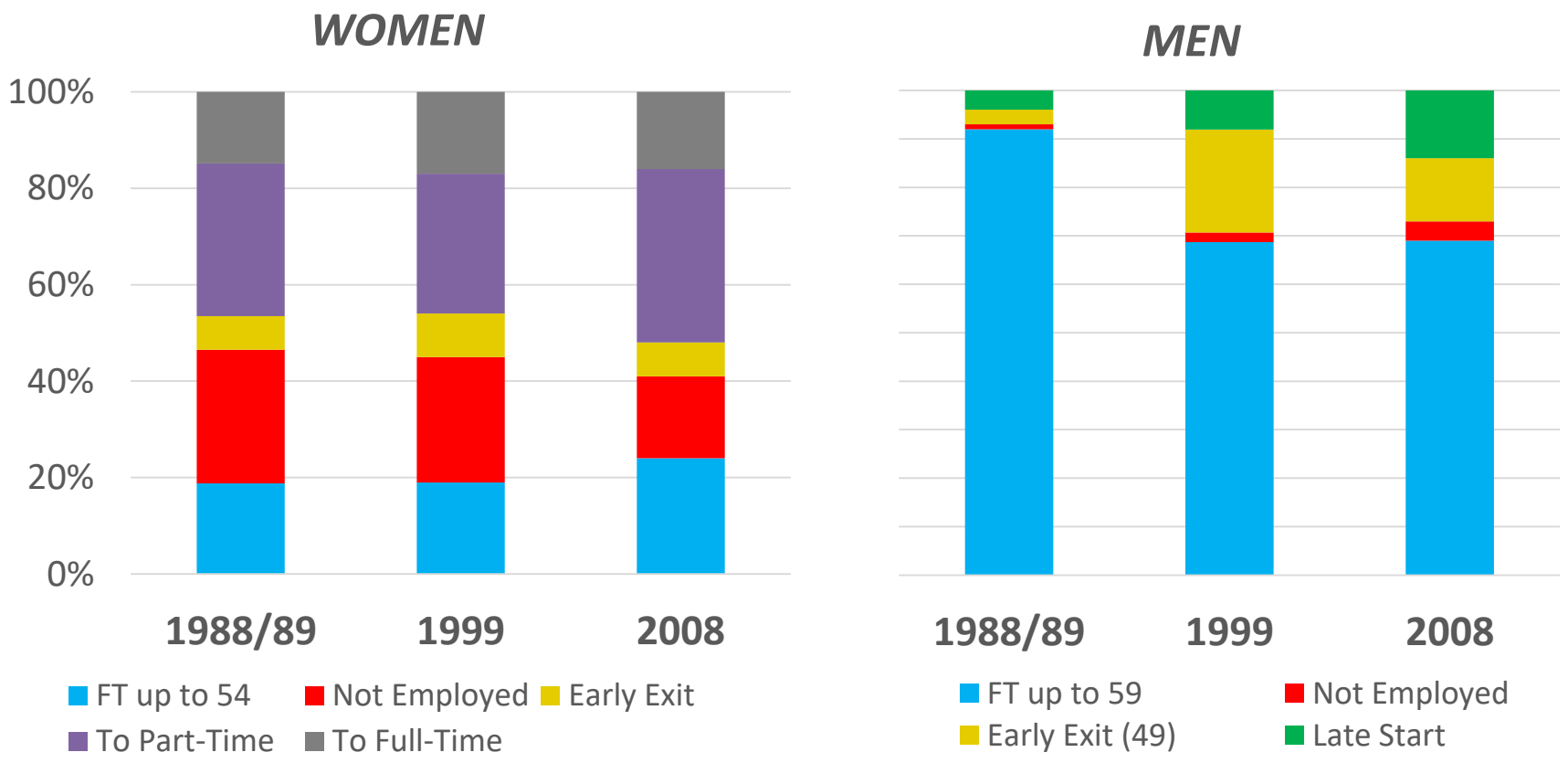

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Other trends …

- Housing tenure: outright, from 50% to 62%
- High education: from 10% to 20% (W), to 27% (M)
- Ever sep/divorced: from 12% to 36% (W), to 30% (M)
- Ever widowed: from 19% to 8% (W); from 10% to 6% (M)
- No children: from 17% to 13% (W)

Women 55-64
(row percentages)

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	1988/89 (RS)			2008/09 (ELSA)		
	No work	<=20h	21+ h	No work	<=20h	21+ h
FT up to 54	59	6	**35**	30	15	**55**
FC to FT	52	11	**37**	47	10	**43**
Not employed/FC	**88**	7	5	**76**	10	13
Early exit at 49	**86**	11	4	**79**	17	3
FT to PT/FC to PT	48	**33**	19	43	25	**31**
Ever divorced	63	11	**26**	45	15	**40**

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Women 55-64
(row percentages)

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	1988/89 (RS)			2008/09 (ELSA)		
	No work	<=20h	21+ h	No work	<=20h	21+ h
Alone	69	13	**18**	53	14	**33**
Partner in work	46	23	**30**	32	24	**45**
Partner Not PW	**77**	11	12	**69**	14	17
Outright	67	15	18	63	18	19
Mortgage	42	22	36	30	19	**51**
SRH=> good	50	20	25	**42**	19	39
SRH=fair/poor	73	12	15	71	11	17
No Mobility Lim.s	59	18	23	**44**	19	37
1+ Mobility Lim.s	87	5	8	82	7	11

Women 55-64
Multinomial Logistic Regression

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	1988/89 (RS)		2008 (ELSA)	
	PT vs. no work	FT vs. no work	PT vs. no work	FT vs. no work
FT up to 54	Ref	Ref	Ref	Ref
FC to FT	0.78	0.17	-0.72 ***	-0.65 **
NE/FC	-0.08	-2.33 ***	-1.34 ***	-2.69 ***
Early exit at 49	0.06	-2.58 ***	-0.32	-3.24 ***
FT to PT/FC to PT	1.73 ***	-0.58 ***	0.26	-0.92 ***

Note: Controlling for children early and late (ref no children); no current partner and partner not in LBF (ref. partner in LBF); ever-widowed, ever-divorced; A-level, O-level, CSE, technical, no educational qualifs (ref. university and above); own home with mortgage and rents or social housing (ref. own home outright); income quintiles (ref. highest); Providing care for sick or disabled adult or elderly (ref. not providing care); # jobs ever held; occupational pension; Self-rated health – good, fair or poor (ref. very good/excellent); Mobility limitations (ref. no limitation) and limiting health conditions (ref. no limiting health conditions).

Probability of FT work among RS and ELSA women

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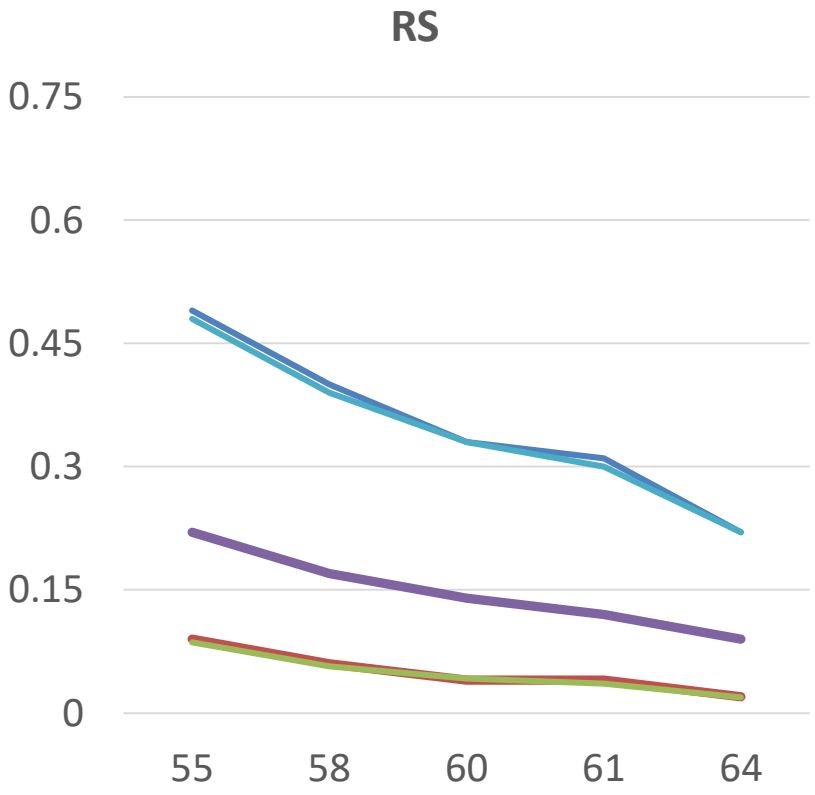

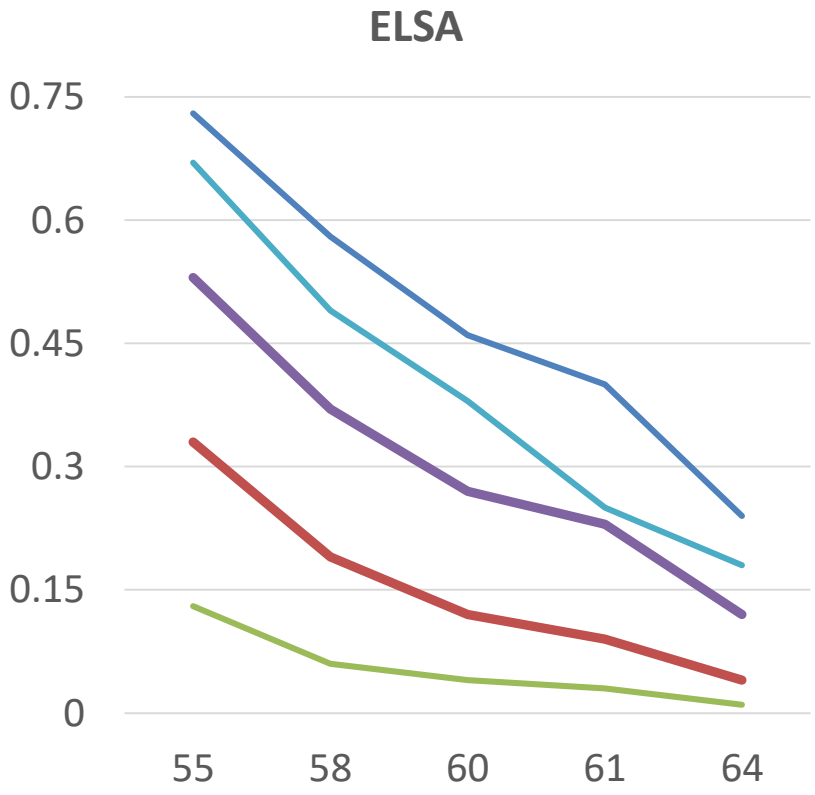

Probability of PT work among RS and ELSA women

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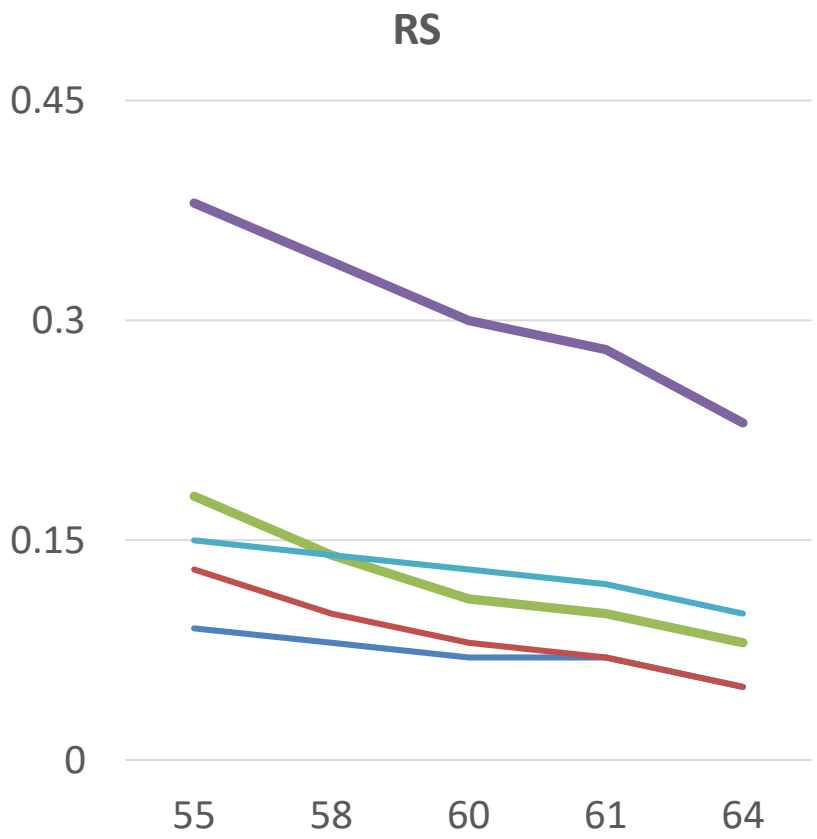

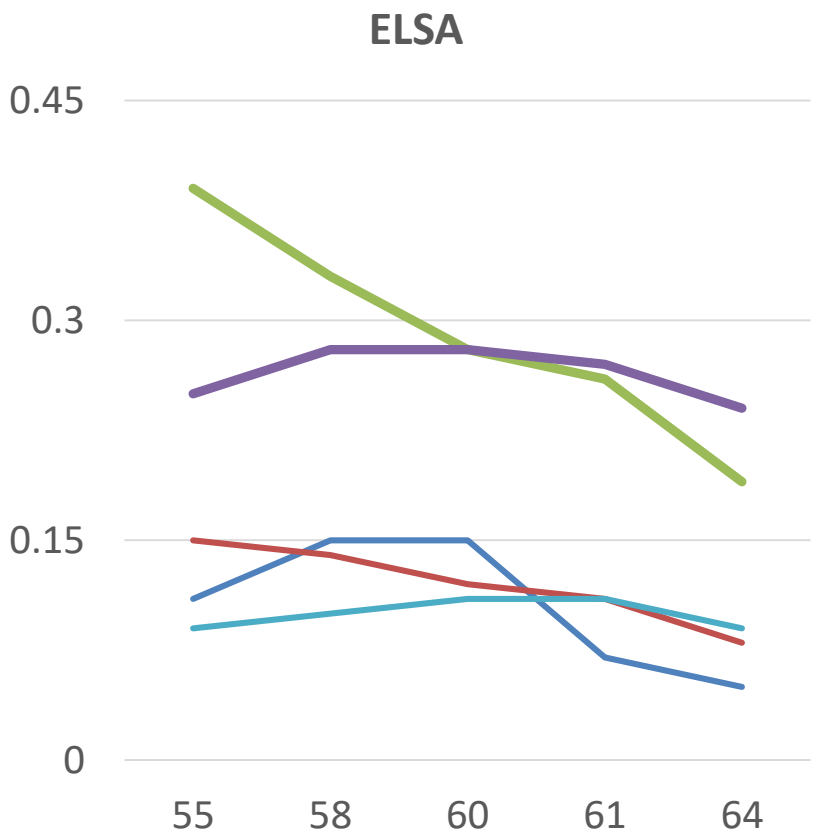

F-T throughout
Not employed
Early Exit
to PT
to FT

F-T throughout
Not employed
Early Exit
to PT
to FT

Main findings

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- Relatively little change across cohorts in labour market patterns – BUT younger cohorts of women are more likely to report full-time work throughout their lives
- Women with continuous labour market history consistently more likely to be in paid work at older ages ('attachment hypothesis')
- Those with more advantaged characteristics (e.g. highest income quintile and better health) are more likely to work at older ages.
- Some evidence of opportunity costs – Divorce and mortgage?

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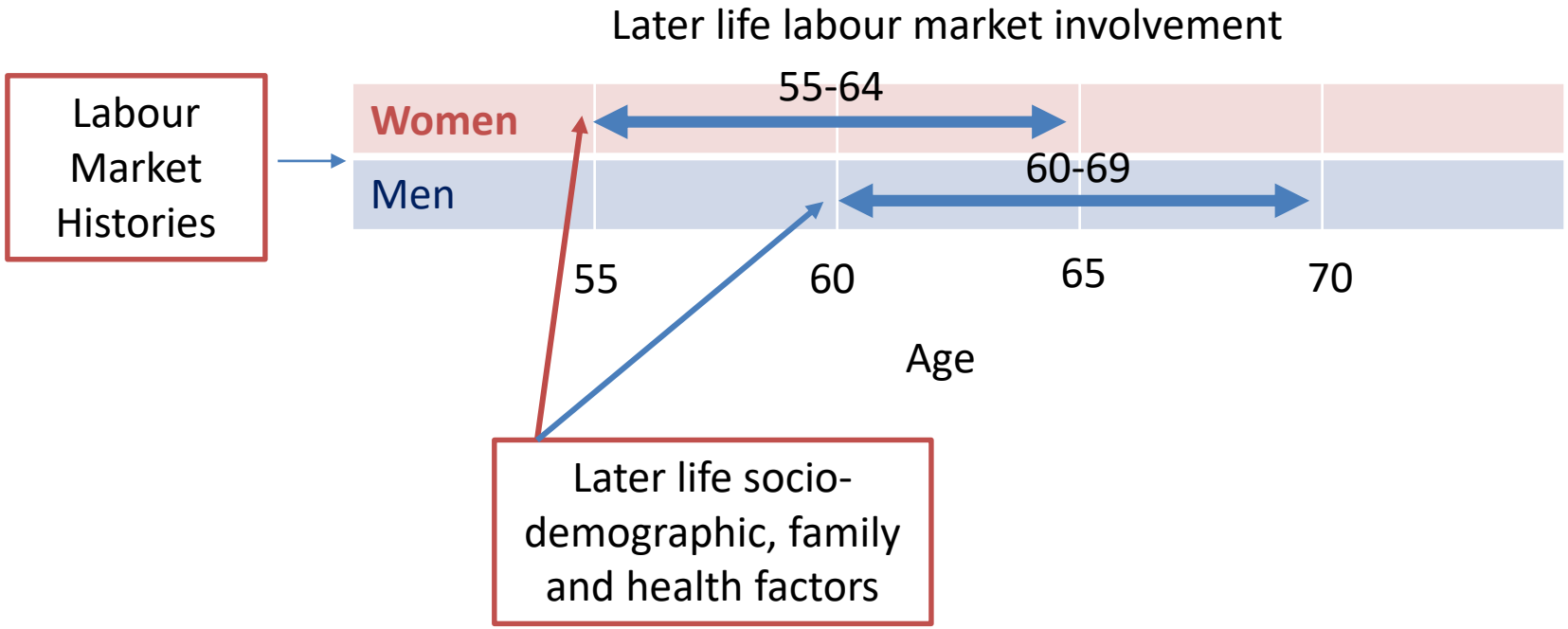
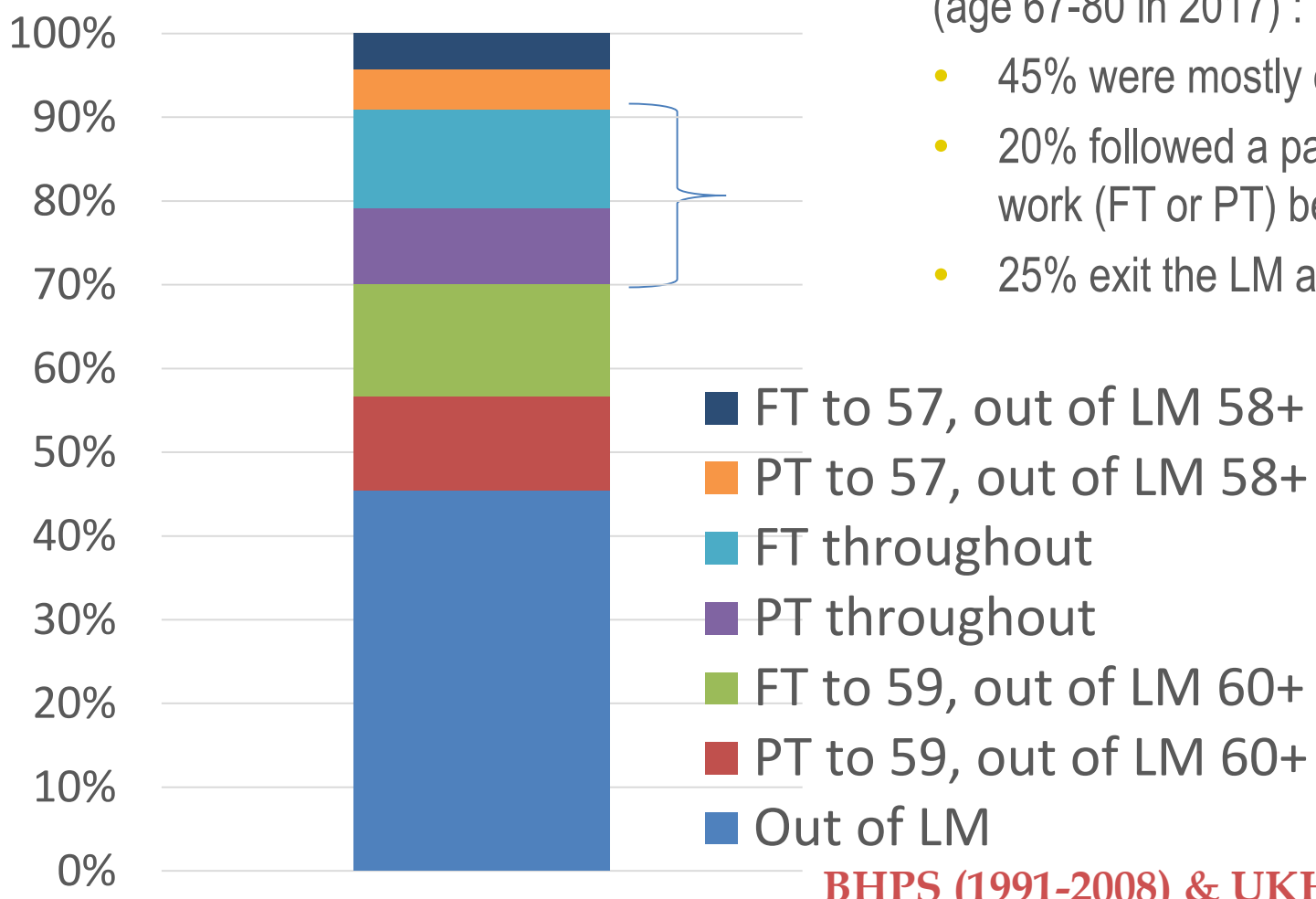
Patterns of Work

- Summarise the most common patterns of men and women's later-life employment in the five years pre- and post-state pension age
  - Men: 60-69 yrs / Women: 55-64 yrs
- Assess the socio-demographic and life course factors associated with these patterns



Key Findings /1 (Women)



At ages 55-64 1937-1950

(age 67-80 in 2017) :

- 45% were mostly out of the LM
- 20% followed a pattern involving work (FT or PT) beyond SPa
- 25% exit the LM at their SPa

BHPS (1991-2008) & UKHLS (2010-2015)

Very similar findings …

- Those with weak labour market attachment are less likely be in paid work at ages surrounding SPa.
- Continuity between FT and PT patterns of employment and labour market histories
- Both among men and women, good health and having a mortgage are key predictors of working FT up to SPa and beyond
- Women working FT up to and beyond Spa were more likely to be born in the 1940s
- Men working PT appear to be a socioeconomically privileged group

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Aim & Objectives

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- Examine the relationship between paid work beyond SPA and health
  - i. Using longitudinal data
  - ii. Using life-history data, including labour market histories & health in adulthood and childhood
- Examine the effect of the reasons to work beyond SPA on well-being

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Data

- English Longitudinal Study of Ageing (ELSA), a multidisciplinary longitudinal biennial survey representative of individuals 50+ in England. Household response rate ~70%
- Waves 2, 3, and 4 *collected respectively in 20**04/05**, **06/07**, and **08/09*** [health]
- Waves *4* and *7* collected in 20***08/09*** and ***14/15***, respectively [quality of life]

Sample

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Our analytic sample included respondents who

i. had reached the current SPA (**65***M*, **60***W*) by W3

ii. participated in both W2 and Life History

iii. were within 10 years of SPA (65-74 for men and 60-69 for women)

(N~2,300)

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Key Variables

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Work beyond SPA: being in paid work in the month prior to the interview at W3.

We also accounted for work characteristics

- ✓ Working Hours per week *(30+ vs <30h)*
- ✓ Physical Effort *(sedentary vs physically demanding)*
- ✓ NS-SEC Occupational Class *(3 classes)*

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Key Variables /2

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We considered three health outcomes

- ✓ Physical Health *(represented by a latent variable including ADL, SRH, grip strength, heart conditions)*
- ✓ Depression *(validated CES-D scale)*
- ✓ Sleep disturbance *(index including delay in falling asleep, inability to stay asleep, and sleep quality)*

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Results, Descriptive

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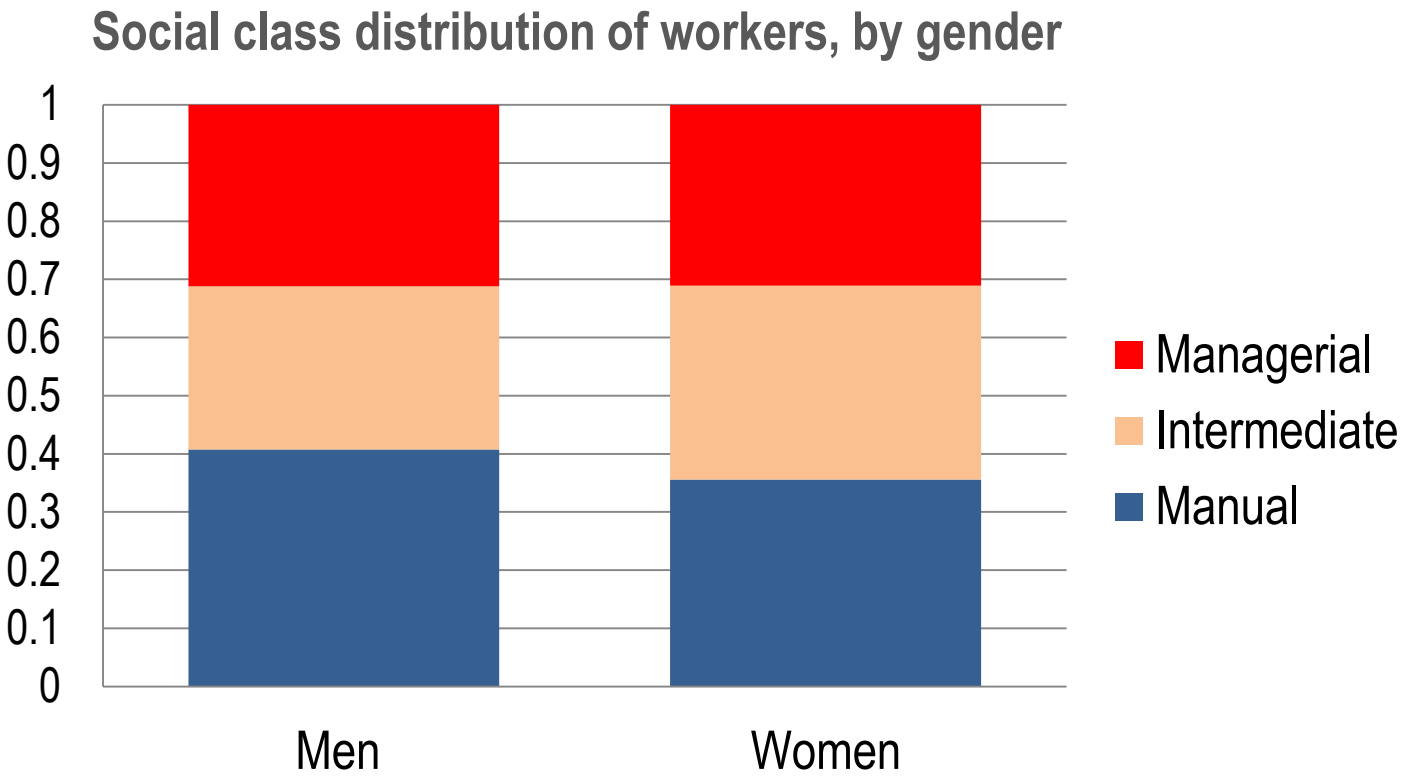
1 in 5 English people reported being in paid work beyond SPA (**25%** W, **14%** M)



Results, Key findings

Unadjusted and fully adjusted beta coefficients for the relationship between paid work at W3 and 'good physical health' at W4

	MEN		***WOMEN***	
	Unadjusted Model	*Fully Adjusted*	*Unadjusted Model*	*Fully Adjusted*
In Paid Work	0.323 ***	0.021	0.292 ***	0.011
2+ ill health periods	-0.561 ***	0.113***	-0.642 ***	-0.166***
Fair/Poor SRH /child	-0.256 ***	-0.047*	-0.278 ***	-0.037
Weak labour attachment	-0.117 **	-0.018	-0.103 **	0.006
N	996		1,342	

Fully adjusted model controls for age, education, labour market histories, marital status, wealth, housing tenure, smoking, physical activity, caring, depressive symptoms, and physical health

Sample and Method

- We included men aged 65-74 and women aged 60-69 at W4 [SPA was 65 for men, 60 for women].
- In our final models we analysed 2,517 (cross-sectional) and 1,865 individuals (longitudinal).
- Conditional change linear regression to examine associations between changes in employment status and QoL at W7, adjusting for CASP-19 scores at W4.

Key Variables

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We evaluated subjective quality of life using the CASP-19 scale, a 19-item self-completion questionnaire assessing control, autonomy, self-realisation and pleasure.

The possible range of CASP-19 scores is 0 to 57, with higher scores indicating greater well-being

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Key Variables /2

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What are your reasons for working after SPA?

1. Could not afford to retire earlier
2. Didn't know what to do after stopping work
3. Enjoyed job/working
4. To improve pension/financial position
5. To keep fit and active
6. To retire at the same time as spouse/partner
7. Persuaded by employer to stay on

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Key Variables /3

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Employment Status and reasons

1. In paid work for financial reasons
2. In paid work 'voluntarily'
3. 'Normal' retirement
4. 'Involuntary' retirement
5. 'Voluntary' retirement

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Other covariates

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We controlled for a range of variables known to be associated with QoL and work past SPA

- Health (long-standing illness; disability; depression)
- Education; housing tenure; wealth
- Informal care provision; volunteering
- Marital status; number of close relationships; frequency of contacts; presence of positive support

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Results, Descriptive

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Table 1. Unadjusted CASP-19 score in ELSA Wave 4 by employment status

	N	%	W4 CASP-19 [Mean (SD)]
Retired at SPA	707	28.1	42.1 (0.30)
Voluntarily retired	708	28.1	44.5 (0.26)
Involuntarily retired	596	23.7	39.0 (0.36)
In work, financial necessity	175	7.0	41.0 (0.64)
In work, by choice	331	13.1	45.3 (0.36)

Source: ELSA Wave 4.

P value <0.001

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Results, Descriptive /3

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Mean changes in CASP score by changes in employment between W7 and W4

	N	%	Δ in CASP [Mean (SD)]	CASP at W7
Still retired at SPA	531	28.2	-0.71 (0.31)	*41.8*
Still voluntarily retired	536	28.5	-1.24 (0.26)	*43.5*
Still involuntarily retired	422	22.5	-1.70 (0.37)	*37.9*
Still in work	50	2.7	-0.38 (0.49)	*44.2*
No longer in work, necessity	80	4.3	0.92 (0.76)	*42.9*
No longer in work, choice	165	8.8	-0.01 (0.40)	*45.2*

Source: ELSA Wave 4 and Wave 7.

P value <0.001

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Results, Key findings /2

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Basic and fully adjusted B coefficients (with 95% CIs) for the conditional change model of CASP-19 score at Wave 7 compared with Wave 4

	Model 1: Basic adjusted model	Model 2: Fully adjusted model
Still retired at SPA	Ref	Ref
Still voluntarily retired	-0.04 (-0.80; 0.71)	-0.10 (-0.84; 0.64)
Still involuntarily retired	**-1.59** (-2.41; -0.78)	**-1.44** (-2.23; -0.64)
Still in work	0.64 (-0.52; 1.81)	0.49 (-0.64; 1.61)
No longer in work, necessity	*1.10* (-0.08; 2.28)	0.69 (-0.67; 2.06)
No longer in work, choice	**1.14** (0.03; 2.26)	*0.97* (-0.07; 2.01)

Source: ELSA Wave 4 and Wave 7. Note: basic model only adjusts for changes in socio-economic characteristics, whereas the fully adjusted model also accounts for changes in health between Waves.

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Conclusions

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i) Being in paid work beyond SPa is + associated with good health. However, this relationship is no longer significant after controlling for baseline and life-course characteristics;

ii) 1 in 3 report financial circumstances as their main reason for being in paid work past SPa. These report lower QoL, with no improvements upon eventual retirement

iii) Those who work past SPA for positive reasons report higher QoL, and experience marginal improvements in QoL when they do eventually leave the labour market.

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Implications for Inequalities

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- The already privileged are the ones who are working up to and beyond Spa (more advantageous socioeconomic conditions and better physical and mental health)
- Being divorced/ separated and still having a mortgage are also associated with employment post SPa (particularly among women).
- No adverse health effects for those currently working beyond Spa
- However, reasons for working beyond SPa critical for quality of life
- Will results hold for future workers? If everyone, including people in poor health, are required to work longer, could this lead to worse health?

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