Is being in paid work beyond state pension age beneficial for health? Evidence from England

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1. Background

In response to population ageing and the associated rising costs of pensions, health and social care, governments are pursuing policies designed to extend working lives by raising the state pension age (SPA) (Bongaarts, 2004; Vickerstaff, 2010). The UK, like many other European countries, has introduced reforms raising SPA for women to age 66 by 2020 and setting SPA for both men and women on a rising trajectory to age 68 by 2046 (Ginn, 2013). However, at present, relatively little is known about who engages in paid work beyond SPA, and in particular, whether working beyond SPA has positive or negative implications for health.

Most research to date has focused on factors associated with labour market exit before reaching SPA, showing that poor health selects individuals out of paid work (Hyde et al., 2004; Jokela et al., 2010; Rice et al., 2011; Westerlund et al., 2009). Few studies have examined health among those working beyond SPA (Smeaton & McKay, 2003). Thus, the health impact of working beyond SPA on older people remains uncertain.

Our study contributes to knowledge in this area by examining the longitudinal relationship between paid work beyond SPA and health among older English people, controlling for baseline health and socio-economic characteristics, as well as for labour market involvement and health across the life course. Our study explores these relationships separately for men and women, given the important gender differences in relation to work history and SPA.

2. Methods

2.1 Sample

We used data from the second (2004/05), third (2006/07) and fourth wave (2008/09) of the English Longitudinal Study of Ageing (ELSA) as well as from the life course interview (2006/07). ELSA is a multidisciplinary longitudinal survey of ageing among individuals older than 50 living in private households in England. In our analytic sample we considered respondents who had reached SPA, defined as 65+ for men and 60+ for women. As labour market participation is low at ages beyond 74 for men and 69 for women, we restricted our sample to men aged 65-74 and women aged 60-69 for whom life history information had been collected, who participated at wave 2, and who were successfully interviewed at wave 4 (N=776 and 1,059 male and female respondents respectively).

2.2 Measures

Outcome. As a measure of health, in our preliminary analyses we derived a latent health index using a similar procedure to the one proposed by Ploubidis and Grundy (2011). The index captures physical health using self-reported information on health (such as self-rated health, severe long standing illness; functional limitations; and self-reported doctor

diagnosed conditions) under the assumption that several health indicators reflect a latent or "true" physical health status.

Work beyond SPA. Respondents were considered to be working beyond SPA if they reported being in paid employment or self-employed in the month prior to interview at wave 3. In our sample, approximately one in five older adults (21%) was working beyond SPA, with a greater proportion of women (25%) than men (15%).

Confounders. Age, gender, educational level, wealth, income, caring responsibilities, marital status, as well as other health measures and behaviours at baseline (such as depressive symptoms, and participation in vigorous activities) were included in our analyses as potential confounders of the association between paid work and health in later life. Furthermore, a series of categorical indicators capturing the participants' recall of health-related experiences in childhood and adulthood were also created. These included SRH at childhood; whether participants suffered ill health or disability lasting for more than a year; and whether they ever left a job because of ill health.

2.3 Statistical Analyses

We assessed the longitudinal relationship between paid work at wave 3 and health at wave 4 controlling first only for demographic and socio-economic factors at wave 2; then also for life-course characteristics; and finally controlling also for health at baseline. Analyses were carried out separately for men and women, given that work history characteristics are likely to differ by gender. Given the continuous nature of the outcome variable, we used linear regression models for our analyses. Models were estimated using full information maximum likelihood (FIML) estimation in order to deal with sample attrition; all analyses were performed using Mplus.

3. Results

3.1 Descriptive statistics

Overall, both men and women in paid work post-SPA at wave 3 generally reported better health both at wave 2 and throughout their lives. For example, both male and female respondents with no work disruptions due to ill health, and with no periods of ill health (or just one spell of ill health) as adults were more likely to extend their working lives beyond SPA. Being in paid work was also associated with higher education, and with being in the highest wealth and income quintile (see Table 1 for more details).

3.2 Associations between work beyond SPA and health at follow-up

When investigating the longitudinal relationship between paid work beyond SPA and subsequent health, we conducted several analyses distinguishing not only between respondents in paid work beyond SPA and those not in paid work, but also considering detailed information on the number of hours worked, the physical demands of the occupation, the individual's occupational class (as defined by the National Statistics Socio-economic classification, NS-SEC), and work history up to SPA.

Once baseline characteristics (and health in particular) are controlled for, paid work beyond SPA is no longer associated with better health among men or women. However, our results suggest that women working part-time, those in managerial positions, and with sedentary occupations, were more likely to report good health over time.

Table 2 shows the association between health at follow-up and an indicator of paid work at wave 3 which combines employment histories with current labour market involvement. For instance, we distinguished between men in paid work, those not currently in paid work but who worked continuously up to age 64, those not currently in paid work who showed weaker labour market attachment throughout their lives, and those currently in paid

work who had left work at ages younger than 50. Even after accounting for the effect of work history, analyses suggested no health benefits of working post-SPA for men or women compared to those who worked up to retirement age.

Associations with other baseline covariates were broadly as would be expected from findings in previous studies. Higher levels of education and wealth were positively associated with better SRH. Baseline health and health behaviours, as well as health in adulthood were strongly associated with subsequent health, as expected.

Table 1. Percent distribution of selected wave 2 and life-history health, demographic, and socio-economic characteristics, by work status beyond SPA at wave 3 and gender.

	MEN			WOMEN		
	Not in	In paid	P	Not in	In paid	P
	paid work	work	value	paid work	work	value
SRH>=good	74.8	91.6	***	73.2	85.3	***
No depressive symptoms	85.8	89.9		75.0	82.7	***
Vigorous Physical Activities	24.5	23.5		17.8	25.9	***
<2 periods of ill health in adulthood	84.5	94.1	***	80.2	92.5	***
Never left job because of ill health	78.2	91.6	***	74.8	91.0	***
SRH in childhood >	88.1	92.4		83.7	89.9	***
No Education	32.5	23.5		37.7	24.4	
Mid Education	37.4	35.3	**	41.6	42.4	***
High Education	30.1	41.2		20.7	33.5	
Own home outright	76.3	72.3		72.6	59.8	
Own home with mortgage	10.1	16.0		14.0	32.3	***
Rent (including social renting)	13.6	11.8		13.4	7.9	
In highest income quintile	15.8	40.3	***	15.3	32.7	***
In highest wealth quintile	18.6	27.8	**	19.2	22.2	
Baseline Respondents (N)	656	119		793	266	
Percentages (%)	84.6	15.4		74.9	25.1	

Sources: ELSA 2004/05; 2006/07, ELSA life history; 2008/09. Note: P values refer to chi-square tests; **, ***: significant at the 0.05 and 0.0l levels, respectively. Own calculations

Table 2. Beta coefficients between work status at wave 3 and good health at follow-up, controlling for wave 2 and life-history health, demographic, and socio-economic characteristics, by gender.

Work Status at Wave 3	MEN	WOMEN	
Not in paid work (PW), but worked up to retirement age	-0.011	0.002	
In PW beyond SPA, strong attachment to labour market	Ref.	Ref.	
In PW beyond SPA, mixed attachment to labour market	n.a.	0.025	
Not in PW, weak attachment throughout	0.030	0.024	
Not in PW, with family care interruption	n.a.	0.030	
Not in PW, early exit	-0.077	n.a.	

Sources: ELSA 2004/05; 2006/07, ELSA life history; 2008/09. **, ***: significant at the 0.05 and 0.01 levels, respectively. Controlling for age, education, wealth, income, marital status, home tenure, caring responsibilities, social participation, depression, physical activity, and for health at childhood and adulthood. Own calculations

4. Conclusion and discussion

Understanding the consequences of working post-SPA for older workers' health is a critical issue, given the current European political agenda which aims to extend working lives by postponing ages of eligibility for state pensions. Previous research suggests that men and women who extend their working life beyond SPA are a select group of healthier older people. For this reason, in our study, we investigated longitudinal associations between being in paid work post-SPA and health among men and women separately, controlling for previous health characteristics which might affect both the likelihood of extending working lives and health.

Our results confirm previous findings suggesting that only a select group of older adults are likely to extend their working lives beyond the SPA. Indeed, we find that those reporting poor health at or beyond SPA are less likely to continue working compared to their healthier counterparts (as well as those who are more socio-economically advantaged). Among this select group of older adults, our preliminary results show no health benefits of working beyond SPA once previous health is accounted for. However, our results suggest that those in paid work post-SPA who have part-time jobs, managerial positions and sedentary occupations are more likely to report good health compared to those not in paid work. Government policies designed to extend working lives may not have uniform effects across social groups. In health terms, only some groups may benefit.

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