NIHR | Policy Research Unit

Healthy Ageing

The impact of rising state pension age on health and well-being outcomes of people aged 50+: a quantitative analysis investigating rises in SPA for women

Executive Summary

Background

The UK State Pension Age (SPA) has undergone substantial reforms in recent decades. For many years, women became eligible for the state pension at age 60 and men at 65. The Pensions Act 1995 began a process to equalise SPA for men and women. The plan was to raise women's SPA to 65 by 2020, but under the 2011 Pensions Act the new qualifying age of 65 for women was brought forward to 2018. Subsequent legislation increased SPA further for both men and women, with the rise from 65 to 66 implemented between December 2018 and October 2020. A further rise to 67 is scheduled between 2026 and 2028, and proposals to increase to 68 are under consideration. These changes aim to ensure the financial sustainability and intergenerational fairness of the state pension system in light of an ageing population and increasing longevity, while encouraging older adults to remain in the workforce for longer. However, the implications of such reforms extend beyond fiscal considerations.

The requirement to work longer before receiving a state pension may have complex and uneven effects on health and well-being. Extended working lives can confer benefits for some, through financial security, daily structure, social interaction, and mental stimulation, but may harm others, particularly those in poor health or in physically demanding, low-control jobs. The health effects are likely to be socially patterned, potentially widening inequalities if disadvantaged groups bear disproportionate burdens. Despite extensive research on work, retirement and health, relatively little evidence assesses the effects of policy-driven SPA increases. Existing studies suggest such reforms may affect subgroups differently. The aim of this study is to examine how rising SPA affects health, well-being and unpaid care among older women experiencing extended working lives.



Methods

This study uses longitudinal data from the first 12 waves (2009–2022) of Understanding Society, the UK Household Longitudinal Study. The dataset provides rich information on employment status, occupation, health and well-being, and demographic characteristics for UK households, allowing us to follow individuals over time. Our analytical sample included women born between 1949 and 1955 who are or had previously been in paid employment, excluding those never in paid work or providing proxy responses. Women born in 1949 were considered the control group. We defined 'treatment' as the period from age 60 onwards for women affected by the SPA reform (those born in 1950 to 1955), representing the point at which they would have been eligible for the pension under previous rules but were no longer so. We employed a heterogeneous difference-in-differences (DiD) approach with regression adjustment (RA) estimators, following Callaway

and Sant'Anna (2021). This method compares how an outcome changes for each of the post-policy cohorts (1950/51 – 1955/56) at each time point compared to the unaffected pre-policy cohort (1949) at each corresponding time and controlling for covariates. It allows for variation in treatment timing between cohorts and adjusts for differences in covariates, improving robustness over standard DiD designs.

Two models were estimated: Model 1 controlled for marital status, education, and number of children, while Model 2 additionally adjusted for job type (management and professional, intermediate, routine). The outcomes examined were: GHQ-12 scores (lower values indicating better well-being), SF-12 Mental Component Score (MCS) for mental functioning, and SF-12 Physical Component Score (PCS) for physical functioning, and provision of unpaid care. We estimated Average Treatment Effects on the Treated (ATETs) aggregated across cohorts, across time points, and by treatment exposure duration. Subgroup analyses examined whether impacts varied by most recent job type, and robustness checks used a placebo sample of men unaffected by the reform to rule out confounding by broader time trends.To explore potential mediation mechanisms, we also estimated a generalised structural equation model (GSEM) to assess whether changes in employment status helped to explain the reform's effects on well-being. This allowed us to examine both direct effects of the SPA increase and any indirect effects operating through employment, using a logit model for the mediator and a linear model for GHQ with bootstrap standard errors.

Findings

The SPA increase was associated with statistically significant improvements in mental well-being and mental functioning outcomes when compared to the unaffected pre-policy cohort. Specifically, these policy effects were driven primarily by the 1952/53 and 1953/54 birth cohorts. No significant effect was found for physical functioning, as measured by SF-12 PCS or for the provision of unpaid care.



Cohort-level analyses showed that improvements were concentrated in those experiencing the largest SPA increases, notably women born in 1953/54, who faced an accelerated rise in SPA due to the introduction of a second reform partway through the period between their 60th birthday and their SPA as prescribed by the first reform. When examining outcomes by treatment exposure duration, effects on well-being and mental health functioning emerged approximately two years after treatment, peaked at around 67 years old, and declined to non-significance by age 69 and 70. This temporal pattern suggests that improvements may be linked both to continued employment and to the transition into retirement itself, which previous literature associates with a 'honeymoon effect'.

We tested this statistically with a GSEM approach. The mediation analysis found no evidence that being employed significantly explained the observed higher well-being. Although affected women were more likely to remain in work longer, this does not appear to translate into an effect on GHQ, indicating that the reform's impact on well-being were not significantly driven by employment changes. Subgroup analysis proved inconclusive. Despite significant treatment effects for women in management and professional occupations, similar trends were observed for women in lower-reward occupations, but sample sizes limited the statistical power of our subgroup analysis. Using an unaffected male sample, including men born between April 1949 and November 1953 who were unaffected by the reform, we performed robustness analysis. Results showed no significant changes in any outcome measures, lending credibility to the causal interpretation of our primary analysis.

Interpretation

Our findings support the idea that prolonged employment has some positive impacts and challenge the assumption that a policy increasing SPA harms women's mental health on aggregate. For many women affected by the policy, particularly those born in 1952/53 and 1953/54, the raised SPA was associated with modest improvements in well-being and mental functioning compared to those born in 1949/50 (who reached their SPA at age 60). These gains may arise from several mechanisms that would need to be explored further, including financial security, social interaction, as well as positive anticipation of pension receipt. Although subgroup analysis proved inconclusive due to limited predicting power, it is important to acknowledge that the literature emphasises the need to examine distributional impacts when evaluating SPA reforms, as average effects can mask important disparities between subgroups. That the mediation analysis did not confirm that staying in employment for longer explained the higher level of wellbeing of those affected by the reform compared with those not affected by it, suggests that policymakers should also consider wider factors such as financial security, retirement planning and support during the transition to state pension eligibility.

Conclusions



The UK's reform of the raising SPA for women was on average associated, with modest improvements in well-being and mental functioning, for women affected by the reform in comparison with an earlier cohort of women. No significant differences in physical functioning were observed. The positive impacts on well-being and mental functionality were largely confined to those in the 1952/53 and 1953/54 birth cohorts, suggesting unequal benefits across the workforce. These findings are important for policymakers considering further SPA increases, as they demonstrate both potential benefits and risks. Without targeted interventions, reforms may exacerbate inequalities.

Implications for policy

Policy responses to SPA increases should be sensitive to their unequal effects. Support mechanisms such as workplace policies, flexible working arrangements, workplace adaptations or retraining programmes may help people in more physically demanding or lower-control jobs to work longer and ameliorate adverse impacts on their health and wellbeing.Whilst opportunities to support retraining and upskilling routes such as returnerships and adult apprenticeships may support older workers re-entry to the employment market. Complementary measures should protect individuals who are unable to extend their working lives due to health problems, caregiving responsibilities, or limited access to suitable employment. These could include targeted financial support or alternative routes to pension eligibility. Future research should focus on understanding the heterogeneity of effects across socio-economic and occupational groups, incorporating measures of job quality, working conditions, and broader life circumstances. By doing so, policymakers can design SPA reforms that promote equity as well as sustainability.

To access relevant publications and further information in relation to this research please visit https://www.hapru.nihr.ac.uk/.

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