# Non-Employment in NSHD: A Risk Factor for Poor Cognitive Function and Decline?

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## Summary

- Men aged 60-64 who had been non-employed for >20 years of their working lives had significantly lower word memory than men non-employed for ≤6 months
- Women aged 60-64 who had been non-employed for >5-10 years of their working lives had significantly higher mental speed than women non-employed for ≤6 months

### Introduction

- Research indicates cognitive function is influenced by a range of factors acting across the life course, including employment characteristics
- Although it is widely recognised that unemployment is associated with health and mortality, its association with cognitive function and decline has not been adequately investigated

### **Data and measures**

The MRC National Survey of Health and Development (NSHD) recruited 5362 babies born in a single week in 1946

Cognitive outcomes: Scores for word memory and letter search (crossing out Ps and Ws) speed and accuracy at age 43 and 60-64

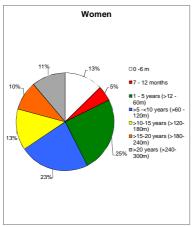
**Non-employment duration:** Months of non-employment (from leaving full-time education to age 60-64), categorised into: - 0-6 months; >6-12 months; >1-5 years; >5-10 years; >10-15 years; >15-20 years; >20 years

**Control variables:** Childhood factors (social class, cognitive ability, adolescent mental health); educational attainment; adult factors (head of household social class, occupational complexity, physical and mental health, smoking, physical exercise, participation in social activities)

### Non-employment

Women experienced longer periods of non-employment than men.

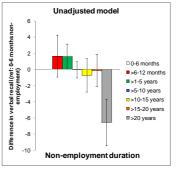
# Men 13% 12% 13% 120 -6 m 1-7 - 12 months 1-5 -5 (-80 - 120m) 1-5 -5 (-10 years (-80 - 120m) 1-10-15 years (>120 - 180m) 1-1

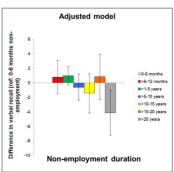


# Cognitive function (Age 60-64 years)

### Men

 Compared to 0-6 months non-employment, >20 years nonemployment was associated with 6.35 fewer words recalled. The control variables only partially accounted for this.





 Compared to 0-6 months non-employment, >20 years nonemployment was associated with lower search speed and accuracy. Adjustment for the control variables accounted for these associations

### Women

- There was an association between non-employment duration and search speed
- Compared to 0-6 months non-employment, >5-10 years non-employment was associated 25.61 letters higher search speed
- Adjustment for the control variables did not attenuate the association
- Non-employment duration was not associated with verbal recall or search accuracy in fully adjusted models

