

Use it Too much and Lose it? : The Effect of Working Hours on Cognitive Ability

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ABSTRACT

Using data from Wave 12 of the Household Income and Labour Dynamics in Australia (HILDA) Survey, we examine the impact of working hours on the cognitive ability of people living in Australia aged 40 years and older. Three measures of cognitive ability are employed: the Backward Digit Span; the Symbol Digits Modalities; and a 25-item version of the National Adult Reading Test. In order to capture the potential non-linear dependence of cognitive ability on working hours, the model for cognitive ability includes working hours and its square. We deal with the potential endogeneity of the decision of how many hours to work by using the instrumental variable estimation technique. Our findings show that there is non-linearity in the effect of working hours on cognitive functioning. For working hours up to around 25 hours a week, an increase in working hours has a positive impact on cognitive functioning. However, when working hours exceed 25 hours per week, an increase in working hours has a negative impact on cognition. These results suggest that people in old age could maintain their cognitive ability by working in a part-time job such as 20–30 working hours per week. Interestingly, there is no statistical difference in the effects of working hours on cognitive functioning between men and women.

Keywords: cognitive ability, endogeneity, retirement, working hours

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