

English Longitudinal Study of Aging: Can Internet/E-mail Use Reduce Cognitive Decline?

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Background. Cognitive decline is a major risk factor for disability, dementia, and death. The use of Internet/E-mail, also known as digital literacy, might decrease dementia incidence among the older population. The aim was to investigate whether digital literacy might be associated with decreased cognitive decline in older adulthood.

Methods. Data from the English Longitudinal Study of Aging cohort with 6,442 participants aged 50–89 years, followed for 8 years, with baseline cognitive testing and four additional time points. The main outcome variable was the relative percentage change in delayed recall from a 10-word-list learning task across five separate measurement points. In addition to digital literacy, socioeconomic variables, including wealth and education, comorbidities, and baseline cognitive function were included in predictive models. The analysis used Generalized Estimating Equations.

Results. Higher education, no functional impairment, fewer depressive symptoms, no diabetes, and Internet/E-mail use predicted better performance in delayed recall.

Conclusions. Digital literacy may help reduce cognitive decline among persons aged between 50 and 89 years.

Key Words: Cognitive decline—Prevention—Digital literacy—Cohort study—Ageing.