

Abstract

This study explored the relationship between the life-style choices of neurotypically healthy older adults and the effect this has on their working memory functionality. Life-style advantages for cognitive functioning have been comprehensively discussed in the literature but little is known about which of the life-style factors extends to working memory capacity and functioning in older adults, or about the long-term effect of various life-style choices people make on their old age. With a sample of 50 cognitively healthy, older South African adults, this study used a cross-sectional, correlational design in which numerous of the life-style factors: socio-economic status, level of education, occupational status, stimulating leisure activities, sleep, diet, medical conditions and interventions, social interactions, physical exercise and bilingualism were examined for any relationship to working memory. Cognitive health was assessed using the MoCA and working memory was tested using the Weschler Digit Span, Arithmetic and Symbol Span tests. There were no significant relationships found between any of the life-style factors chosen for this study and working memory, other than being single/married and the Symbol Span test scores. The small sample size of only 50 participants meant that the study may have been statistically underpowered to achieve the anticipated outcomes and is acknowledged as a limitation of the study. In addition, a homogenous socio-economic status level among the participants weighed negatively against finding variations in the results and is a further limitation.

Keywords: cognitively healthy older adults, executive function, working memory, cognitive reserve, life-style factors