

Applicant

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Project Title

Cognitive aging in middle and older-aged Canadians: consideration of genetic risk, modifiable factors, and biological sex

Project Summary

Previous research has suggested that certain lifestyle behaviours and individual characteristics may buffer the influence of genes that predispose individuals to cognitive impairment. The intent of the proposed study is to explore this thesis further using data collected over the first three waves of the CLSA. The proposed study will evaluate whether carriers of dementia-related gene variants have lower cognition at baseline and/or faster rates of decline in cognition over time. This study will then determine whether various behaviours (smoking, alcohol consumption, diet, physical activity) and characteristics (social isolation, depression, education) might modify how strongly these genes relate to cognition, and whether this also depends on whether the individual is biologically male or female. Finally, we will look at markers in the blood to determine whether those might help explain any links between genetics, individual behaviours and characteristics with cognitive aging.

Keywords

biological sex, cognitive aging, genetic influences, modifiable lifestyle factors