of measurement invariance did not substantially affect classification properties based on cutoff values at the 2nd (major neurocognitive disorder) and 7th (mild cognitive impairment) percentile. Conclusion: Our findings support using MoCA to assess changes in cognition over time in the study population. Future research should examine the longitudinal measurement properties of the test in other populations with different characteristics.

PLASMA LONG CHAIN FATTY ACIDS AND COGNITIVE FUNCTION IN OLDER ADULTS: A COMPARISON OF STATISTICAL ANALYSES

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Omega-3 fatty acids (FAs) have been suggested as modifiable protective factors for cognitive decline because of their neuroprotective properties. However, the evidence is still inconsistent regarding types of omega-3 FAs, and the probable interrelation with other circulating long chain FAs (LCFAs). This study aimed to evaluate associations between 14 plasma LCFAs and four cognitive domains using a principal component analysis (PCA) and to compare results with those obtained using standard methods. A group of 386 healthy older adults aged 77 ± 4 years (53% women), selected from the NutCog Study, a sub-study from the Québec cohort on Nutrition and Successful Aging (NuAge), underwent a cognitive evaluation and fasting blood sampling. Verbal and non-verbal episodic memory, executive functioning, and processing speed were evaluated using validated tests. LCFAs circulating concentrations were measured by high-performance liquid chromatography using published procedures. Linear regressions adjusted for age, sex, education, and BMI were used to evaluate cross-sectional associations between LCFAs, using PCA or a more standard grouping (omega-3, omega-6, monounsaturated, and saturated LCFAs), and cognitive performance. Higher scoring on the omega-3 PCA factor and higher concentrations of total omega-3 FAs were both associated with better episodic non-verbal memory and processing speed. Higher eicosapentaenoic acid (EPA omega-3) was also associated with these two cognitive domains and with episodic verbal memory. The associations with total omega-3 FAs taken separately were of smaller magnitude than those with PCA. These results suggest that omega-3 FAs should be considered in combination with other LCFAs when evaluating the association with cognitive function.

SOCIAL PARTICIPATION AND THE RISK FOR DEVELOPING MILD COGNITIVE IMPAIRMENT AND DEMENTIA AMONG OLDER ADULTS

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Introduction: We aim to investigate the longitudinal associations between social participation and the risk of developing mild cognitive impairment (MCIl) and dementia over 5 years of follow-up among cognitively normal older adults. Methods: A total of 2802 participants had complete follow-up data from Age-Gene/Environment-Susceptibility-Reykjavik-Study. Social participation was assessed by a questionnaire asking the frequency of contact with children, relatives, friends and neighbors. MCI and dementia were diagnosed according to international guidelines and by a team composed of a geriatrician, neurologist, neuropsychologist, and neuroradiologist. Logistic regression analysis was used to assess the associations. Results: At baseline 8% (n=225) reported no social participation. Among cognitively normal participants at baseline, 5.6% (n=243) developed mild cognitive impairment and 2.4% (n= 103) developed dementia during a mean follow-up time of 5.2 years. After full adjustment with covariates including age, gender, education, marital status, vitamin D levels, depression and APOE ε4, those with no social participation at baseline were significantly more likely to develop MCI at follow-up (OR=1.953, P=0.001). However, social participation at baseline was not associated with higher dementia diagnosis at follow-up (OR= 1.490, P=0.194). Conclusions: Community-dwelling old adults who are socially inactive are more likely to develop MCI than those who are socially active. Social participation might independently indicate impending changes in cognitive function among older adults.

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COVID-19 and Social Health

CHICAGO OLDER ADULTS' LIKELIHOOD OF BEING HOME BEFORE AND DURING THE COVID-19 PANDEMIC

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Staying at home has particularly been emphasized for older adults during the COVID-19 pandemic, given their elevated risk of infection and complications. However, little is known about the extent to which this population is indeed spending more time at home during the pandemic, compared to before it began. The present investigation addresses this question, also examining differences by gender and race/ethnicity. We analyzed ecological momentary assessments among 98 older adults (age 65-88 in 2020) who participated in two waves of the Chicago Health and Activity Space in Real Time study. Pre-pandemic data were collected from July-October 2019, and pandemic data were collected from