

participating in Adult Day Service (ADS) programs. We analyzed a ten-year longitudinal data set from the Virginia Tech ADS center. We limited our analyses to individuals for whom we had two time points of the Mini-Mental Status Exam (MMSE) ($n=142$; average age = 78.48; 63 female, average days at center = 347; $SD=432.71$). Participants in the center completed approximately 30 minutes of physical exercise each day of attendance. The exercise regimen was largely composed of aerobic chair exercise, stretching, and lifting. Facilitator ratings of engagement with the exercise activity between the two test administrations were used to create an average engagement score for each participant. Multiple regression analyses were conducted using engagement as a predictor and change in MMSE as an outcome; no significant relationship was identified between exercise engagement and change in cognitive status. However, a moderation analysis conducted with diagnosis of Alzheimer's disease (AD) or dementia as a predictor, change in MMSE as an outcome, and exercise engagement as a moderator revealed a significant moderation effect ($p = .001$). Greater exercise engagement was associated with improvements on the MMSE, but only for individuals without a diagnosis of AD or dementia. Given that many ADS programs serve individuals both with and without AD or dementia, these findings may inform more personalized exercise interventions at ADS centers.

SUBJECTIVE AGE AND COGNITIVE, PHYSICAL, AND PSYCHOSOCIAL HEALTH IN OLDER ADULTS

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Subjective age predicts cognitive, physical, and psychosocial function in older adults independent of objective age. However, the stability of this association is unknown. The goals of this study were to determine whether (1) subjective age was stable across eight years and (2) if subjective age predicted cognitive, physical, and psychosocial function in older adults. This study used data from a nationally-representative longitudinal cohort study (Health and Retirement Study) of 3,084 older adults aged 65-96 measured biannually from 2008 – 2016 with at least two waves of data. The main predictor was the proportion of subjective age compared to one's objective age. The outcomes were dementia status (TICS_m), physical function (grip strength, walk speed), and psychosocial function (Self-Perceptions of Aging). On average, the sample reported feeling 15% younger than their objective age. Among older adults who reported feeling older than the sample average, there were significant deficits in TICS_m, walk speed, and self-perceptions of aging, but not in grip strength. Older adults who feel older than average have poorer cognitive, lower limb physical, and psychosocial function, and these deficits are exacerbated when those individuals feel even older compared to their own average. These results suggest that instability in subjective aging is particularly disruptive for those already at risk for poor aging, so interventions targeting the most vulnerable could promote healthy aging.

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STABILITY AND CHANGE IN DEPRESSIVE SYMPTOMS AND COGNITION FOR CENTENARIAN COHORTS

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The purpose of the study was to examine the stability and change of cognition and depression levels and how they predict each other over time. Participants of the Health and Retirement Study who survived to centenarian status ($N = 331$) were included in this study. The total cognition summary score and the CES-D summary score of depressive symptoms were used to conduct four cross-lagged regression analyses from wave 2 to wave 6. Age was used as a covariate. Results indicated that the stability coefficients for depressive symptoms and cognition from wave 2 to wave 6 were high. Depressive symptoms at wave 2 significantly predicted change in cognition at wave 3, whereas depressive symptoms at all other waves did not predict change in cognition in the next wave. Cognition did not predict changes in depressive symptoms for any wave. Age as a covariate predicted change in cognition in each following wave, particularly from wave 2 to wave 5. The coefficients without stability for depressive symptoms and cognition from wave 2 to wave 5 predicted each other significantly over time, except for the last wave. In conclusion, cognition and depressive symptoms predict each other over time, but they do not predict each other if stabilities are included in the analyses. Further research needs to examine the stability and change in depressive symptoms and cognition including more waves in order to examine whether cross-lagged effects fade or continue in very late life.

THE ASSOCIATION OF OBJECTIVE FINANCIAL DECISION MAKING WITH FINANCIAL LITERACY, EDUCATION, AND MATH SKILLS

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Rationale: Financial decision-making (FDM) is a critical ability with implications across the adult life-span. In healthy adults, demographic and cognitive factors impact FDM. However, the impact of these factors on FDM has yet to be fully investigated. The aim of the current study was to understand the extent to which demographics (age, education, sex), financial literacy (crystallized ability), and mathematical ability (fluid ability) influence FDM. Participants and Methods: The sample, recruited from a larger ongoing study, consisted of 73 adults; mean age=61.31 (13.76) years, mean education=15.68 (2.61) years, 59.5% female, 58% Caucasian. FDM was measured using the Financial Competence Assessment Inventory, financial literacy using a standard set of 23 questions, and math skills using WAIS-III Arithmetic, WRAT-IV Math and Cognitive Reflection Test. Results: Only variables that were significantly associated with FDM in bivariate analysis were selected for the multiple regression analysis. After adjusting for multicollinearity, stepwise multiple regression analyses revealed that the overall model with 3 predictors (education, financial literacy, WAIS-III Arithmetic) was

significant ($F = 23.64, p < .001$) and explained 50.7% of the variance in FDM. Education and WAIS-III Arithmetic predicted FDM to a higher extent than financial literacy. Conclusions: The finding that education and fluid ability has a relatively higher impact on FDM as compared to crystallized ability is important. As one ages, fluid abilities decline more rapidly than crystallized abilities. This may be one explanation for why FDM ability worsens with age. To increase confidence in these findings, future research should test these models using age-stratified analyses.

SUBJECTIVE MEMORY COMPLAINTS AND COGNITIVE PERFORMANCE: THE MODERATING ROLE OF DEPRESSIVE SYMPTOMS

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Cognitive health is a rising public health concern in the U.S. Currently, approximately 5.7 million older adults suffer from Alzheimer's disease (AD), and by the year 2050 this number is expected to increase to 14 million. Subjective memory complaints (SMC) are shown to be an early indicator of cognitive decline, and accordingly included as a clinical criterion for diagnoses of MCI, an indicator of pre-dementia states, and a research criterion for AD diagnoses. Among older adults, depressive symptoms hinder the accuracy of memory self-ratings. However, there has yet to be consensus regarding the nature of how depressive symptoms may condition the relationship between SMC and cognitive performance. The aims of the present study are to both investigate whether SMC is related to episodic memory and to determine whether depressive symptoms act as a moderator for the relationship between SMC and episodic memory among older adults. This research used nationally representative sample of 8,123 older adults aged 65 and older who completed the Leave Behind Questionnaire in the 2012 and 2014 waves of the Health and Retirement Study. Linear regression was performed and results showed that there was a significant main effect of SMC on episodic memory performance, in that older adults with increased SMC have worse episodic memory. There was also a significant moderating effect of depressive symptoms, in that depressive symptoms cause older adults to underestimate their memory abilities. In order to use SMC as a tool for early detection efforts it is critical to understand these complex relationships.

PERFORMANCE ON COGNITIVE FUNCTIONING RELATED TO SUCCESSFUL AGING

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Introduction The cognitive functioning, as a general measure, is a criterion commonly used to define and

operationalize successful aging. (Project-Conacyt-256589) The aim of this study is to analyze cognitive function and its relationship with the successful aging in older adults. Methods Population based, random sample included $n=401$ community-dwelling older adults 60-years and older (mean age=72.51, SD=8.11 years, 59.4% women). Cognitive functioning was assessed by a comprehensive battery including working memory (Digit Span Backward WAIS-IV), episodic memory, metamemory (self-report), processing speed (Symbol Digit WAIS-IV), attention (TMT-A), executive functioning (TMT-B), learning potential (RAVLT), language (FAS), visuospatial skills (Block Design WAIS-IV). Successful aging was operationalized in accordance with Rowe & Kahn definition (no important disease, no disability, physical functioning, cognitive functioning, and being actively engaged). Sociodemographic and health data were also asked. Data were analyzed in SPSSv24. Results In total 11.2% were successful agers and 11.4% had Mild Cognitive impairment. Global cognitive functioning was significantly related to the achievement of successful aging criteria. Specifically, the more successful agers showed a significant ($p < .05$) better performance on learning potential, working memory, metamemory, processing speed and attention. Executive functions were not related to successful aging criteria. None cognitive domain was related to the being actively engaged criteria. Better visuospatial skills were showed in older adults meeting the criteria of being free of disability and high physical functioning. Conclusion Knowledge generated by this study reveals the role of specific domains of cognitive functioning in successful aging, and sets a scenario to promote successful aging, through alternatives centered in the improvement of cognition in the older adults.

COGNITION

OLDER ADULTS WITH PREDIABETES EXPERIENCE ACCELERATED NEUROCOGNITIVE DECLINE

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Type II diabetes (T2D) is associated with neurocognitive decline beyond normative aging, and thus older adults with T2D are at high risk for developing dementia. However, the extent to which similar deficits occur in prediabetic older adults is not well understood. While few studies have shown that prediabetic older adults experience some cognitive decline, further research is needed to determine the specific cognitive domains affected and the degree to which this decline occurs. Moreover, structural and functional brain changes that may occur with these deficits is currently unknown in this population. Therefore, the aim of this study was to assess cognitive function and brain health in prediabetic older adults. We conducted a cross-sectional analysis of older adults (aged 60-80) with prediabetes (FPG 6.1-7.0 mmol/L) and healthy aged-matched controls, examining 1) cognitive performance, 2) functional brain activation as measured by fMRI, and 3) structural measures such as volume of the hippocampus. Based on our cross-sectional analysis, prediabetic older adults show impaired cognition (e.g., memory), as well as decreased hippocampal volume and activation. Therefore, we conclude that older adults