

**Results:** The analysis found that gait speed negatively predicted executive functioning scores ( $b = -.12, p = .02$ ). The overall mediation model was statistically significant ( $F(3, 150) = 9.17, p < .001$ ). Gait speed and age negatively predicted BMI ( $p < .001$ ). BMI was a significant predictor of executive functioning ( $p = .001$ ). The direct effect of gait speed on executive functioning remained significant after including BMI in the model ( $p < .001$ ), which suggests that BMI partially mediated the relationship between gait speed and executive functioning. The indirect effect of the model when including BMI was tested using the bootstrap estimation approach with 5,000 samples, and was found to be significant (95% CI [.03, .11]), indicating that mediation did occur in the analysis.

**Conclusions:** BMI partially mediated the relationship between gait speed and executive set-shifting. Thus, the path by which gait speed predicted executive functioning abilities was partially attributable to BMI, one measure of obesity. This finding suggests that older adults with slower gait speeds may have poorer executive function partially due to greater BMI. Given the importance of executive functions on independence and well-being in older adulthood, management of BMI could lead to improved functioning and quality of life. Interventions to decrease weight in older adults is likely to result in several positive health outcomes, and these results suggest that they may also promote important cognitive processes.

**Categories:** Aging

**Keyword 1:** executive functions

**Keyword 2:** aging (normal)

**Keyword 3:** movement

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#### 4 The Effect of Age on the Relationship Between Adverse Childhood Experiences and Frailty in Late Life: A Moderation Model

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**Objective:** Although relationships between Fried frailty criteria (i.e., weakness, slowness, weight loss, exhaustion and low physical activity), cognitive decline, and adverse childhood experiences (ACEs) have been examined (Brigalo et al., 2015, Brown et al., 2022, Fabricio et al., 2020, & Tani et al., 2021), the moderating effect of age on the relationship between ACEs and frailty has yet to be explored. The present study examined whether age moderates the relationship between total number of ACEs and number of frailty criteria in older age.

**Participants and Methods:** 137 older adults were recruited from University of Miami clinics and surrounding community care centers. Collected data included demographic information, number of frailty criteria met, and number of ACEs endorsed. Participants were primarily Hispanic-White (64.2%) and female (56.9%), with a mean age of 73.62 years ( $SD=6.252$ ). Data were initially analyzed using descriptive statistics. A hierarchical linear regression was run to test the effect of ACE score on number of frailty criteria met. A simple moderation analysis using the PROCESS macro was then performed with total number of medical conditions included as a covariate to address any potentially confounding effects. To avoid multicollinearity issues, number of ACEs endorsed and age were mean centered and an interaction term between the two was produced.

**Results:** Scores on the ACE did substantially effect the total number of frailty criteria met by participants in this study ( $f=2.37, p=0.028, \Delta R^2=0.023$ ), independent of number of medical conditions. The overall moderation model was significant ( $f=2.99, p=0.022, R^2=0.103$ ), and the addition of the interaction effect resulted in a statistically significant change to the model ( $f=4.08, p=0.045, \Delta R^2=0.035$ ). Taken together, support for a moderating effect was found, specifically within the lower age group (65 - 71years), but not older (greater than 72 years) with ACE score positively predicting the number of frailty criteria met ( $b = 0.230, t=2.62, p=0.010$ ).

**Conclusions:** Results largely support the positive effect of ACE endorsement on the number of frailty criteria met in later life. Age acted as a moderating effect, for the younger old population, such that as number of ACEs endorsed increased, so too did the number of frailty criteria met. This finding highlights the importance of early intervention among those in younger late life who have experienced trauma. Given the positive relationship between frailty and cognitive decline in late life (Brigalo et al.,

2015 & Fabricio et al., 2020), these findings also support the need for a better understanding of how childhood adversity impacts physical well-being over the life course.

**Categories:** Aging

**Keyword 1:** aging (normal)

**Keyword 2:** childhood maltreatment

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## 5 Antihypertensive Medication Use and Cognition in Older Adults

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**Objective:** Hypertension is a common disorder that has been inconsistently associated with worse cognition in older adults. Antihypertensive medications offer treatment for high blood pressure but previous studies on the association between blood pressure, antihypertensive use, and cognitive performance in older adults have yielded inconsistent findings. Individuals without high blood pressure may also take antihypertensive medications for other medical conditions, including migraines. It is unclear whether antihypertensive medications have any effect on cognitive performance in older adults, and whether the differences, if any, are similar in hypertensives and normotensives.

**Participants and Methods:** 4,969 participants from the National Alzheimer Coordinating Center (NACC) database were included in this study ( $M_{\text{age}}=72.4$  years,  $SD=7.3$  years). Cognitive assessment included Letter Fluency, Category Fluency (animals and vegetables), Trail Making Test A & B, Digit Ordering (forward and backward), and MoCA total score. Participants were included if they had a clinician diagnosis of hypertension or normotension and recorded history of whether they take any antihypertensive medication. Participants with a history of stroke were excluded. Cognitive differences between medication groups were investigated in hypertensive participants and normotensive participants using Bayesian Mann-Whitney tests.

**Results:** Bayesian Mann-Whitney tests in hypertensive individuals showed no cognitive differences between those taking

antihypertensive medications and those not taking antihypertensives (all  $BF_{10s} < 3$ ). Bayesian Mann-Whitney tests in normotensive individuals showed individuals taking antihypertensive medications performed worse on Trail Making Test B compared to individuals not taking antihypertensives (123.6 seconds vs 108.8 seconds;  $BF_{10} = 35.1$ ), with a small effect size ( $d=-.156$ ).

**Conclusions:** These results suggest that antihypertensive use in older adults with normal blood pressure may be associated with worse executive functioning. Antihypertensive use in normotensive older adults may lower blood pressure and reduce cerebral perfusion, resulting in worse cognitive functioning. Future studies should investigate long-term antihypertensive use and associated cognitive changes in both hypertensive and normotensive individuals.

**Categories:** Aging

**Keyword 1:** cognitive functioning

**Keyword 2:** aging (normal)

**Keyword 3:** cardiovascular disease

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## 6 Now or Later? Decision-Making Preferences in Community-Dwelling Older Adults

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**Objective:** When deciding between now and later, the tendency to devalue later outcomes is known as temporal discounting. The degree of devaluing is known as one's discounting rate. Steeper temporal discounting rates indicate preferences for immediate gains and delayed losses, reflecting a desire for instant gratification and greater loss aversion, respectively. Considering that decrements in decision-making abilities may precipitate cognitive dysfunction and decline, a better understanding of decision-making preferences among older adults represents an important endeavor. Thus, the current study aimed to investigate whether differences among temporal discounting rates