

increase in stride length IIV from STW to DTW (estimate = -1.301, $p = 0.039$). Stratified LMEMs revealed that the association between pain and neural IIV was significant in only males (estimate = -0.049, $p = 0.037$), while the association between pain and gait IIV was significant in only females (estimate = -1.712, $p = .008$).

Conclusions: Study results suggest that self-reported pain over one month is associated with differential patterns of neural and behavioral responding amongst healthy, community-dwelling older adults. Furthermore, it appears that males are more susceptible to the neural effects of pain, while females are more susceptible to the behavioral effects under attention-demanding conditions. In this population, these patterns may reflect a tendency towards inefficient neural and behavioral modifications in response to perceived pain. These findings highlight the need for clinical use of routine pain assessments and, when appropriate, the implementation of timely and effective pain treatments in aging.

Categories: Aging

Keyword 1: chronic pain

Keyword 2: cognitive control

Keyword 3: motor function

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21 Neurocognitive Differences Between Lifestyle Profiles of Women Across the Menopausal Transition

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Objective: Women are at greater risk of developing Alzheimer's disease (AD) than men. The menopausal transition, which involves a neuroendocrine shift, is a potential contributor to this sex difference. Multiple estrogen-regulated systems (i.e., circadian rhythms) are disrupted during this transition which affects cognitive functioning (Barha & Liu-Ambrose, 2020), most notably verbal learning and memory. Little is known about how lifestyle factors (i.e., sleep, physical activity (PA), stress) may promote neurocognitive functioning across this transition (Maki & Weber, 2021). Utilizing data from the Human Connectome Aging project (HCP-A), the current study will examine whether distinct

lifestyle profiles including sleep, PA, and stress relate to multiple domains of cognitive performance among a sample of perimenopausal/menopausal women.

Participants and Methods:

Perimenopausal/menopausal women (ages 45 to 65) from the HCP-A were included ($n = 150$, M age = 54.6, $SD = 5.5$). Demographic information, menopausal status, sleep problems (Pittsburgh Sleep Quality Index), PA (International Physical Activity Questionnaire), stress (Distress subscale of the Perceived Stress Scale) were assessed with surveys, and participants completed several lab-based tasks including: dimensional change card sort (DCCS), flanker, pattern recognition processing speed (PS), working memory (WM), picture sequencing, oral reading, Trails Making Test A and B (TMT), and Rey Auditory Verbal Learning (RAVLT) tasks. Using latent profile analysis (LPA), lifestyle profiles were identified via sleep problems, PA, and stress levels. A MANOVA compared cognitive performance between these lifestyle profiles, above and beyond age and education status.

Results: Fit indices indicated that a three-class solution fit the sample best: high PA, low stress and sleep problems (Class 1, $n = 38$), high PA, stress, and sleep problems (Class 2, $n = 17$), and low PA, high stress and sleep problems (Class 3, $n = 95$) which were not significantly different based on age or menopausal status ($p > 0.05$). A significant multivariate effect of age and education on cognitive performance ($p < .001$) emerged. There was a significant multivariate effect of lifestyle profile on cognitive performance, $F(18, 260) = 1.73$, $p = .034$, $\eta^2 = .11$, after controlling for age and education. Univariate analyses determined that certain lifestyle profiles were associated with better performance on all cognitive tasks except verbal memory. Contrary to expectation, Class 3 performed better on TMT A & B, DCCS, flanker, WM, and PS tasks as compared to Class 1. Class 3 performed better on reading and picture sequencing tasks than Class 2. There was no difference in performance between Class 1 and 2.

Conclusions: Results suggest three distinct lifestyle profiles exist in this analytic sample. After controlling for age and education, cognitive performance on all tasks except for verbal memory significantly differed between lifestyle profiles. The profile characterized by low PA and high stress and sleep problems demonstrated superior performance as compared to other

classes. These findings provide preliminary evidence that women who have high levels of stress and sleep problems with low PA are performing better on cognitive tasks, but replication of these findings utilizing longitudinal designs are needed.

Categories: Aging

Keyword 1: aging (normal)

Keyword 2: hormones

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22 Cordoba Naming Test Performance and Acculturation in a Geriatric Population

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Objective: A commonly used confrontation naming task used in the United States is The Boston Naming Test (BNT). Performance differences has been found in Caucasian and ethnic minorities on the BNT. The Cordoba Naming Test (CNT) is a 30-item confrontation naming task developed in Argentina. Past research has shown acculturation levels can influence cognitive performance. Furthermore, one study evaluated geriatric gender differences on CNT performance in Spanish. Researchers reported that older male participants outperformed female participants on the CNT. To our knowledge, researchers have not evaluated ethnic differences on the CNT using a geriatric sample. The purpose of the present study was to examined CNT performance and

acculturation in a Latinx and Caucasian geriatric sample. It was predicted the Caucasian group would outperform the Latinx group on the CNT. Moreover, the Caucasian group would report higher acculturation levels on the Abbreviated Multidimensional Acculturation Scale (AMAS) compared to the Latinx group.

Participants and Methods: The sample consisted of 9 Latinx and 11 Caucasian participants with a mean age of 66.80 (SD = 6.10), with an average of 14.30 (SD = 2.00) years of education. All participants were neurologically and psychologically healthy and completed the CNT and the AMAS in English. Acculturation was measured via the AMAS English subscales (i.e., English Language, United States. Identity, United States, Competency). A series of ANCOVAs, controlling for years of education completed and gender, was used to evaluate CNT performance and acculturation.

Results: The ethnic groups were not well demographically matched (i.e., years of education and gender). We found that the Caucasian group outperformed the Latinx group on CNT performance $p = .012$, $\eta^2 = .34$. Furthermore, the Caucasian group reported higher acculturation levels (i.e., English Language, United States, Identity, United States, Competency) compared to the Latinx group p 's $< .05$, $\eta^2 = .42-.64$.

Conclusions: To our knowledge, this is the first study to evaluate CNT performance between ethnic groups with a geriatric sample. As expected the Caucasian group outperformed the Latinx group on the CNT. Also, as expected the Caucasian group reported higher English acculturation levels compared to the Latinx group. Our findings are consistent with past studies showing ethnic differences on confrontational naming performance (i.e., The Boston Naming Test), favoring Caucasians. A possible explanation for group differences could have been linguistic factors (e.g., speaking multiple languages) in our Latinx group. Therefore, since our Latinx group reported lower levels of English Language, United States identity, and United States competency the Latinx group assimilation towards United States culture might of influence their CNT performance. Future studies with different ethnic groups (e.g., African-Americans) and a larger sample size should examine if ethnic differences continue to cross-validate in a geriatric sample.

Categories: Aging