

and can be an effective approach to promote PA. However, the physical function and cardiorespiratory fitness (CRF) benefits of OA engaging in Latin dance have not been investigated. The purpose of this study was to test if PA from an 8-month dance trial yielded and explained improvements in physical function and CRF.

Methods: The study analyzed physical function and CRF outcomes from the BAILA trial. Participants ($n=333$) were Latinos (age 55+) who were randomized to a dance or control condition for an 8-month study. PA was assessed using the Community Healthy Activities Model Program for Seniors (CHAMPS), physical function was assessed with the short physical performance battery protocol (SPPB) and estimated CRF was assessed using the Jurca non-exercise test model. **Results.** ANCOVA models found significant change in SPPB total scores ($F(1, 331)=4.01, p=0.046$) and estimated CRF ($F(1, 331)=7.66, p=0.006$) over eight months in favor of the dance group. Follow-up mediation models found MVPA to mediate between group and SBBP scores, ($\beta=0.05, 95\% \text{ CI } [0.0128, 0.1147]$). MVPA also mediated between group and CRF, ($\beta=0.06, 95\% \text{ CI } [0.0164, 0.1197]$). **Conclusion.** The study supports organized Latin dance programs to be effective for improving physical and cardiorespiratory benefits among older adults. The findings also encourage future investigations to promote PA in culturally relevant forms.

IMPROVEMENTS IN HEALTH-RELATED QUALITY OF LIFE FOR BINGOCIZE CLINICAL TRIAL PARTICIPANTS

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With the number of older adults increasing rapidly, researchers have increasingly focused on designing interventions to improve health-related quality of life (HRQOL) in older adulthood. However, many interventions struggle with adherence because older adults often perceive them as unenjoyable, condescending, or painful. Here, we report results from a clinical trial of Bingocize®, a community-based “in vivo” exercise and health education intervention for older adults, to determine if participation impacts participants’ HRQOL. One-hundred and forty-three older adults ages 60+ were randomly assigned to one of four conditions that contrasted exercise and health education to non-intervention control groups. All conditions were matched on social engagement and met in group sessions twice weekly for 12 weeks. The CDC HRQOL measure was administered before and after the intervention. Session adherence was >90% across all sessions. Results from 2 (Time: Pre/Post) x 4 (Condition: Bingo-only Control vs. Bingo+Health Education vs. Bingo+Exercise vs. Bingo+Health Education+Exercise) ANOVAs found that all participants reported better sleep quality, reduced pain, and increased energy after completing the program (p -values <.05). Results from 2 (Time: Pre/Post) x 2 (Exercise/No Exercise) ANOVAs revealed interactions showing that exercise participants experienced greater decreases in days with anxiety and physically unhealthy days as compared to non-exercise participants (p -values <.05). These findings suggest that elements of Bingocize can contribute to

improvements in older adults’ mental and physical quality of life. The current research can help researchers and professionals further elucidate which intervention mechanisms play a role in determining older adults’ health-related quality of life.

USING ACTIGRAPHY TO ASSESS CHRONOTYPE AND PHYSICAL ACTIVITY IN OLDER ADULTS

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Chronotype refers to the time of day that people prefer to be active or to sleep and varies predictably across the lifespan. In younger samples, the morning-chronotype is related to greater levels of physical activity (PA) and improved health outcomes. It is unclear whether this pattern holds in older adults, a group that commonly exhibits an “early bird” preference. We investigated differences in PA patterns between chronotypes in 109 older adults (Mage = 70.45 years) using wrist-worn ActiGraphs in a free-living environment. ActiGraphs captured data about PA and sleep using a novel approach to measuring chronotype with the mid-point of the sleep interval. We categorized participants as morning-, intermediate-, or evening-chronotypes. We used ANCOVA to predict total and average peak PA from chronotype, adjusting for age, sex, education, and BMI. Total PA significantly differed between chronotypes such that evening-types engaged in less PA than both morning- and intermediate-types, $F(2,102)=4.377, p=.015$. Average peak activity did not differ between chronotypes, $p=.112$. Consistent with findings in younger samples, our evening type participants engaged in less overall activity. A unique finding was that evening-types did not differ from their morning- and intermediate-chronotype peers in peak activity levels. This implies a key distinction between total activity and peak activity levels consistent with recent trends in PA research using a 24-hour-a-day framework instead of average or total activity levels. Future research should consider whether these differences in activity patterns translate into meaningful differences in health benefits in this age group.

SESSION 6580 (POSTER)

PSYCHOSOCIAL WELL-BEING

SENSE OF PURPOSE IN LIFE AND ALLOSTATIC BURDEN IN TWO LONGITUDINAL COHORTS

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Sense of purpose in life has been linked with better physical health, longevity, and reduced risk for disability and dementia, but the mechanisms linking purposefulness with diverse health outcomes is unclear. Chronic activation and dysregulation of neural, immune, and other bodily systems, known as allostatic load, may contribute to these underlying mechanisms. Specifically, sense of purpose may promote