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Comparison Between Dance-Based and Traditional Exercise on Health-Related Quality of Life: A Cross-Sectional Analysis

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INTRODUCTION

Health-related quality of life (HRQoL) includes physical health, cognitive well-being, and the presence of social support. Declines in HRQoL can result in physical impairment, social isolation, and impaired cognition. Regular exercise participation may lead to better HRQoL among older adults. Dance-oriented group fitness classes (DANCE) can provide participants with structured exercise that involves high levels of coordination and social comradery. DANCE exercise may be a viable alternative to traditional exercise (TRAD) for the maintenance of HRQoL.

PURPOSE: To determine whether participation in regular DANCE exercise displays higher HRQoL in older adults when compared to those who participate in TRAD exercise.

METHODS

EXPERIMENTAL DESIGN: This cross-sectional study included those who either participated in DANCE exercise or TRAD exercise at the time of enrollment. Participants were members of a local senior community center. Those in the DANCE exercise group had been participating in the LaBlast fitness program provided by the community center, at least 1x/wk. for 6wks prior to enrollment. The LaBlast fitness program features a diverse range of partner-free, coordinative exercises that include moves from the Tango, Rumba, and Quickstep. The coordinative movement patterns and structured learning habits of LaBlast can be useful for body toning, exercising, dance choreography, weight loss, social activity, or entertainment purposes, and are introduced in a progressive fashion. Those in the TRAD exercise group were participating in either aerobic or resistance training, but not dance-based exercise, for at least 2x/wk. for 6wks prior to enrollment.

All participants completed the following assessments: the Medical Outcomes Study Short Form 36 subscale for physical functioning (SF-36); the International Physical Activity Questionnaire (IPAQ); the Mini Mental State Examination (MMSE); the Duke Social Support Index (DSSI); and the Senior Fitness Test (SFT).



RESULTS

		DANCE	TRAD
Sex	M (n)	1	0
	F (n)	12	16
Age (y)		67.2 ± 7.2	72.0 ± 10.5
Race	White	92.3%	93.8%

Table 1. Baseline Characteristics: 29 healthy, older adult males (M) and females (F) were recruited for participation. No significant interactions between groups were observed.

	DANCE	TRAD
SF-36	92.3 ± 5.3*	79.3 ± 22.5
MSSE	26.9 ± 8.2	28.7 ± 2.0
DSSI	28.2 ± 1.1	27.1 ± 2.0
DSSI Social Interaction	10.5 ± 0.8	10.2 ± 1.4
DSSI Satisfaction	17.6 ± 0.8	16.8 ± 1.4

Table 2. Physical Function, Cognition, and Social Support: DANCE had a difference in physical function compared to TRAD (p = 0.05). There were no differences in cognition, social support, social interaction, and social satisfaction between groups. *p = 0.05

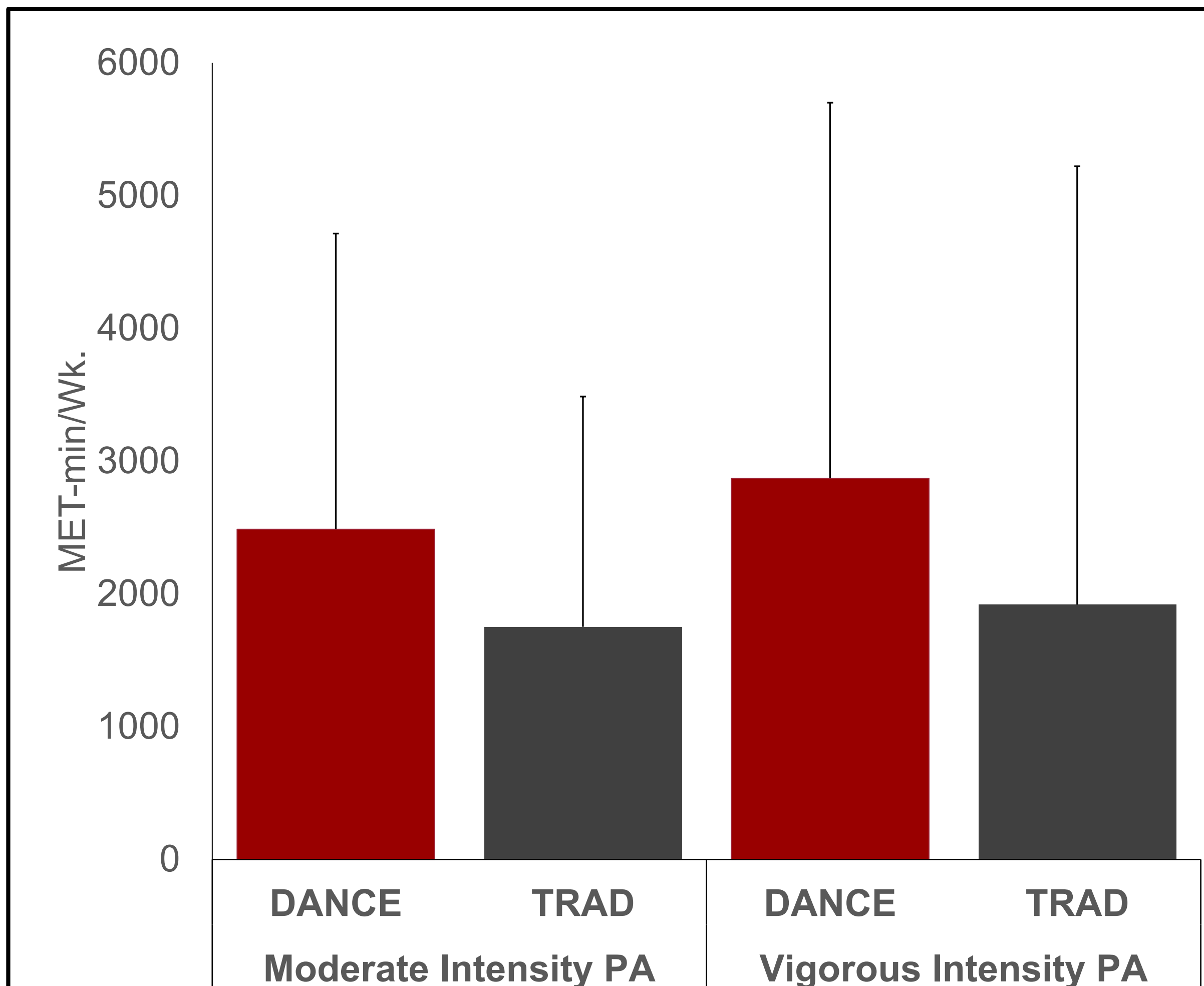


Figure 1. Weekly MET-mins of Moderate & Vigorous Physical Activity: There was no difference in MVPA MET-mins between groups. Data reported as Mean ± SD.

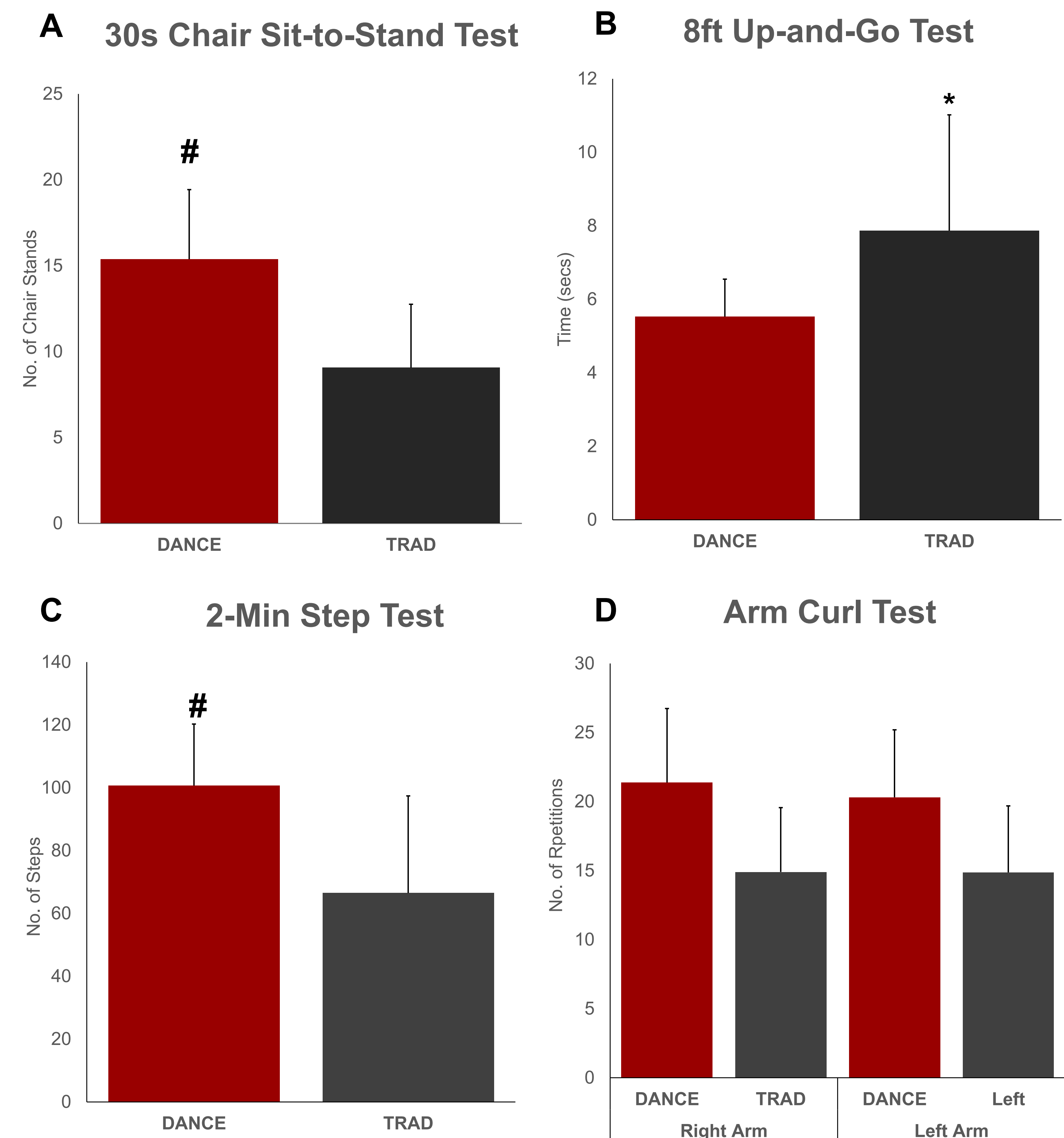


Figure 2. Senior Fitness Test Outcomes: There was a difference in lower body muscular endurance (A), agility (B), and cardiovascular endurance (C) between groups. No difference was observed for upper body muscular endurance (D). Upper and lower body flexibility were also measured, with similar results. Data reported as Mean ± SD. *p = 0.02, #p < 0.001.

CONCLUSION

DANCE exercise supported higher levels of physical health—but had no effect on cognitive well-being and social support—when compared to TRAD exercise. DANCE exercise may be a viable form of exercise to support HRQoL in older adults.

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