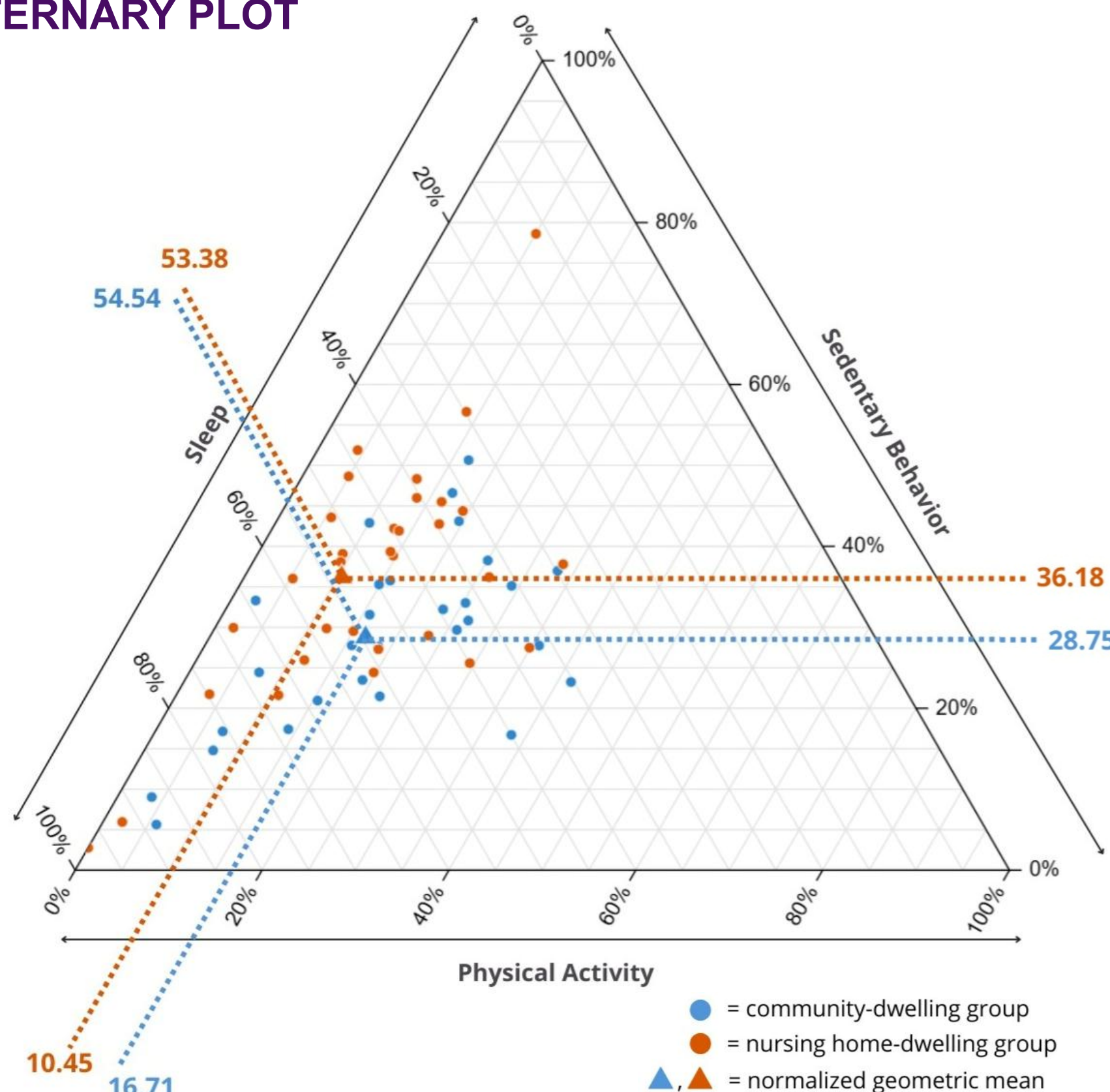


Differences in 24-Hour Movement Behaviors between
Community-Dwelling and Nursing Home-Dwelling
People Living with Dementia

#2631

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Residential differences in 24-hour movement behavior are driven by sedentary behavior and physical activity—not sleep.

INTRODUCTION		RESULTS		CONCLUSIONS																					
Most people with dementia transition to nursing home care. Residential environment may influence how they spend their day. A 24-hour day consists of sleep, sedentary behavior, and physical activity. Aim: To examine residential-related differences in 24-hour movement behavior in people with dementia.		SAMPLE CHARACTERISTICS <table><tr><th></th><th>n</th><th>Age (years)</th><th>Female (%)</th><th>MMSE (0-30)</th><th>Walking aid (%)</th></tr><tr><td>Community</td><td>30</td><td>85</td><td>53</td><td>18</td><td>47</td></tr><tr><td>Nursing home</td><td>32</td><td>84</td><td>81</td><td>16</td><td>78</td></tr></table>			n	Age (years)	Female (%)	MMSE (0-30)	Walking aid (%)	Community	30	85	53	18	47	Nursing home	32	84	81	16	78	OVERALL COMPOSITION  54.3%  32.6%  13.2%		➤ 24-hour movement behavior composition differs between community- and nursing home-dwelling people with dementia.	
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METHODS  Cross-sectional study People with dementia: MMSE < 21 Community-dwelling: on nursing home waiting list Nursing home-dwelling: ≤ 6 weeks after admission  Movement behaviors measured with triaxial accelerometers  Compositional Data Analysis (isometric log-ratio transformations) MANOVA was performed on two behavioral balances: ILR₁: SLEEP BALANCE Sleep vs. Sedentary behavior + Physical activity ILR₂: ACTIVITY BALANCE Sedentary behavior vs. Physical activity		TERNARY PLOT 		MAIN FINDINGS  Composition differed between residential settings.  Difference driven by the balance between sedentary behavior and physical activity (ilr₂).  No difference in sleep balance (ilr₁).		➤ Nursing home residents are more sedentary and less physically active. ➤ Provides direction for future longitudinal studies investigating the mechanisms underlying these differences.																			
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