

Exercise groups implemented by municipalities promote older adults' physical functioning

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National Strength in Old Age Program



- ☞ Promotes health-enhancing exercise for independently living older adults (75+) with decreased physical functioning
- ☞ Main activities in the Program: Strength & balance training, group exercise, outdoor exercise, exercise counselling
- ☞ More scientific research is needed about the outcomes of group exercise in a real-life setting

Purpose

- 🕒 This study examines whether physical exercise groups implemented by municipalities are feasible and promote physical functioning among community-dwelling older adults (75+) in real-life settings.

Methods and data collection

- ☞ Five municipalities in the Program organised guided exercise groups for older adults.
- ☞ Voluntary participants were recruited into:
 - 1) Strength-balance group (n=117)**
 - Gym and balance training 2x per week
 - 2) Other exercise group (n=34)**
 - Chair and balance exercise or senior dance 1x per week
 - Home exercise 1x per week
- ☞ **Short Physical Performance Battery (SPPB)** was conducted before and after an **8–12-week exercise period** by local exercise instructors.



Statistical analysis

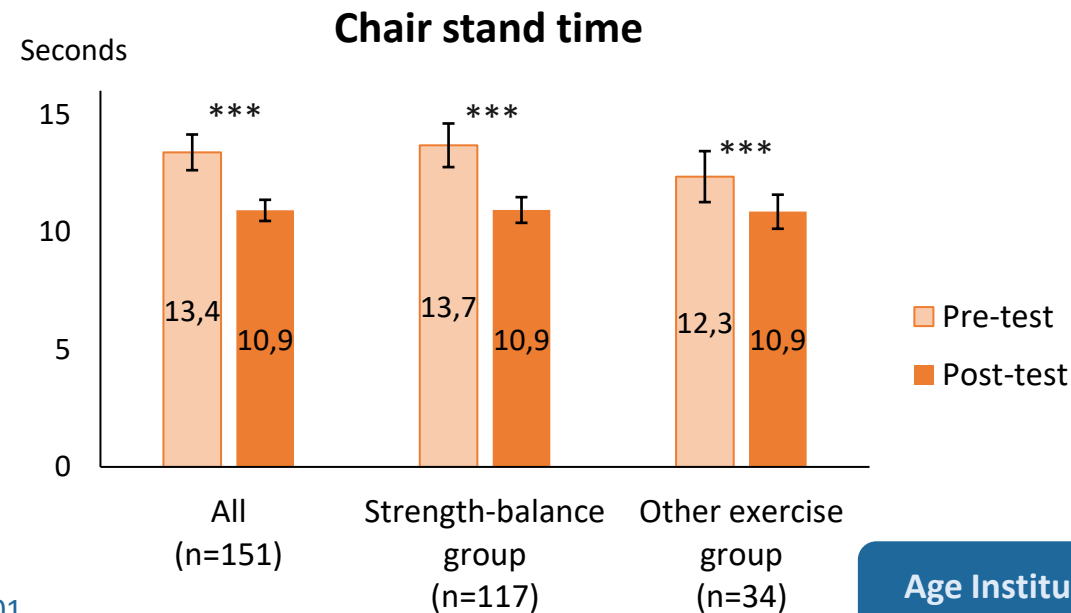
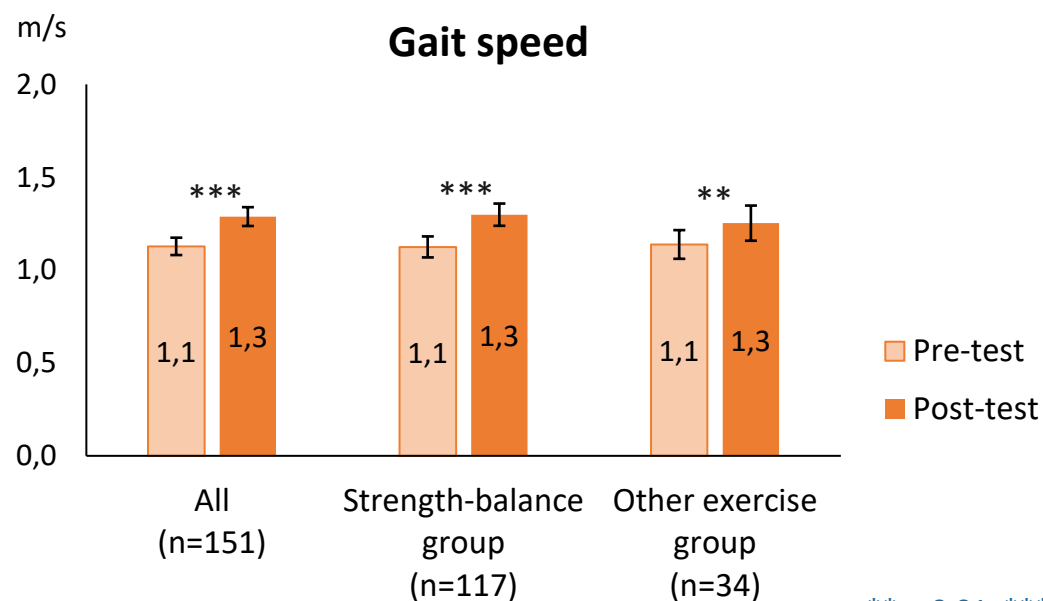
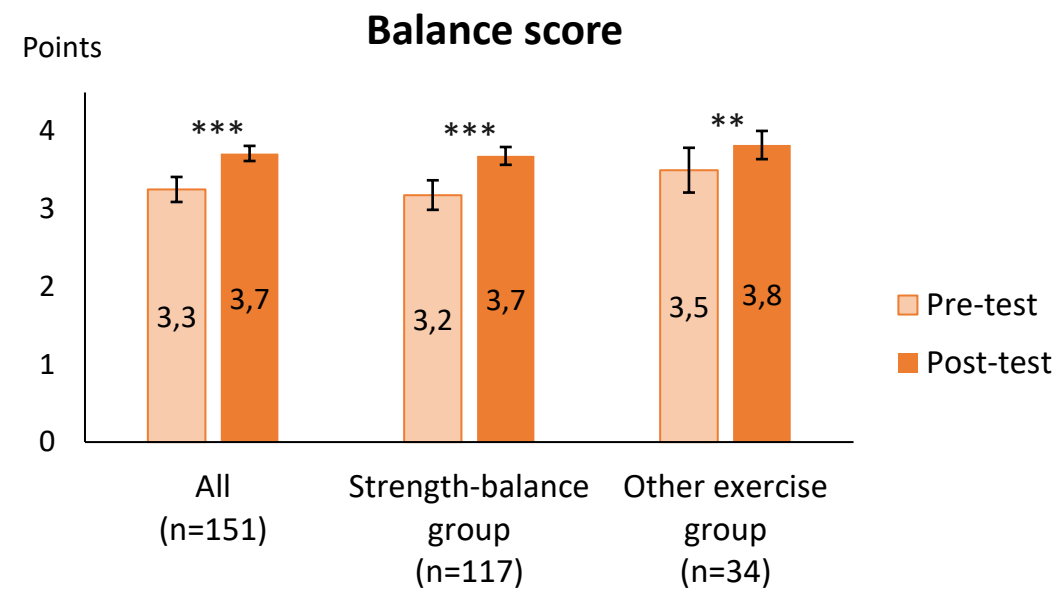
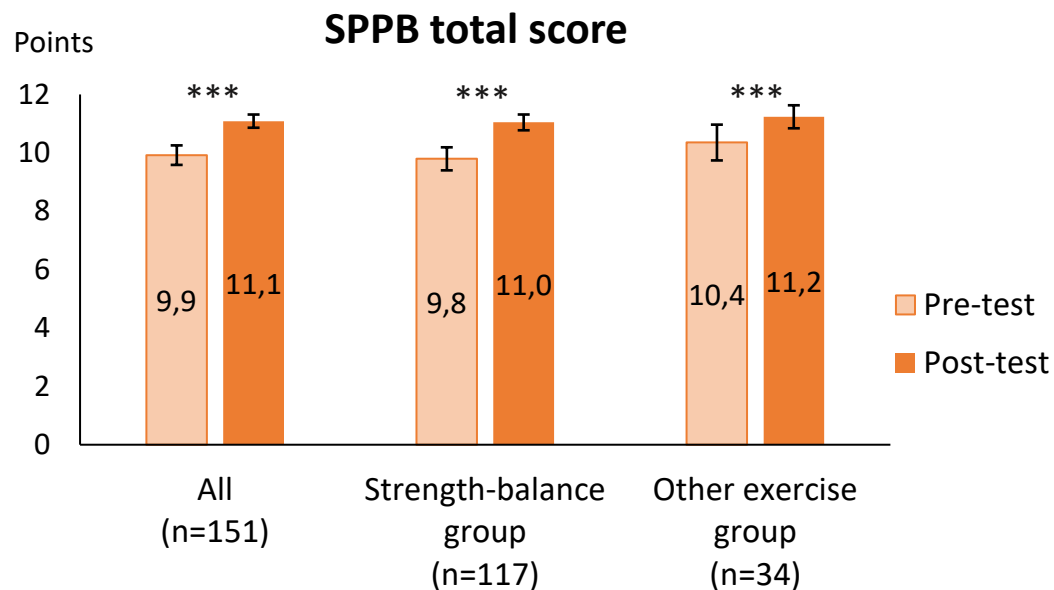
Changes in **SPPB total score, balance score, gait speed and chair stand time** within exercise groups (t-test)

Changes in **the SPPB outcomes** by baseline physical functioning

- Lower-functioning: **SPPB score < 10** vs. Higher-functioning: **SPPB score 10–12**
- t-test; ANCOVA adjusted for age, exercise adherence and exercise group

Participants having both pre- and post-test were included in the analysis (n=151)

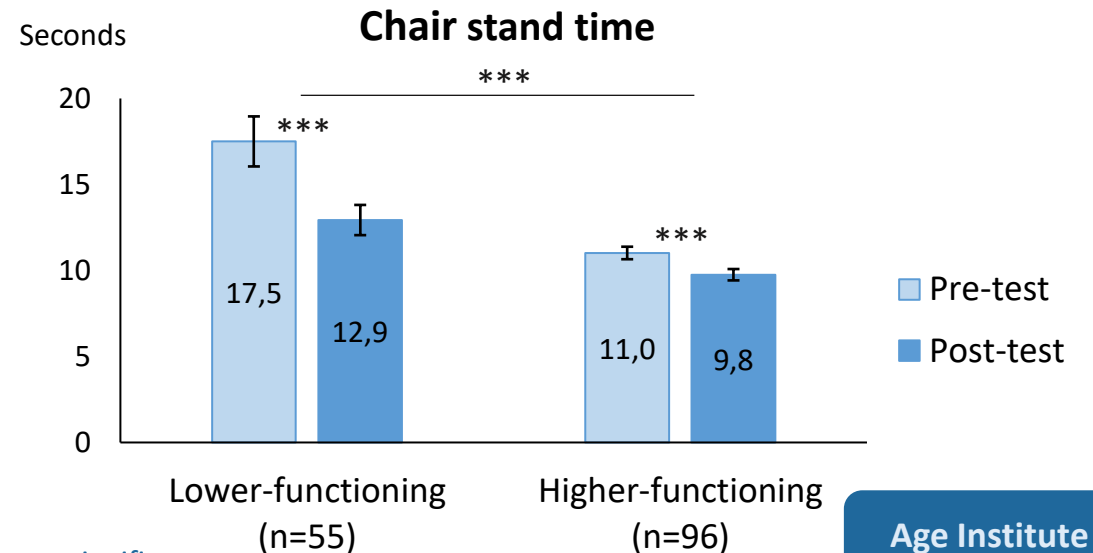
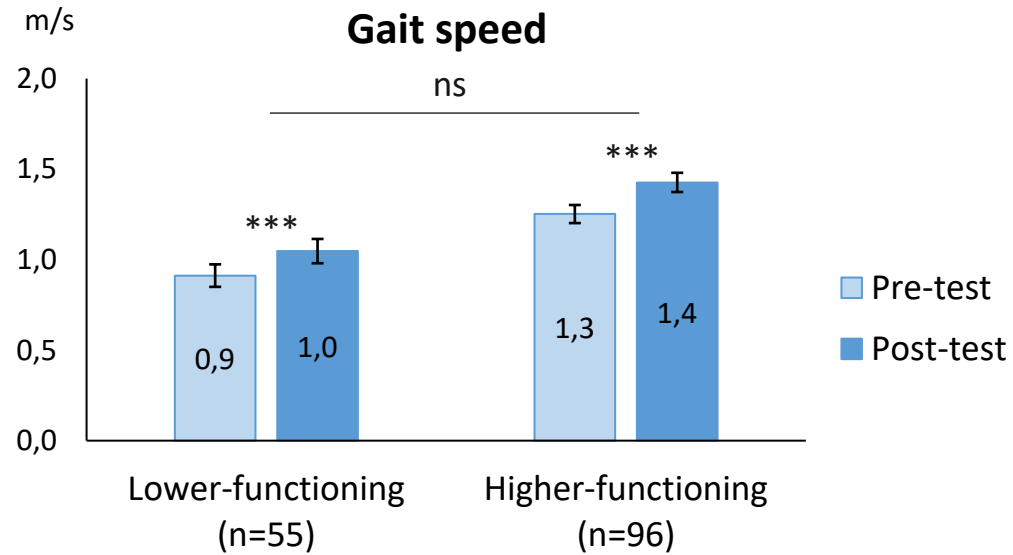
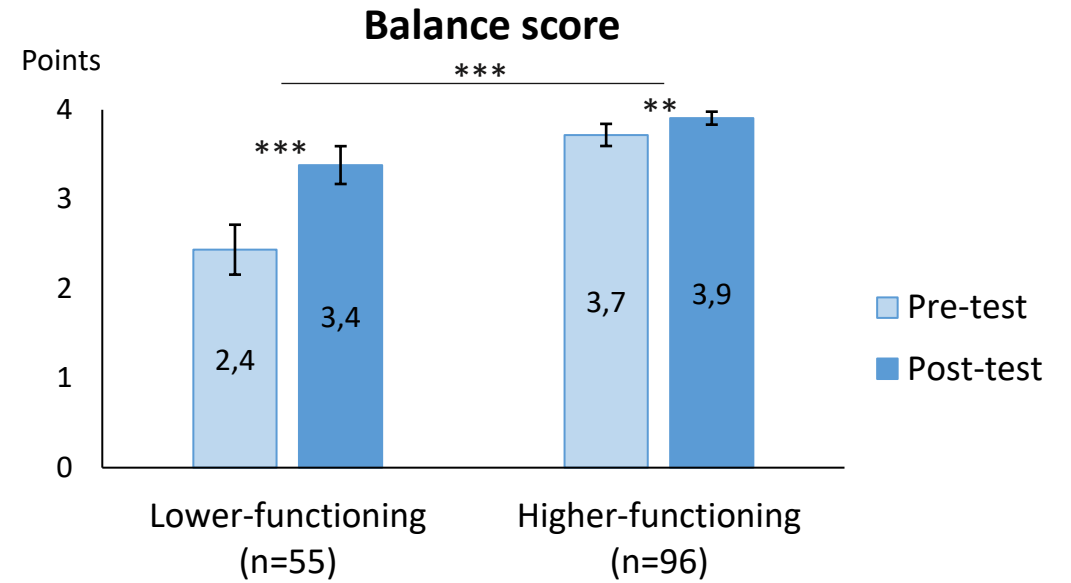
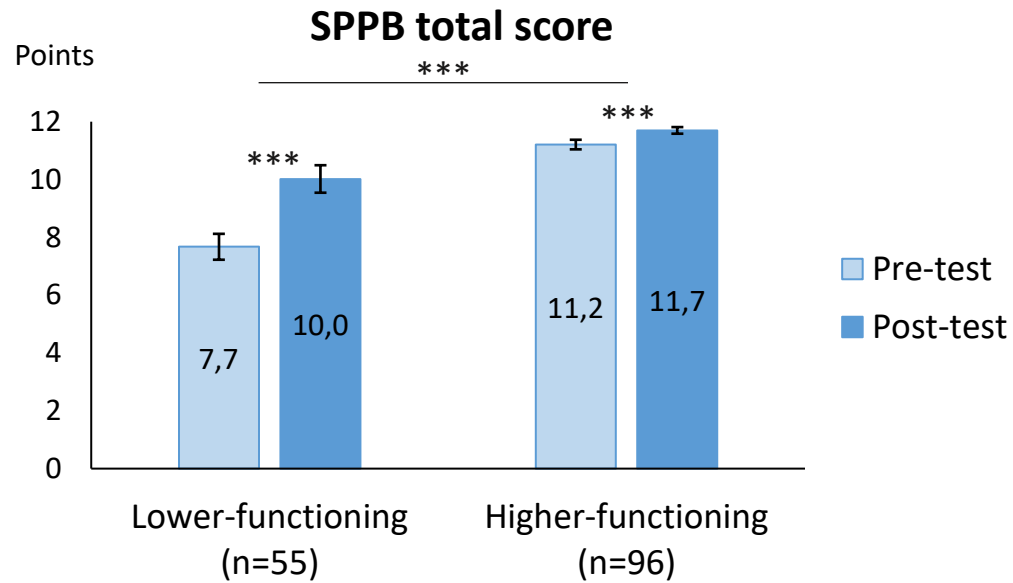
Changes in the SPPB outcomes by exercise groups



p<0.01, * p<0.001

Changes in the SPPB outcomes by baseline functioning

(SPPB score < 10 and 10–12)



p<0.01, * p<0.001, ns = non-significant

Conclusions

- ☞ Municipalities can implement physical exercise groups and mobility tests successfully and enhance older adults' physical functioning in real-life settings.
- ☞ Participants with lower baseline functioning improved the SPPB test results more than those with higher baseline functioning.
- ☞ Baseline testing is recommended to identify the target groups that might benefit from training the most.

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