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Program outcomes of a community-based falls prevention program delivered in different CALD communities

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Health

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Falls in older people

- 🍏 1 in 3 people aged 65 years and over experience at least one fall each year
- 🍏 In Australia, the annual cost of fall-related injuries was estimated to be \$648m in 2007-08
- 🍏 Modifiable risk factors include lower limb muscle strength, impaired balance and gait

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There is a knowledge gap

- 🍏 Little is known about the effectiveness and experience of falls prevention strategies in older people from culturally and linguistically diverse (CALD) backgrounds
- 🍏 CALD communities in Australia
 - Experience significant health disparities
 - Lower levels of physical activity
 - Limited participation in programs

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Stepping On

The Effectiveness of a Community-Based Program for Reducing the Incidence of Falls in the Elderly: A Randomized Trial

Lindy Clemson, BAppSc(OT), MAppSc(OT), PhD, Robert G. Cumming, MBBS, MPH, PhD,‡|| Hal Kendig, MPI, PhD, FASSA,[§] Megan Swann, BAppSc(OT),[¶] Robert Heard, BA(Hons), PhD,[†] and Kirsty Taylor, BA(Psych)**

OBJECTIVES: To test whether Stepping On, a multifaceted community-based program using a small-group learning environment, is effective in reducing falls in at-risk people living at home.

DESIGN: A randomized trial with subjects followed for 14 months.

SETTING: The interventions were conducted in community venues, with a follow-up home visit.

Secondary analysis of subgroups showed that it was particularly effective for men (n = 80; RR = 0.32, 95% CI = 0.17–0.59).

CONCLUSION: The results of this study renew attention to the idea that cognitive-behavioral learning in a small-group environment can reduce falls. Stepping On offers a successful fall-prevention option. *J Am Geriatr Soc* 52:1487–1494, 2004.

Stepping On

- 🍏 2 hours/week for 7 weeks with booster session
- 🍏 Program components:
 - Strength and balance exercises
 - Education sessions



- 🍏 Statewide delivery in New South Wales in English and 10 community languages

Aim of this study

To compare the effects of a community-based falls prevention program on improving participants' lower limb muscle strength, balance and mobility between mainstream (English-speaking) groups and CALD groups.



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Methods

- 🍏 Secondary analysis of routinely collected data from mainstream and CALD groups delivered in 2015 and 2016
- 🍏 Measures at pre (week 1), post (week 7) and 2 month follow-up (booster session)
 - Timed Up and Go
 - Sit to Stand
 - Near Tandem Stand

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Number of groups delivered

- 🍏 A total of 213 Stepping On programs were delivered during the study period (2015-2016)
 - 140 (66%) groups in English
 - 73 (34%) groups in CALD languages



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CALD Stepping On groups

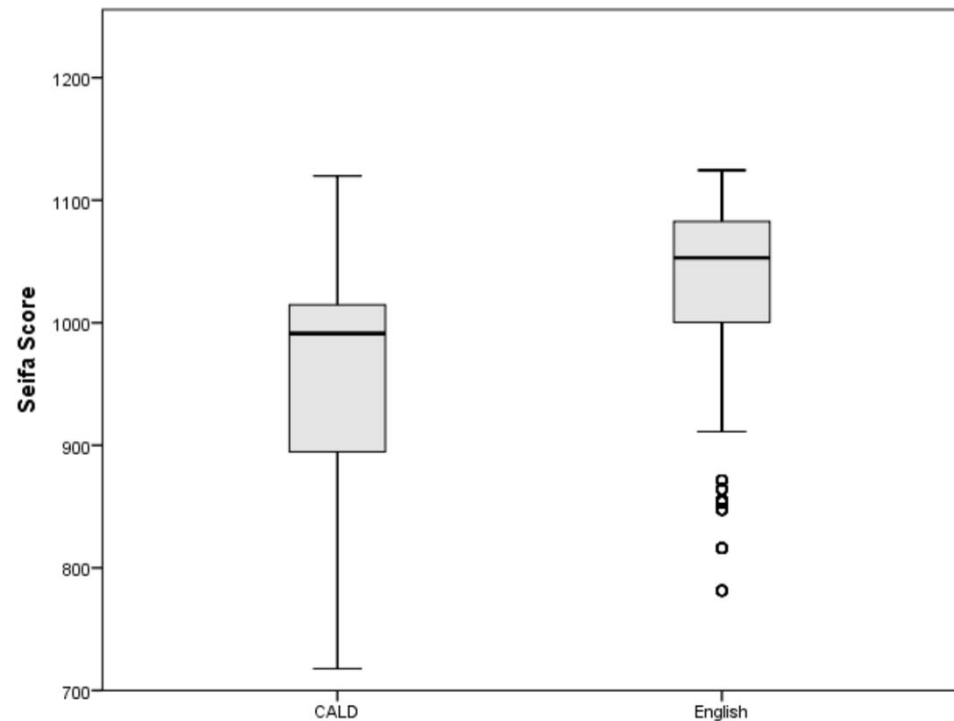
🍏 Languages other than English that Stepping On was delivered in:

Arabic, Chinese, Greek, Hindi, Italian, Khmer, Korean, Macedonian, Maltese, Mauritian, Spanish, Tamil, Turkish, Vietnamese

The five most common languages	Number of Groups n (%)
Chinese	22 (30)
Arabic	13 (18)
Vietnamese	9 (12)
Hindi	7 (10)
Spanish	6 (8)

SEIFA scores of CALD groups

- 🍏 Descriptive analysis
- 🍏 Based on locations where the CALD programs were held



Results

	Mainstream N = 1,654	CALD N = 1,105
Average age (\pm SD)	80.5 (7.4)	76.0 (8.3)
Female	74.4%	73.5%
History of falls	61.2%	53.0%
Fear of falling	98.4%	97.3%
Program completion*	83.7%	84.3%

*Program completion is defined as attendance at least 5 of the 7 program sessions

Results

Timed Up and Go and Sit to Stand tests

	Mainstream	CALD	p value
Timed Up and Go	- 1.77 s	- 0.89 s	0.26
Sit to Stand	- 2.28 s	- 2.51 s	0.34

Near Tandem Stand

	Mainstream n (%)	CALD n (%)	p value
Improvement in Near Tandem Stand	483 (40)	227 (28)	0.215

Conclusions

- 🍏 Stepping On achieves equivalent outcomes for English-speaking and CALD participants; this is important from an equity point of view
- 🍏 Further investigation into how the Stepping On CALD groups are delivered is taking place, including the enablers and barriers



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