

Use and perceptions of activity monitors and health coaching in community dwelling seniors

Presented by

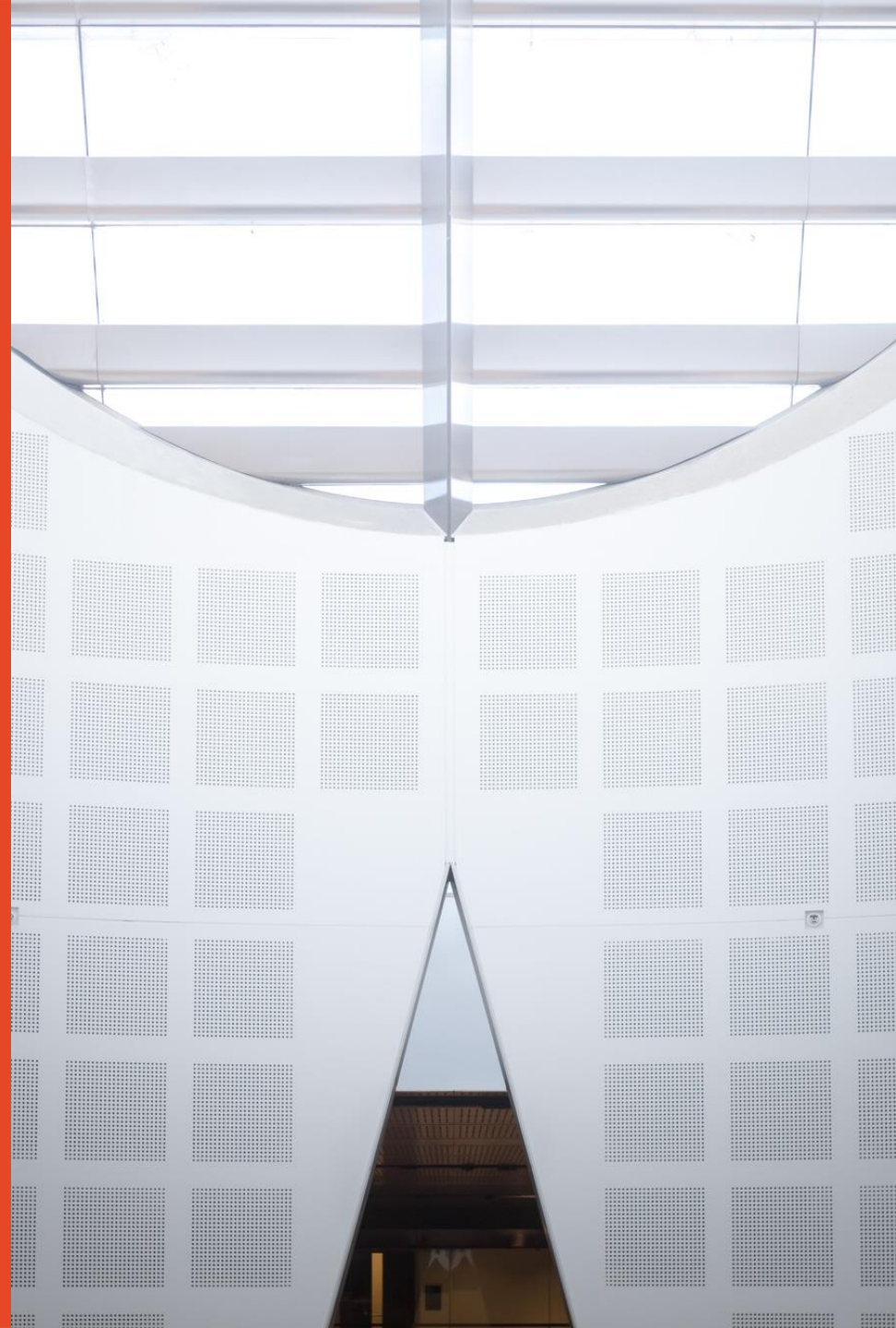
Catherine Kirkham

Research physiotherapist

School of Public Health



THE UNIVERSITY OF
SYDNEY



Background

Two major public health issues:

1. Physical inactivity in older age

Older people are particularly inactive

Approximately 76% of Australians aged 75 years+ do not meet physical activity guidelines (*Australian Health Survey: Physical Activity, 2011-12*)

2. Falls in older age

1 in 3 community-dwelling people aged 65 years+ fall at least once/year

Consequences are enormous - social, economic, ongoing disability



Background

Strategies for promoting physical activity:

Activity monitors

Heath GW et al (2012)¹ - pedometers had greater effects on physical activity than other intervention strategies (informational, behavioural and social approaches)

Health coaching

Oliveira JS et al (2017)² - health coaching effective in improving physical activity participation (in systematic review)

¹Heath GW, Parra DC, Sarmiento OL, et al. Evidence-based intervention in physical activity: lessons from around the world. *Lancet* 2012;380:272–81.

²Oliveira, et al, What are the effects of health coaching on physical activity participation in people aged 60 years and over? A systematic review of randomised controlled trials. *Br J Sports Med* 2017

Background

Tiedemann et al. *BMC Public Health* (2015) 15:477
DOI 10.1186/s12889-015-1380-7



STUDY PROTOCOL

Open Access

What is the effect of a combined physical activity and fall prevention intervention enhanced with health coaching and pedometers on older adults' physical activity levels and mobility-related goals?: Study protocol for a randomised controlled trial

Anne Tiedemann^{1,2*}, Serene Paul^{1,2}, Elisabeth Ramsay¹, Sandra D O'Rourke^{1,3}, Kathryn Chamberlain¹, Catherine Kirkham¹, Dafna Merom⁴, Nicola Fairhall¹, Juliana S Oliveira¹, Leanne Hassett^{1,2} and Catherine Sherrington^{1,2}

Aims of current study

- To evaluate uptake and perceptions of an intervention aimed at increasing physical activity participation and reducing fall risk with health coaching and *Fitbit* activity monitors
- Results will inform the methods to be used for widespread implementation of the intervention if shown to be effective

Participant preferences and program adherence important considerations for any implementation

Methods

➤ **Participant inclusion criteria:**

- intervention group participants who had completed 6 month follow-up
- aged 60 years and over
- living at home
- cognitively intact (Memory Impairment Screen $> 5/8$)
- regular access to the internet
- no medical conditions precluding exercise or progressive neurological condition
- no fall screen in last year AND does not meet current physical activity guidelines

Methods

➤ Intervention:

- One home visit: identify fall risks (QuickScreen), address risk factors, set up a Fitbit pedometer, health coaching / goal setting / motivational interviewing encouraging physical activity



- Fortnightly health coaching phone calls for 6 months: barriers, strengths, strategies

Methods

- **Study measures:** Postal survey completed at the end of 6 months asking about *compliance with* and *perceptions of* the intervention:
 - Benefit of the program
 - Use of Fitbit pedometer
 - What aspects of the Fitbit software used
 - How often was the activity information downloaded
 - How useful was the goal setting and health coaching

- **Analyses:** descriptive statistics used to summarise survey responses

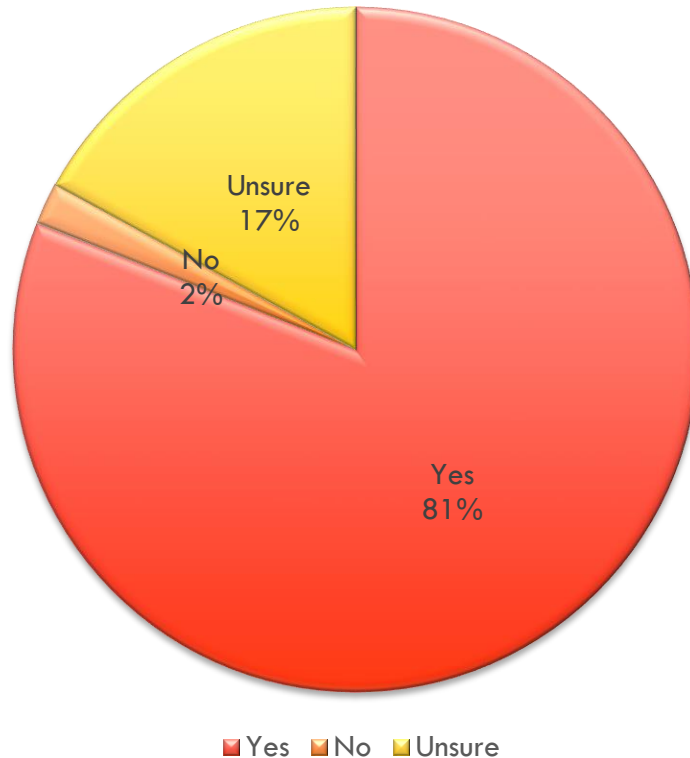
Results

➤ **Participants:**

- 42 people
- 64% female
- Mean age 67.2 years (range 60 – 81 years)
- 9 participants had fallen in the past year

Results: Overall impression of program

Overall was the program of benefit to you?



➤ *It makes me more mindful of what and how I do various activities*

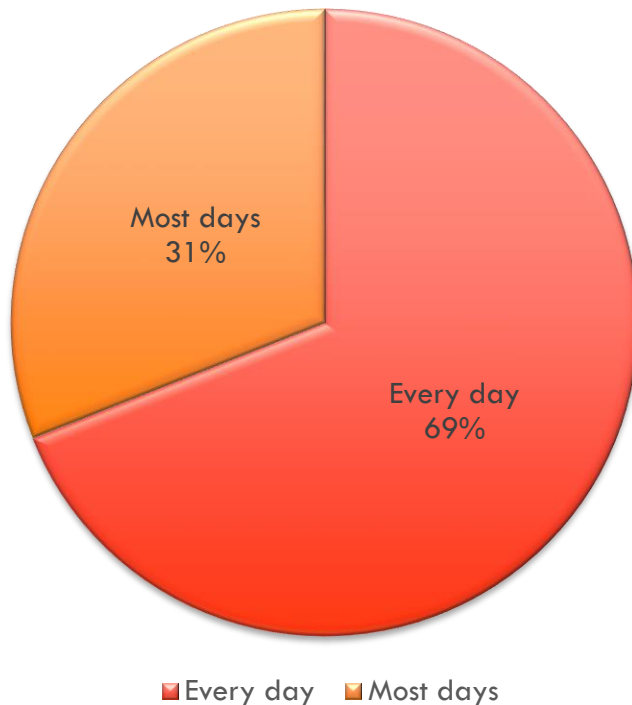
➤ *Made me view walking / exercise more positively*

➤ *I have exercised regularly for a number of years so I do not see myself as needing to be encouraged to engage in physical activity. Yet the program did encourage me to think about how much activity I was doing and to aim for more, to do more*

➤ *It would have been more useful if I had not been too busy at work*

Results: Use of Fitbit pedometer

Did you regularly wear the Fitbit pedometer during the past 6 months?



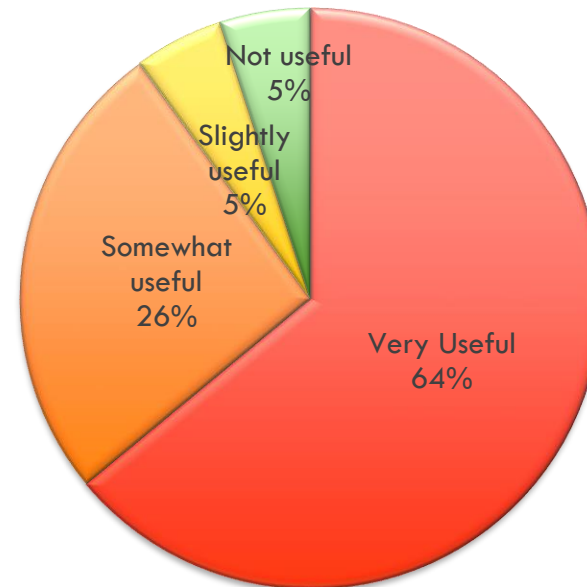
- *Sometimes I forgot to wear the fitbit and became very tired from physical activity. Weather and moods unpredictable. To fit in all this activity and keep up with housework, shopping, cooking and resting after 3pm because of tiredness..*

- *98% said they would wear the Fitbit for the next 6 months*

Results: Use of Fitbit pedometer

- *Encouraged me to walk and stand instead of sitting*
- *I didn't feel my pattern of activity has changed significantly. Fitbit is interesting to wear for a short time but a bit tedious to wear all the time. But it may have motivated me to compete with myself to maintain or raise walking distances*

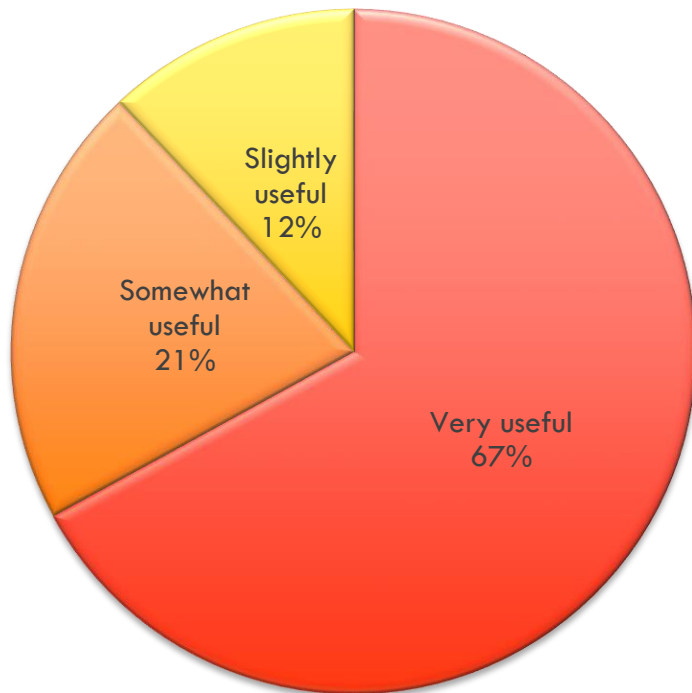
How useful was Fitbit pedometer in motivating you to be active?



Very Useful Somewhat useful
Slightly useful Not useful

Results: Goal setting and health coaching

How useful was goal setting and health coaching?



■ Very useful ■ Somewhat useful ■ Slightly useful

- *I owe everything to my walking program...Thank you for support and chats. So good to have one on one communication with such a supportive and delightful person*
- *Difficulty in decent catch ups with health coach due to work commitments and general availability*

Conclusions

Small sample overall shows that

- an intervention with pedometer and health coaching was feasible and well-received in seniors with a range of ages and activity levels
- Currently being tested in larger trial (600 participants) funded by NHMRC Project Grant

Acknowledgements

Co-authors

Prof Cathie Sherrington, A/Prof Anne Tiedemann, Juliana Souza de Oliveira, Betty Ramsay, Kathryn Chamberlain, Sandra O'Rourke

Funding

Research bequest

Marrickville Council community grant

NSW Office of Communities, Sport and Recreation

