

Physical activity

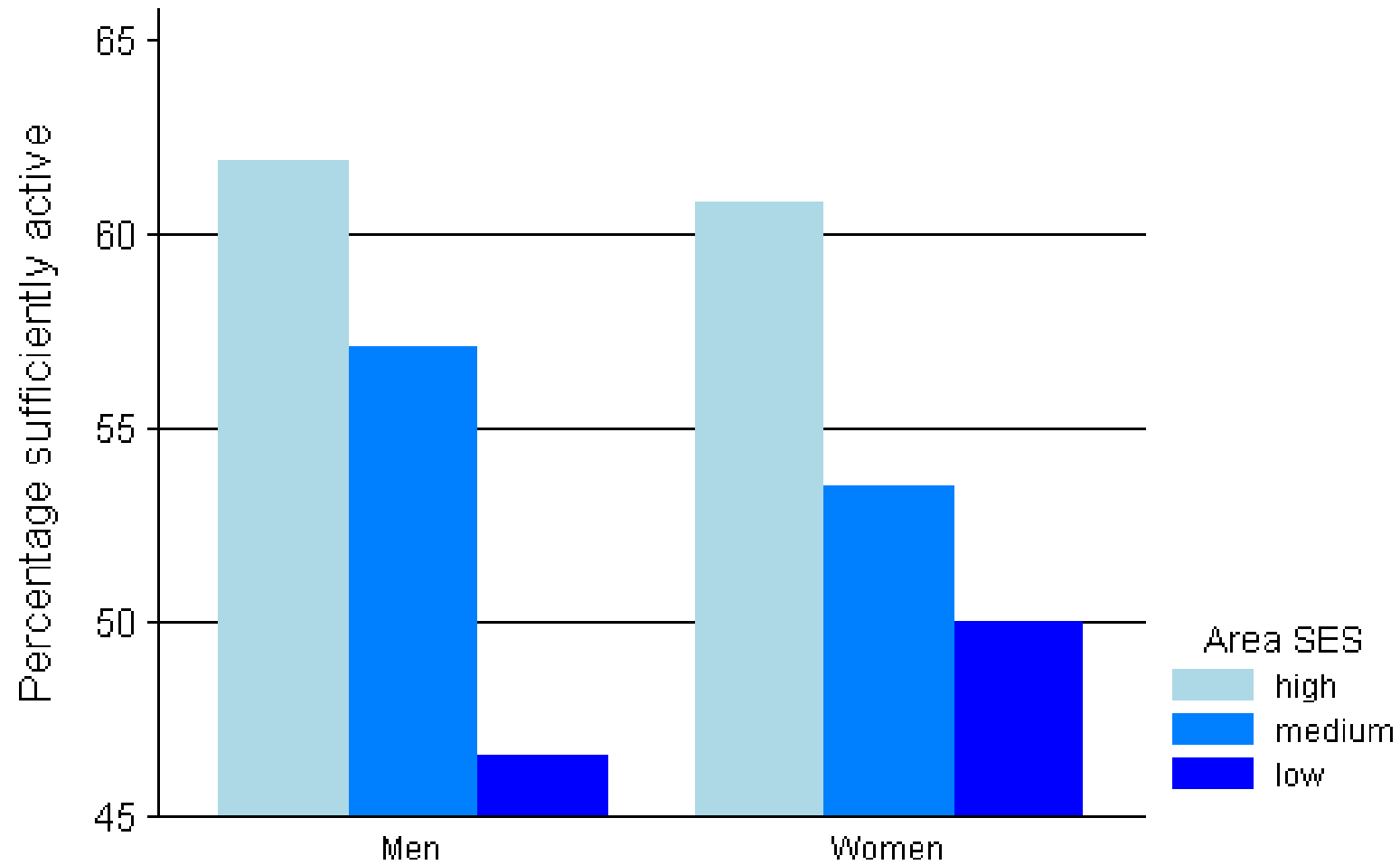
Session 2



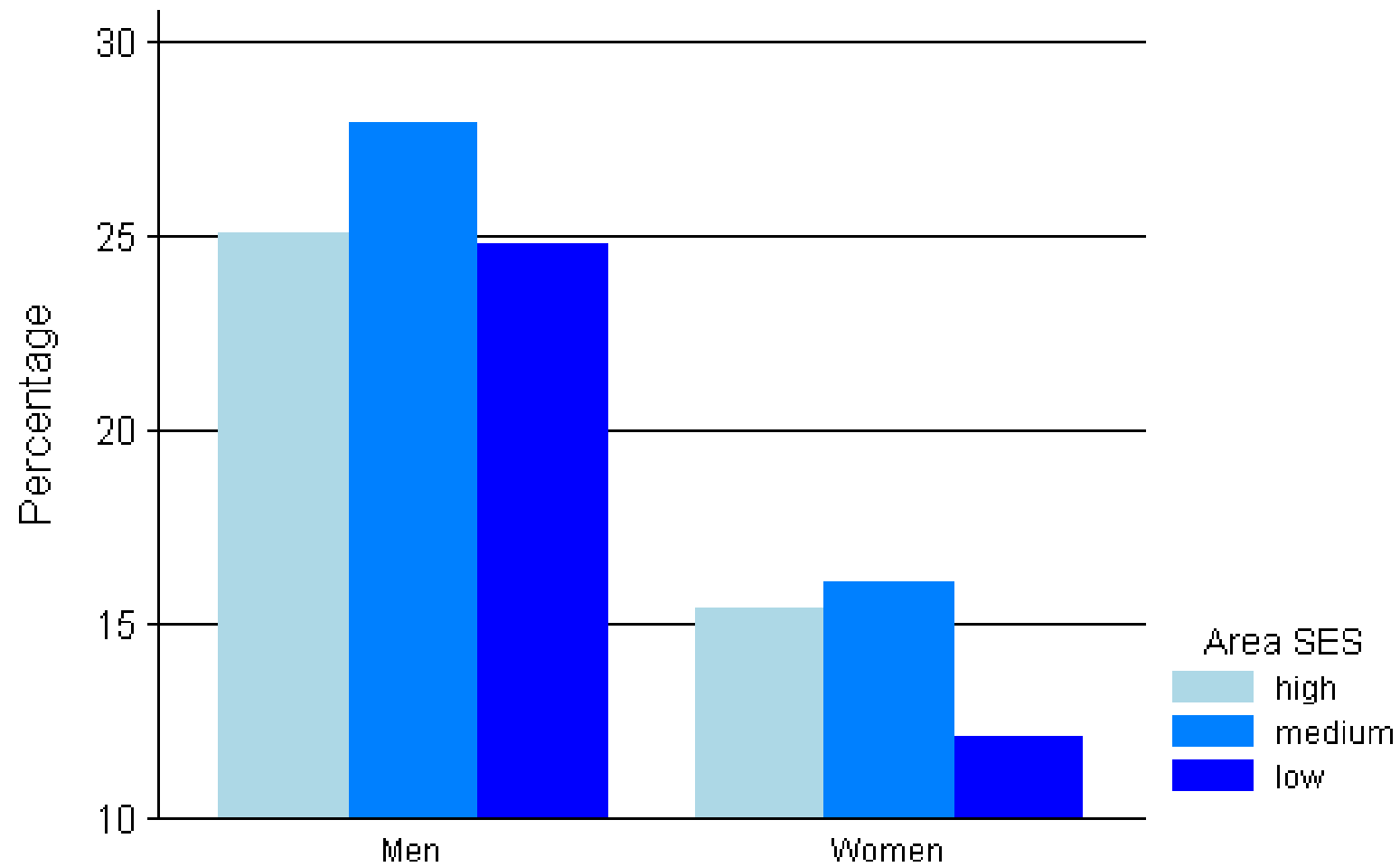
Why physical activity is important?

- Physical activity is an important primary prevention strategy for chronic disease including diabetes, heart disease and many cancers
- Currently recommended that undertake 30mins of moderate intensity physical activity on most, if not all, days of the week.
- 60% of adult men and 40% of adult women are sufficiently active for health
- Most common form of exercise is walking
- Most physical activity is undertaken close to home so it is likely that the local environments matter

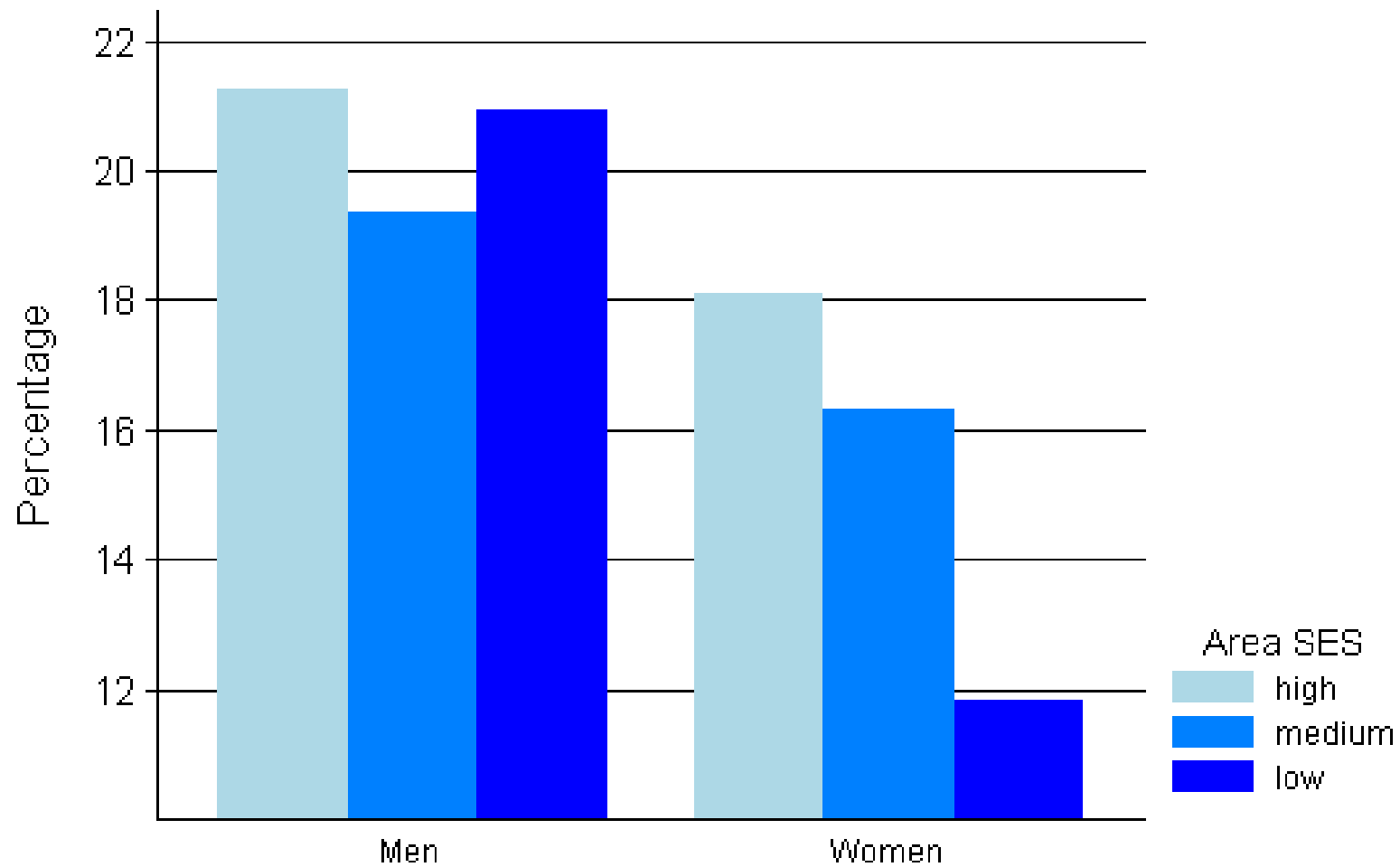
Sufficient physical activity



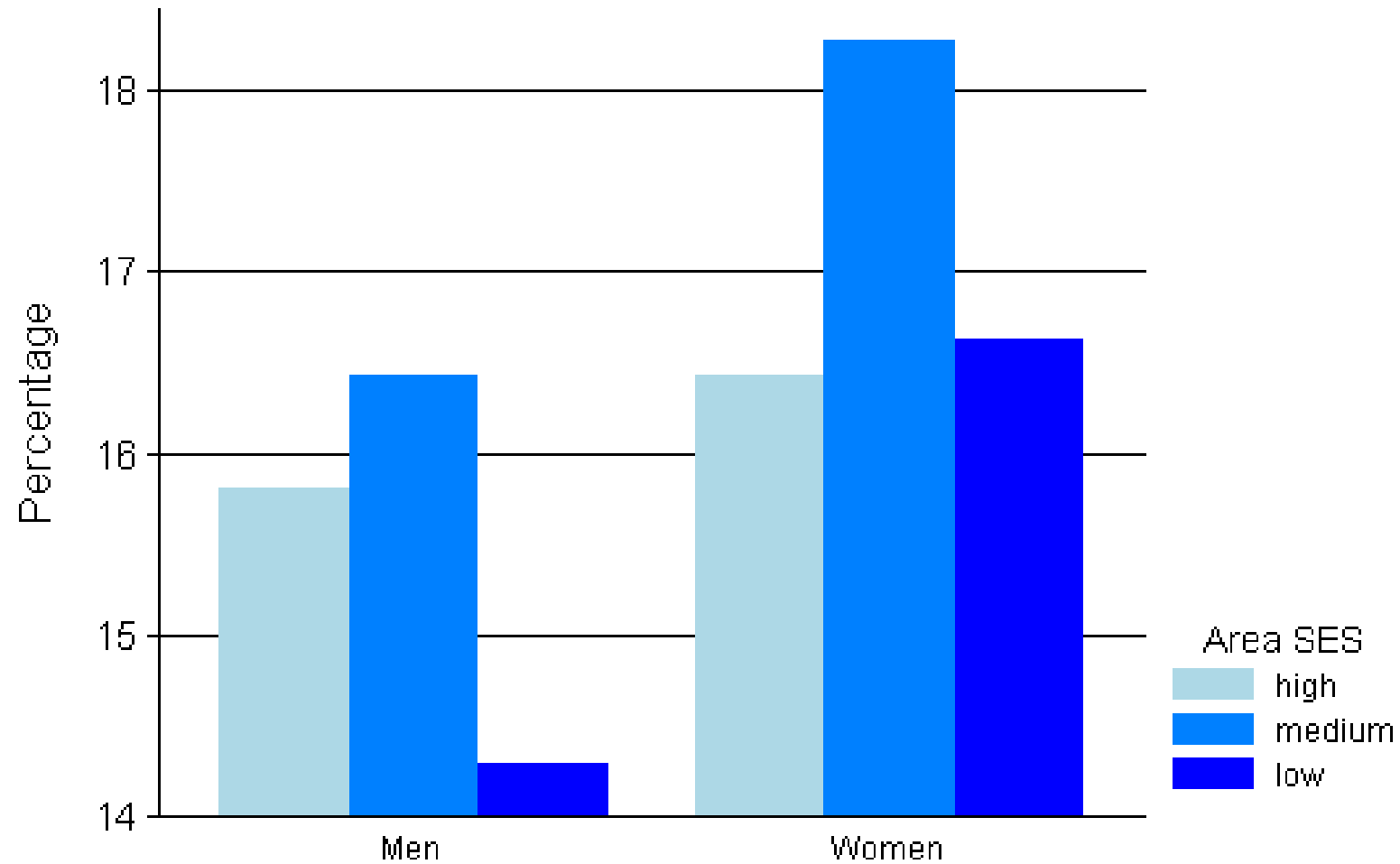
Cycling in the previous month



Jogging in the previous month



Swimming in the previous month



Summary of physical activity and area disadvantage

- People living in more socio-economically disadvantaged areas were less likely to:
 - be sufficiently active for health
 - jog
- Previously shown that there is significant variation between areas in terms of cycling, walking and swimming

RESEARCH REPORT

Urban area disadvantage and physical activity: a multilevel study in Melbourne, Australia

Anne M Kavanagh, Jane L Goller, Tania King, Damien Jolley, David Crawford, Gavin Turrell

J Epidemiol Community Health 2005;59:934–940. doi: 10.1136/jech.2005.035931

Objective: To estimate variation between small areas in the levels of walking, cycling, jogging, and swimming and overall physical activity and the importance of area level socioeconomic disadvantage in predicting physical activity participation.

Methods: All census collector districts (CCDs) in the 20 innermost local government areas in metropolitan Melbourne, Australia, were identified and ranked by the percentage of low income households (<\$400/week) living in the CCD. Fifty CCDs were randomly selected from the least, middle, and most disadvantaged septiles of the ranked CCDs and 2349 residents (58.7% participation rate) participated in a cross sectional postal survey about physical activity. Multilevel logistic regression (adjusted for extrabinomial variation) was used to estimate area level variation in walking, cycling, jogging, and swimming and in overall physical activity participation, and the importance of area level socioeconomic disadvantage in predicting physical activity participation.

Results: There were significant variations between CCDs in all activities and in overall physical participation in age and sex adjusted models; however, after adjustment for individual SES (income, occupation, education) and area level socioeconomic disadvantage, significant differences remained only for walking ($p=0.004$), cycling ($p=0.003$), and swimming ($p=0.024$). Living in the most socioeconomically disadvantaged areas was associated with a decreased likelihood of jogging and of having overall physical activity levels that were sufficiently active for health; these effects remained after adjustment for individual socioeconomic status (sufficiently active: OR 0.70, 95% CI 0.55 to 0.90 and jogging: OR=0.69, 95% CI 0.51 to 0.94).

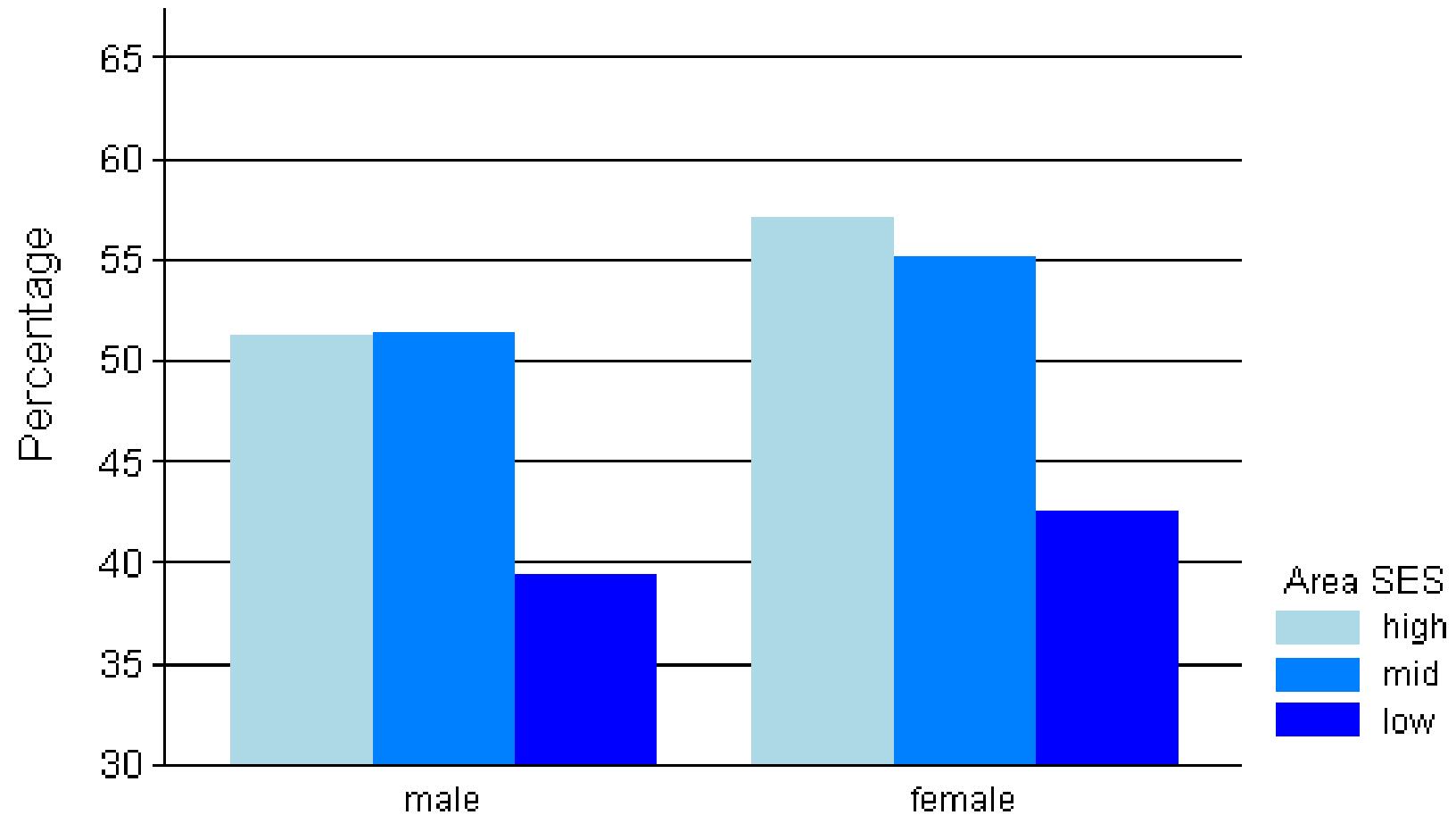
Conclusion: These research findings support the need to focus on improving local environments to increase physical activity participation.

See end of article for authors' affiliations

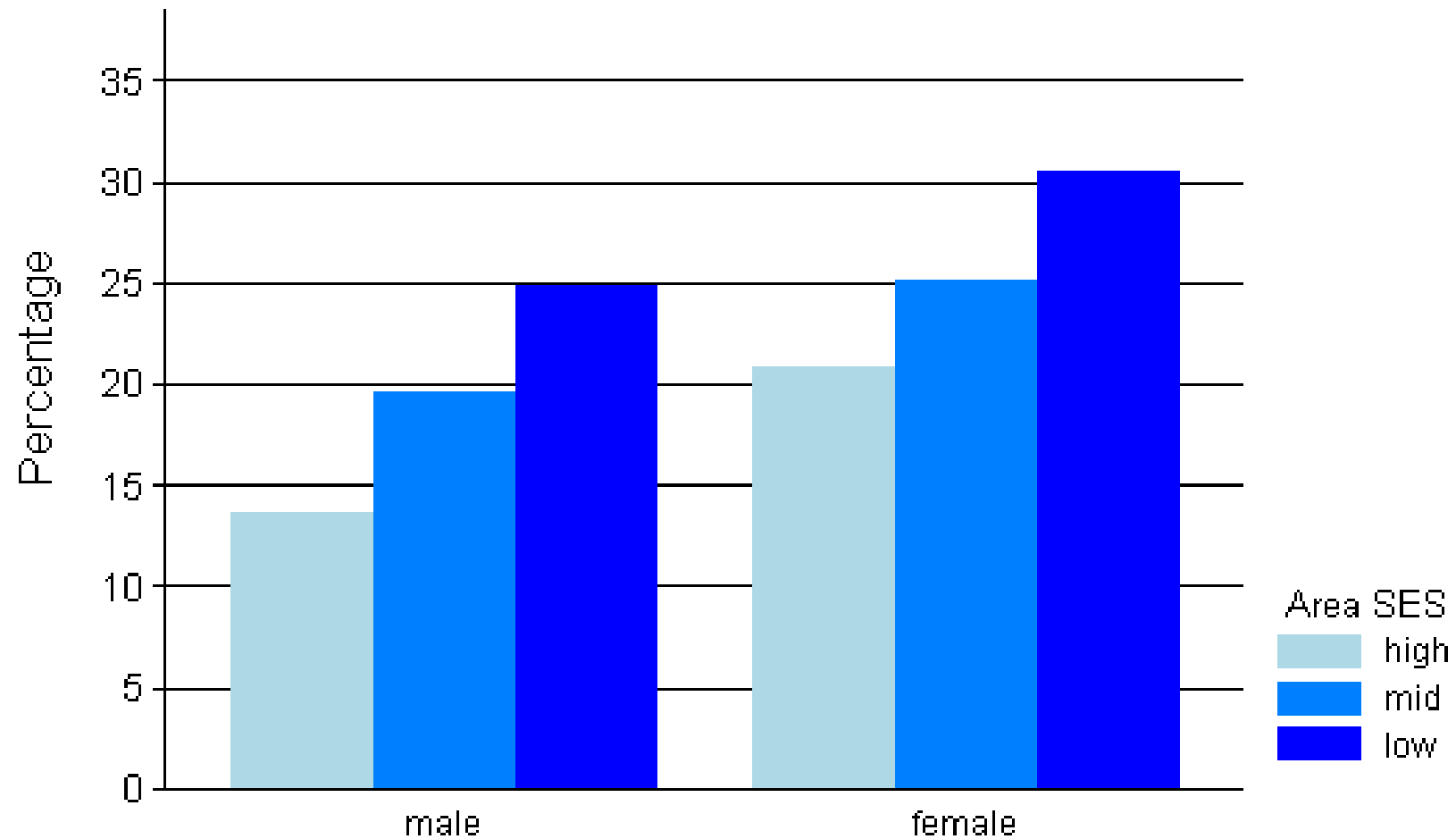
Correspondence to:
Dr A M Kavanagh, Key
Centre for Women's
Health in Society,
University of Melbourne,
Melbourne 3010,
Australia; a.kavanagh@
unimelb.edu.au

Accepted for publication
3 June 2005

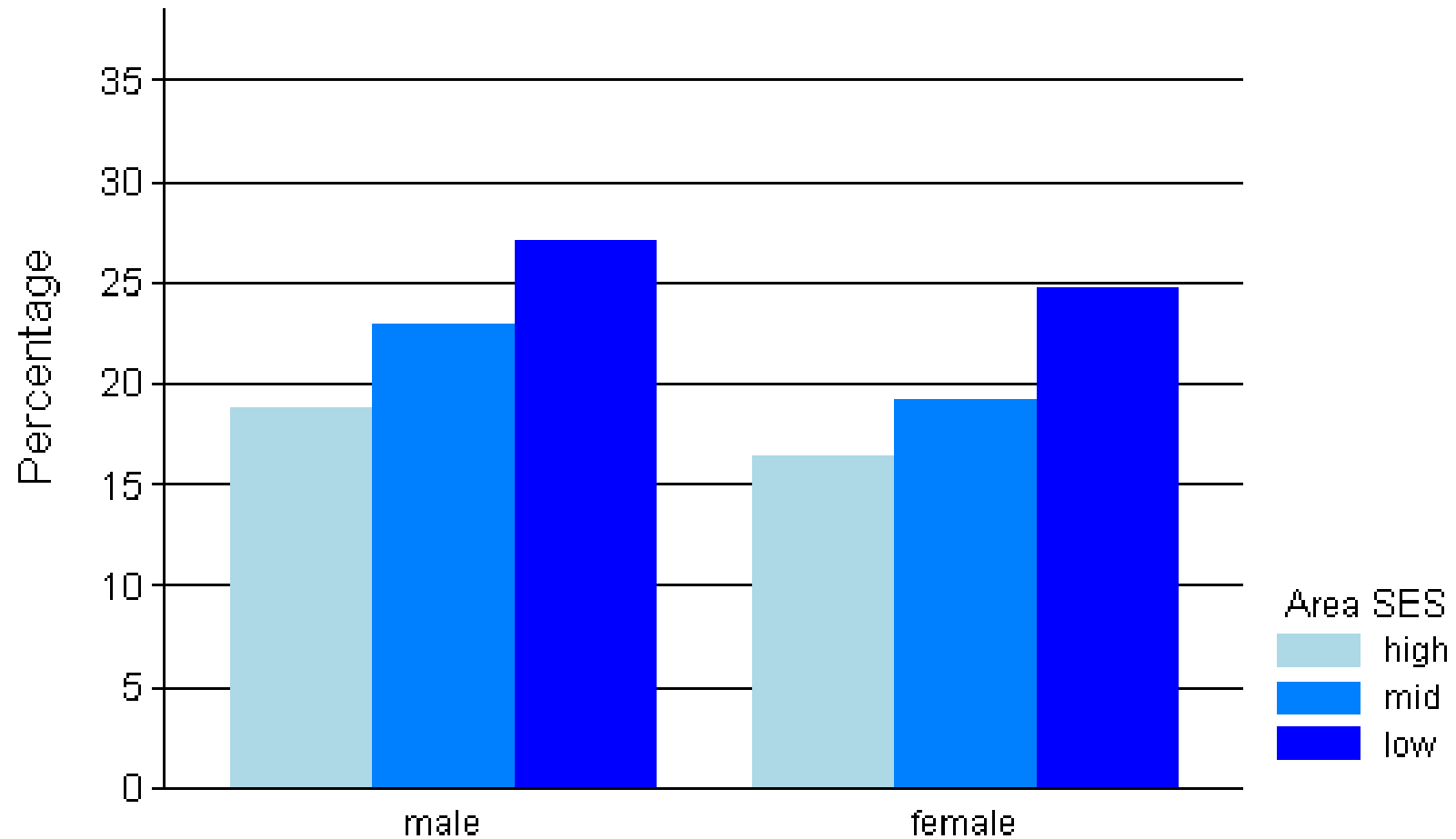
I haven't got time



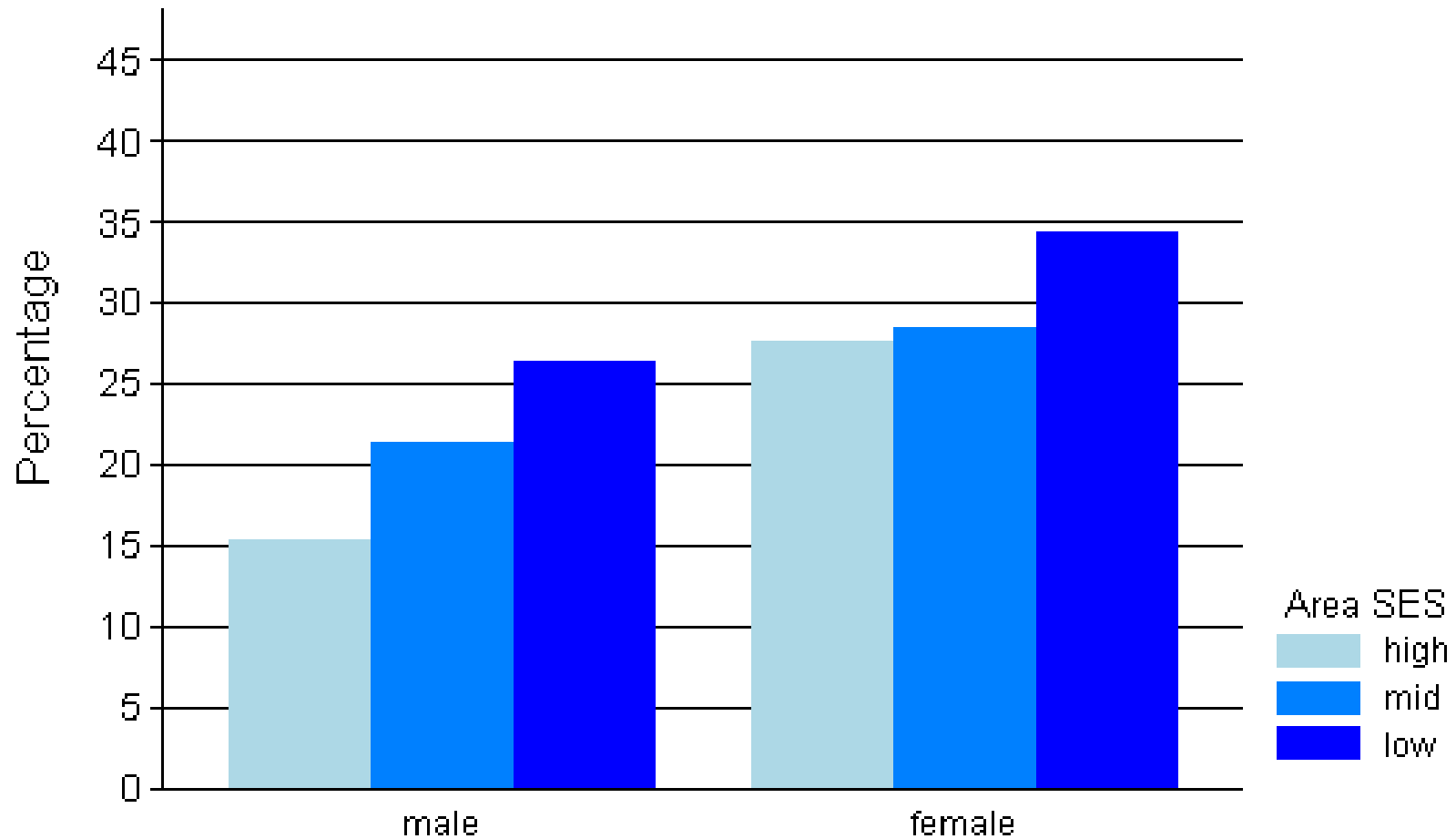
There's no one to exercise with



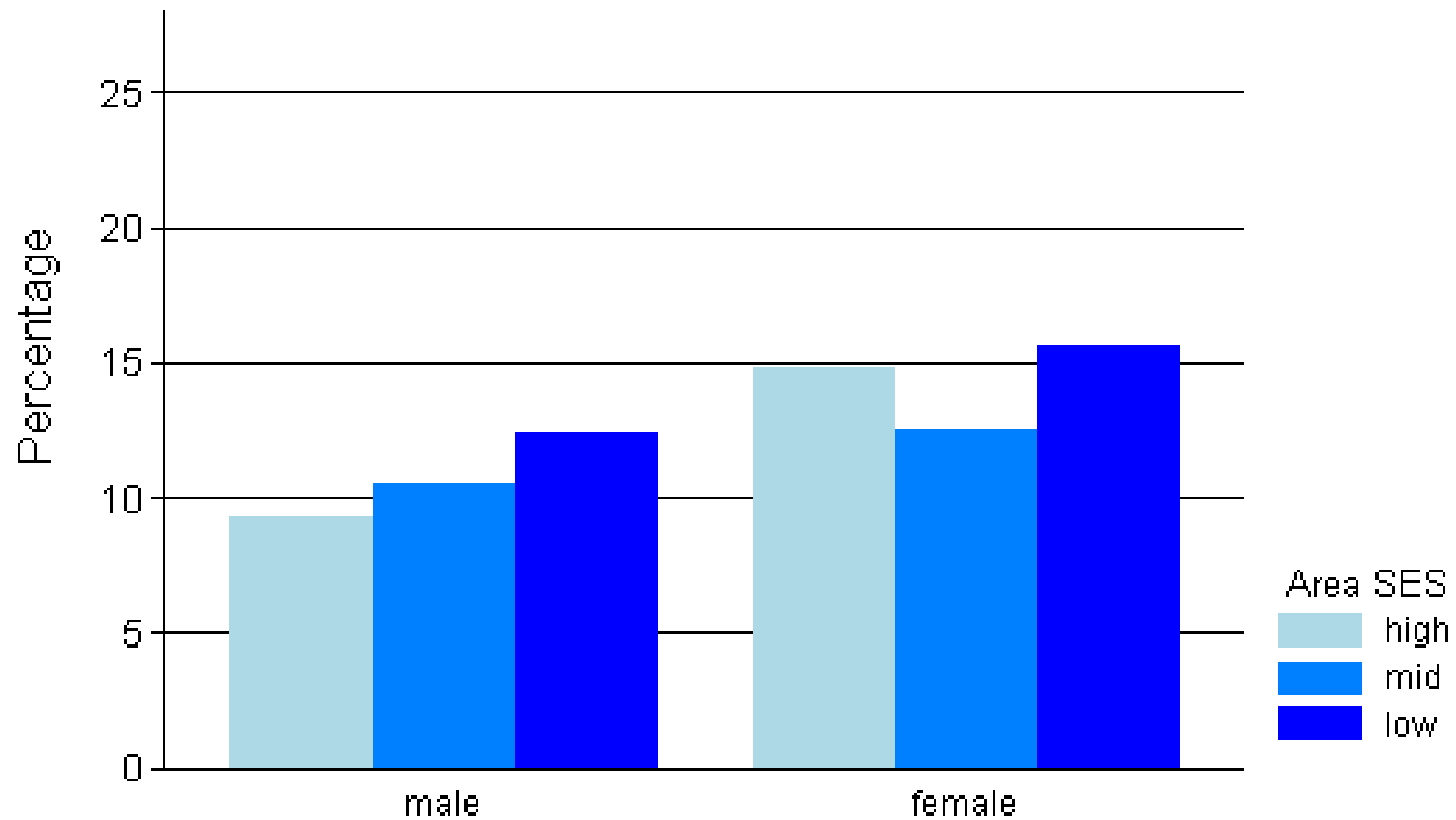
I have an injury or disability



I'm not the sporty type



I've got young children to look after



Attitudes and knowledge

- People living in more socio-economically disadvantaged areas were less likely to:
 - have someone to exercise with
 - say that not having time was a barrier to PA
- People living in more socio-economically disadvantaged areas were more likely to:
 - have an injury or disability
 - say they were not the sporty type
 - say that having young children to look after was a barrier to physical activity

Recreational Facilities

	Area SES		
	High	Medium	Low
Unstructured	16	17	17
Structured	10	11	10

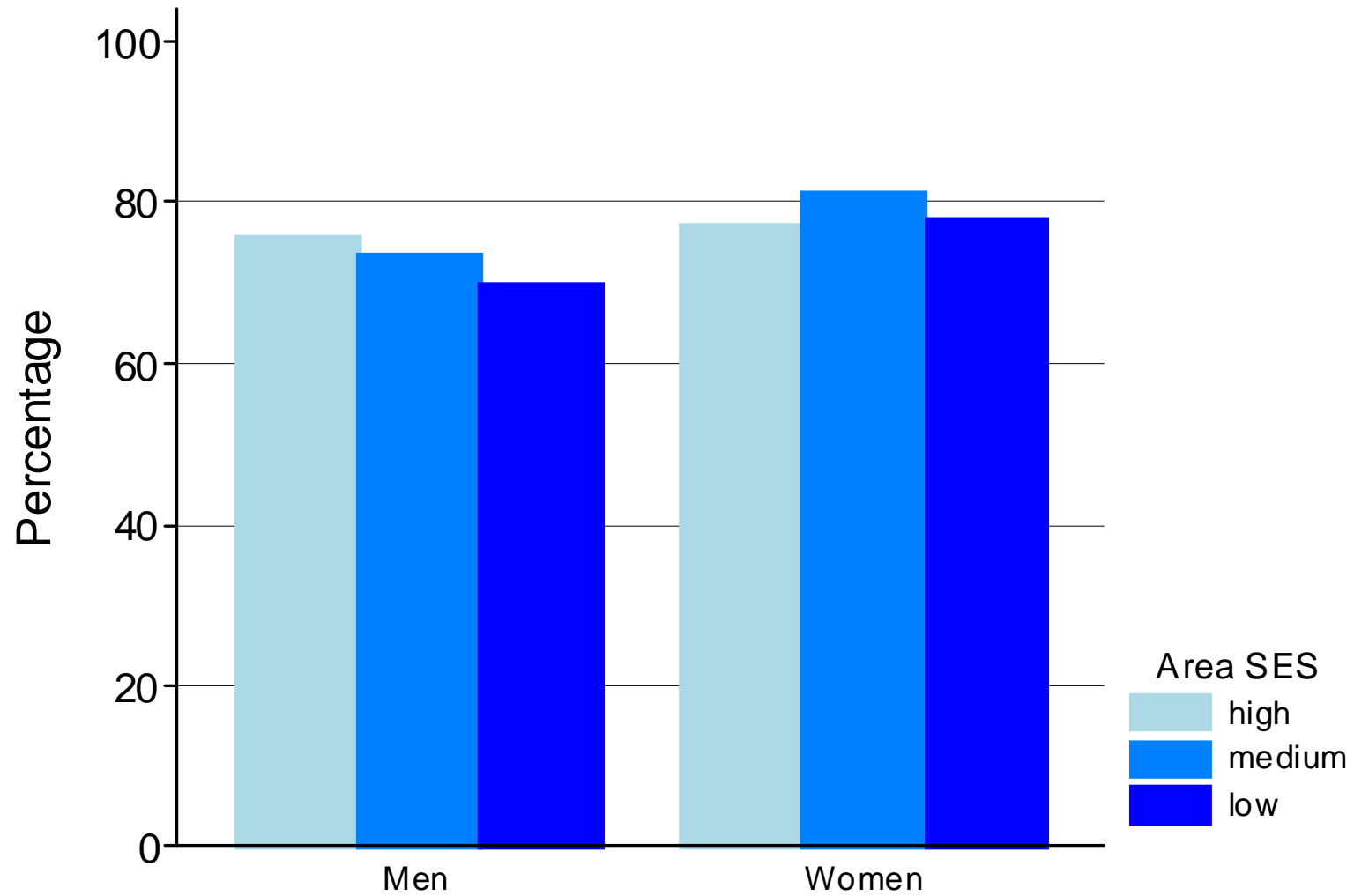
* Unstructured recreation features include parks, recreation reserves etc.

* Structured recreation features include squash courts, swimming pools, tennis courts etc.

Walking behaviour and walkability

Lyndal Thomas

Any walking in the last week

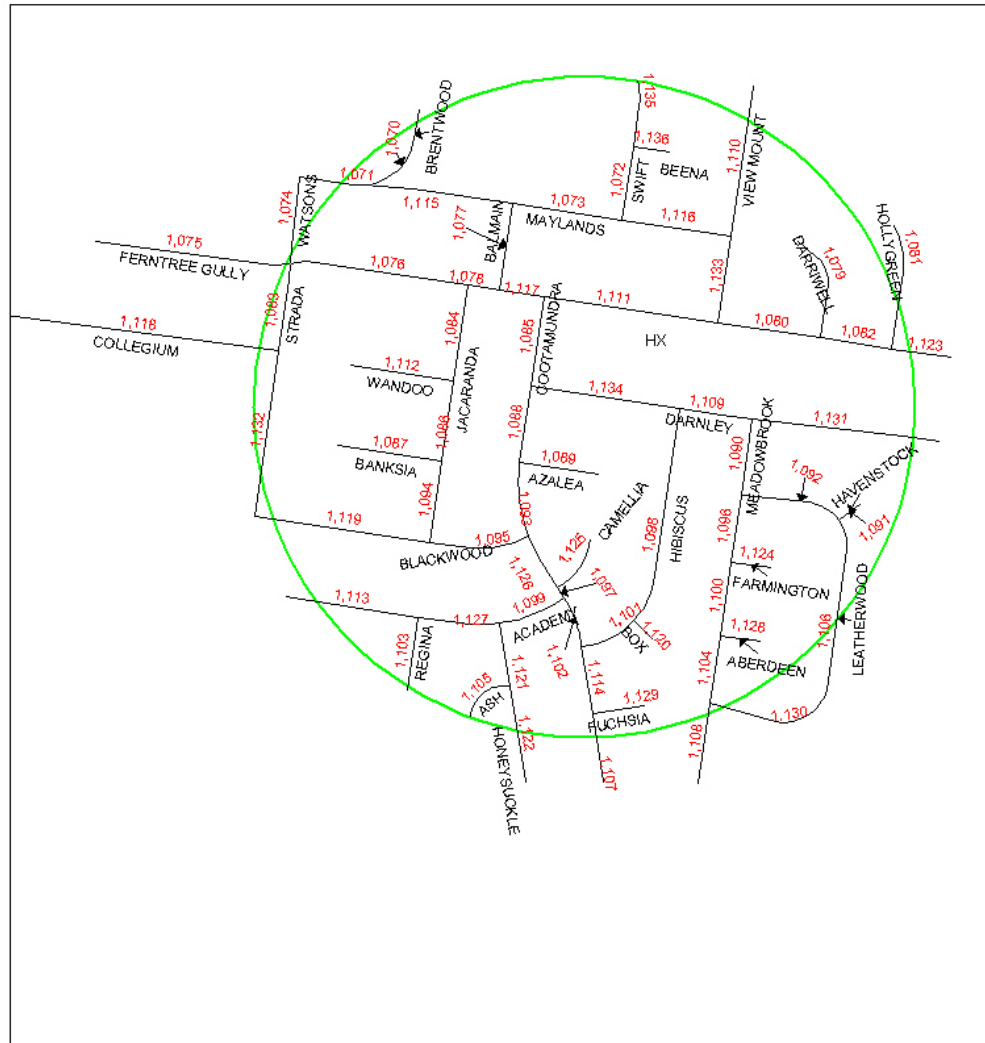







Median number of minutes spent walking in last week

		men	women
area SES	high	60	90
	medium	60	90
	low	45	75

Purpose for walking

walking purpose	men	women
for transport	22%	15%
for recreation/ exercise	49%	48%
for both transport and recreation	29%	37%

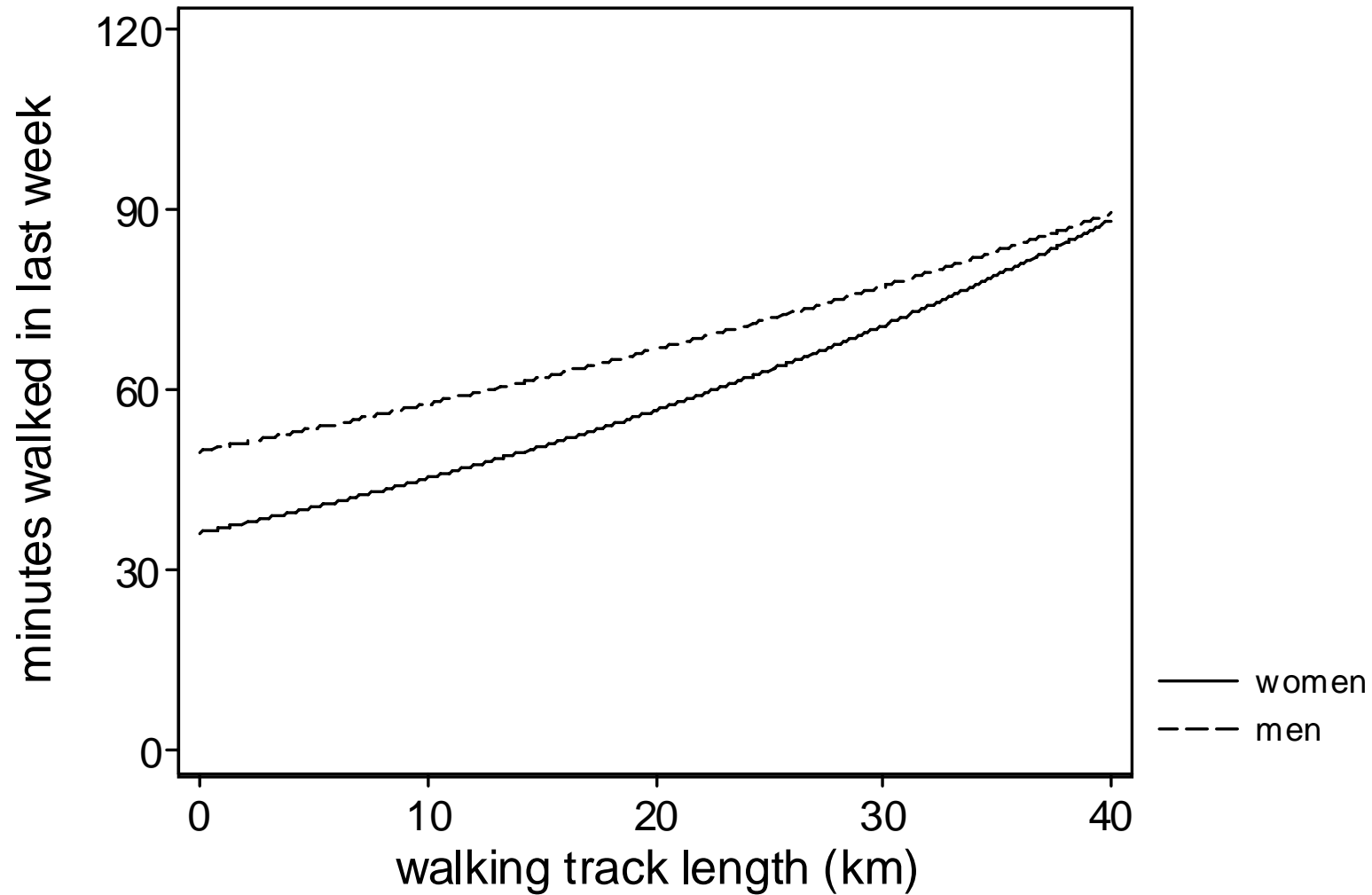


	 Buffer Zone  Street  Street Name  Segment Number	Based on Census Collection Districts and VicMap Data. Data from CDATE 2001; VicMap VMADD_ADDRESS.TAB; VicMap TR_ROAD.tab Produced by A Lovell. Produced for ARCSHS
	Radius: 400 meters Scale: 1cm = 60 meters	

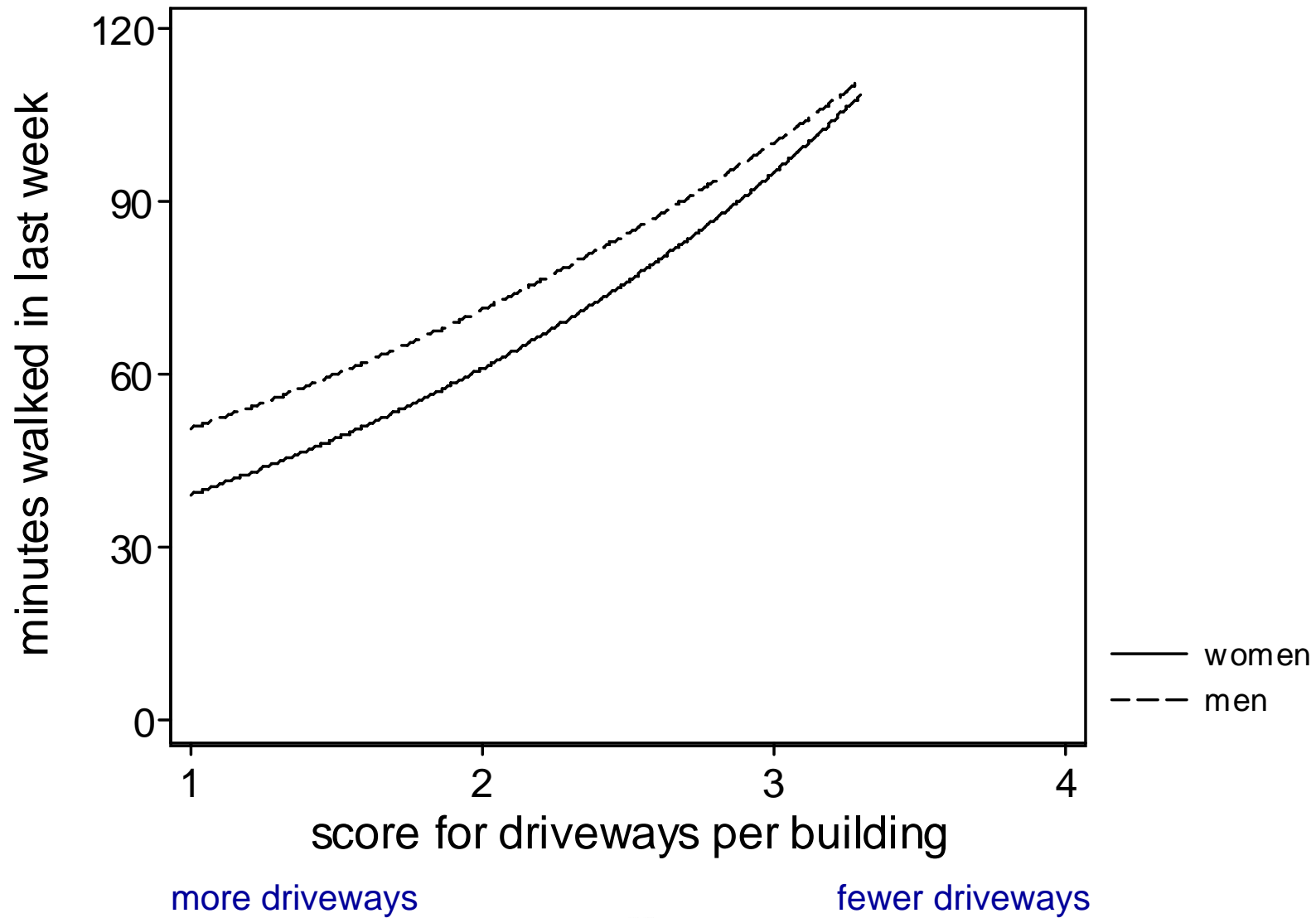
Factors that might affect walkability

- **Functionality**
 - eg Path type, length, parking restrictions
- **Safety**
 - eg traffic control devices, crossings
- **Aesthetics**
 - eg garden maintenance, types of views
- **Destinations**
 - eg schools, shops, parks, transport, entertainment

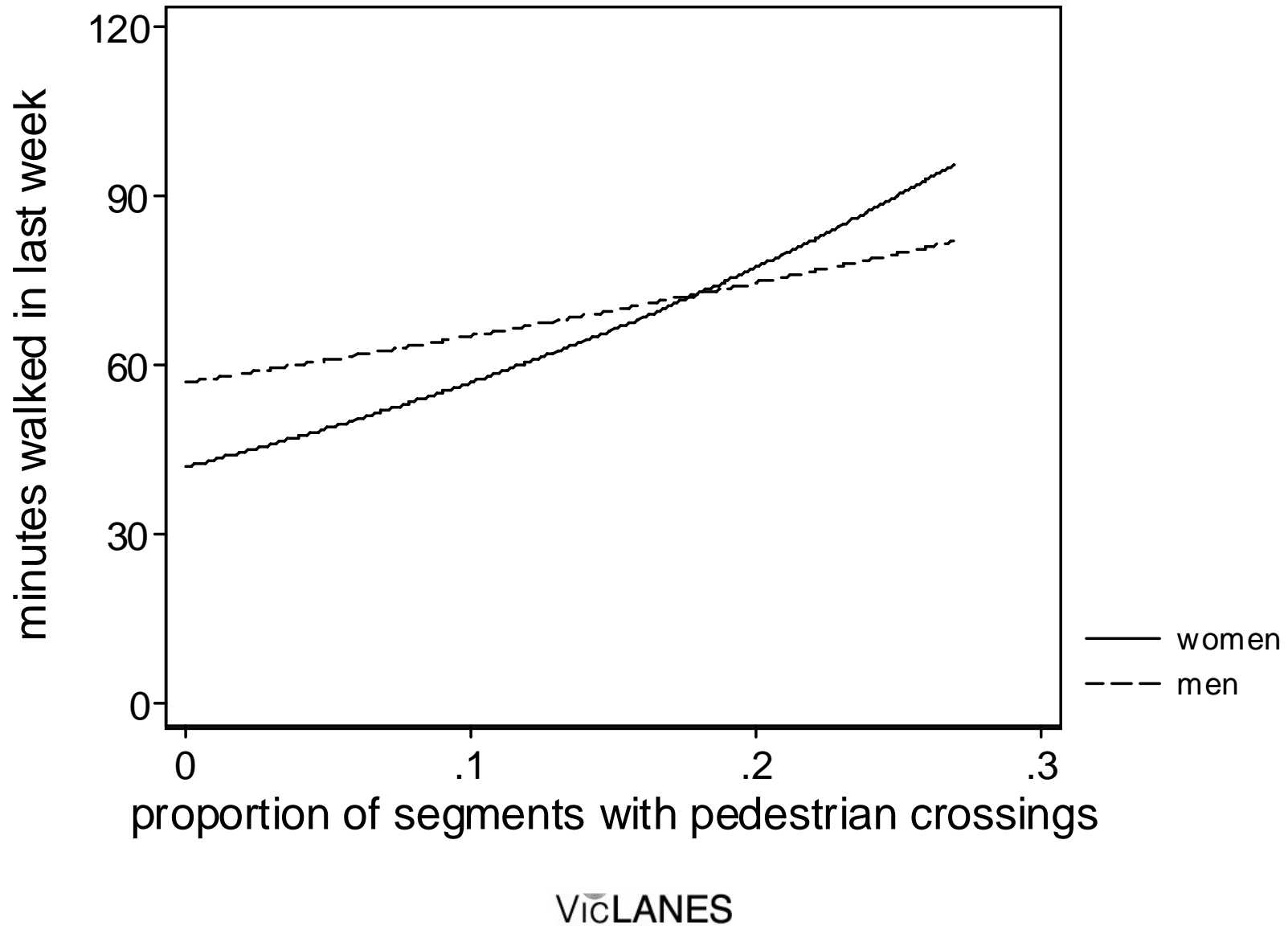
Functional – length of walking tracks



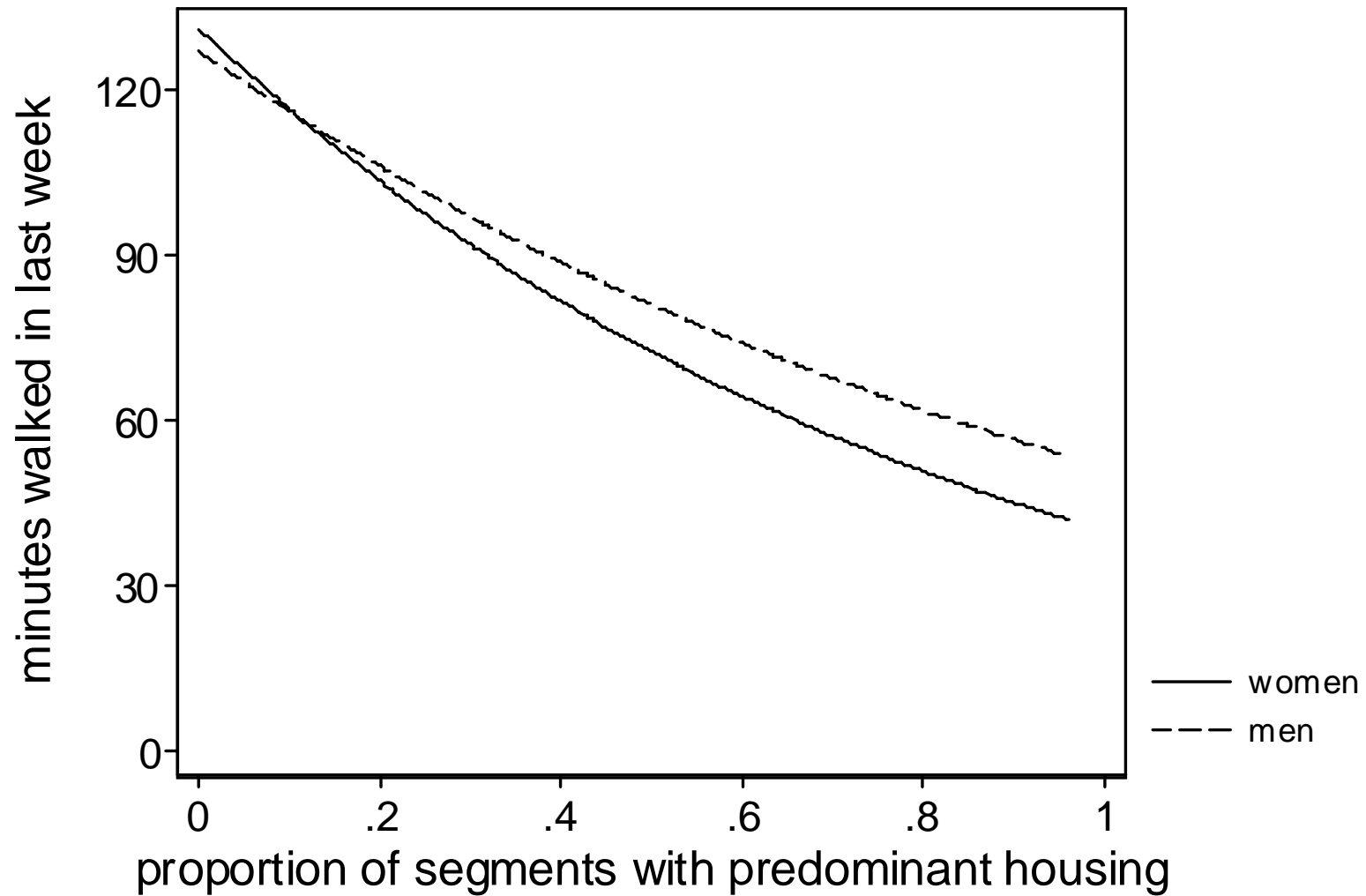
Safety – no. of driveways



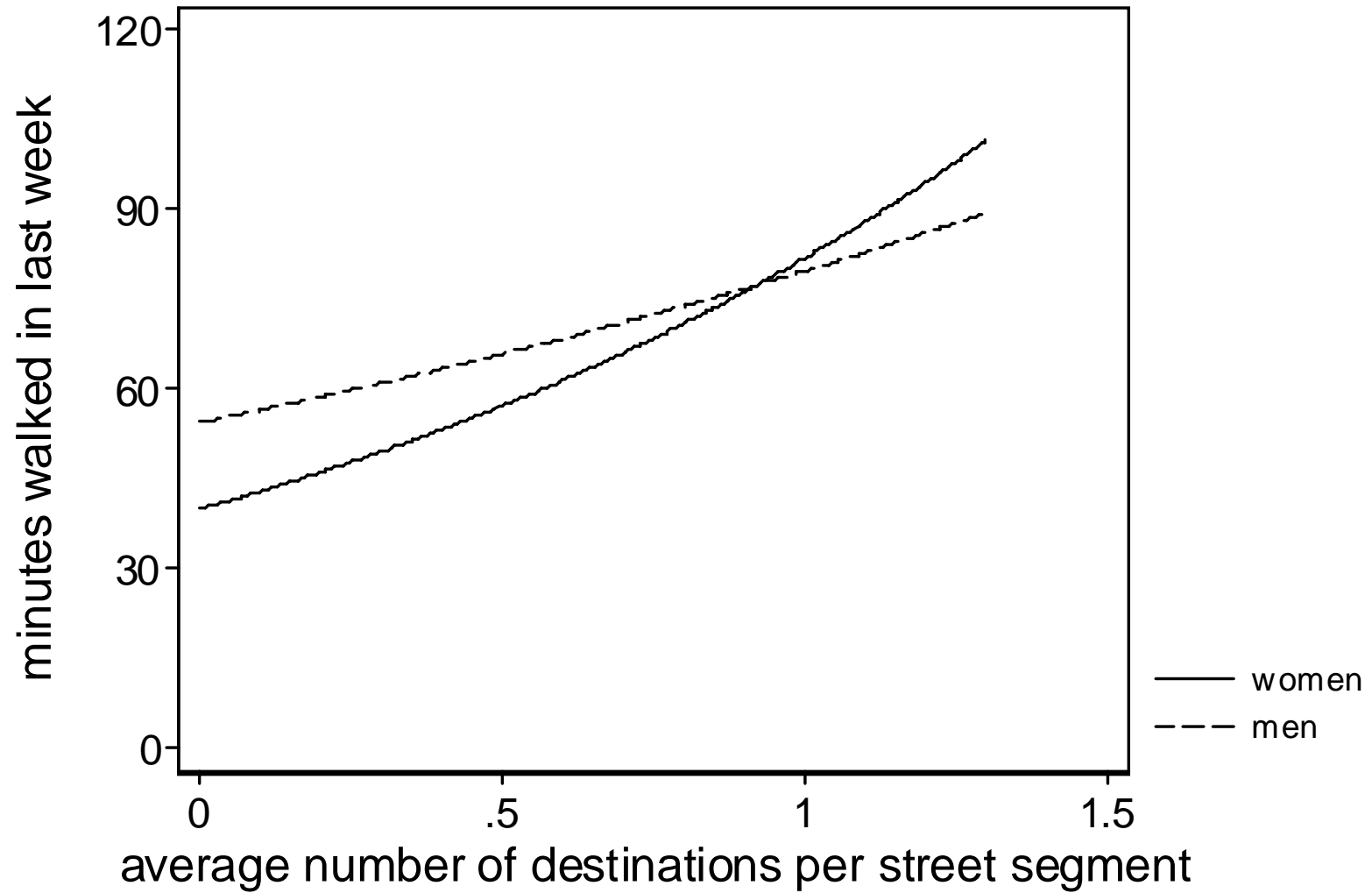
Safety – no. of crossings



Predominant housing



Destinations



Main messages for local government/planning

- recommend increase walking tracks
- increase pedestrian crossings
- need to ensure there is a mix of land use
 - areas where predominant buildings are houses do not promote walking
 - presence of any destinations will promote walking