



COMMUNITY USE AND APPRECIATION OF DANDENONG CREEK PARKLANDS

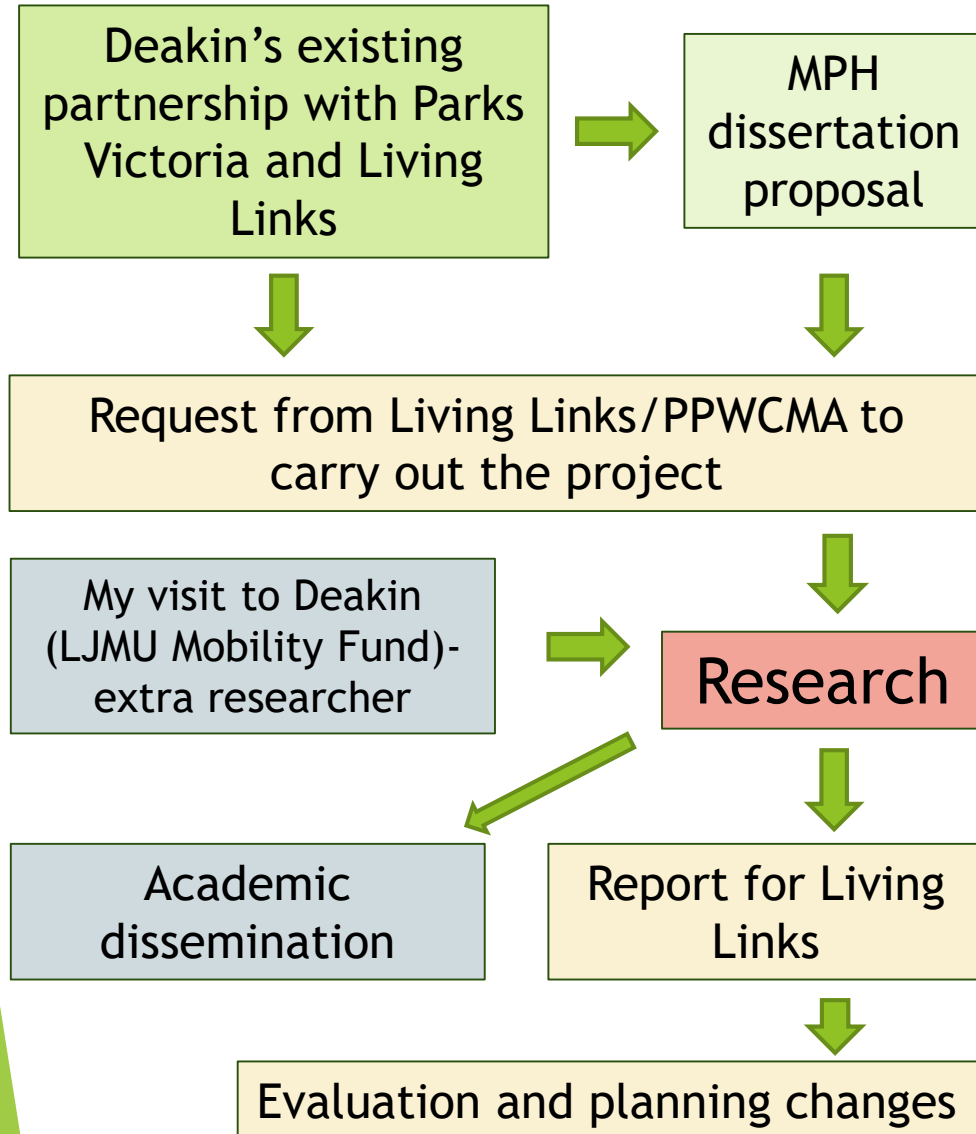
Working on different perspectives: community organisation and
academia

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The project



Health Nature and Sustainability Research Group, Deakin

- ▶ Focus: health implications of the links between humans and the natural environment.

Principles

- ▶ Strategic partnership
- ▶ Research
- ▶ Education (university and wider community level)

Living Links and Port Phillip & Westernport CMA

- ▶ Goals
 - ▶ A web of green
 - ▶ People are connected to nature
 - ▶ Urban nature is valued and resourced

PPWCMA: Coordinates Living Links

Research questions and objectives

Community organisation and academic focus

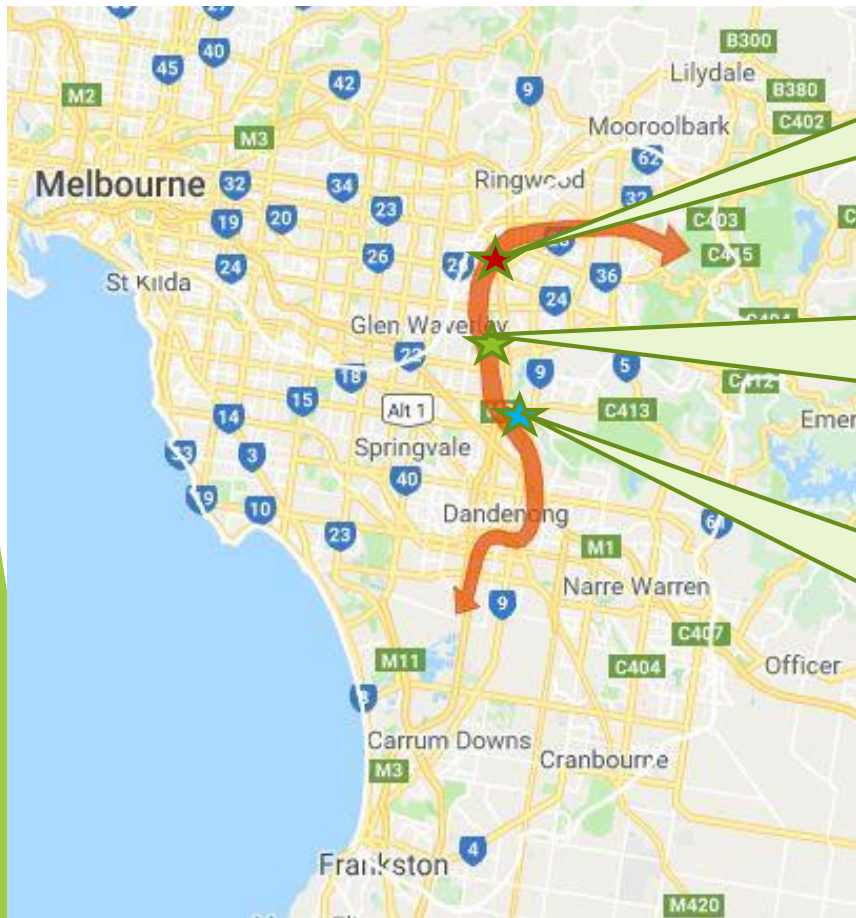
Living Links main interests

- ▶ Park visit frequency
- ▶ Travel mode and duration to park
- ▶ Use of another park more (reason)
- ▶ Companion in the park
- ▶ Activity in the park
- ▶ Overall impression of parks
- ▶ Reasons that would encourage more frequent and/or longer visits

Original research questions/academic focus

- ▶ What are the factors that influence the community use of the Dandenong creek catchment area?
 - ▶ Predictors of visit frequency and length
 - ▶ Park characteristics', activities' and companion's effect on park choice.
 - ▶ Factors that would encourage more frequent and longer visits to parks.
- ▶ What are the barriers to community use and appreciation of Dandenong creek catchment area

Research location: the Dandenong Creek catchment area- green corridor



KOOMBA PARK

- Bad reputation-crime
- Few visitors
- Few facilities: sport, walking-cycling trails
- Information about barriers

JELLS PARK

- Approx. 900.000 visitors/year
- Very good reputation
- Varied and numerous facilities: sport, trails, BBQ/picnic, playground
- Used for various activities
- Information re community use- park quality relationship

TIRHATUAN PARK

- Habitat for the native flora and fauna
- Used for a few activities: BBQ, walking/running, playground
- The only enclosed, spacious dog park in the area

Methods

- ▶ Cross sectional design: data collected in three parks along the Dandenong Creek Corridor (2 occasions/park)

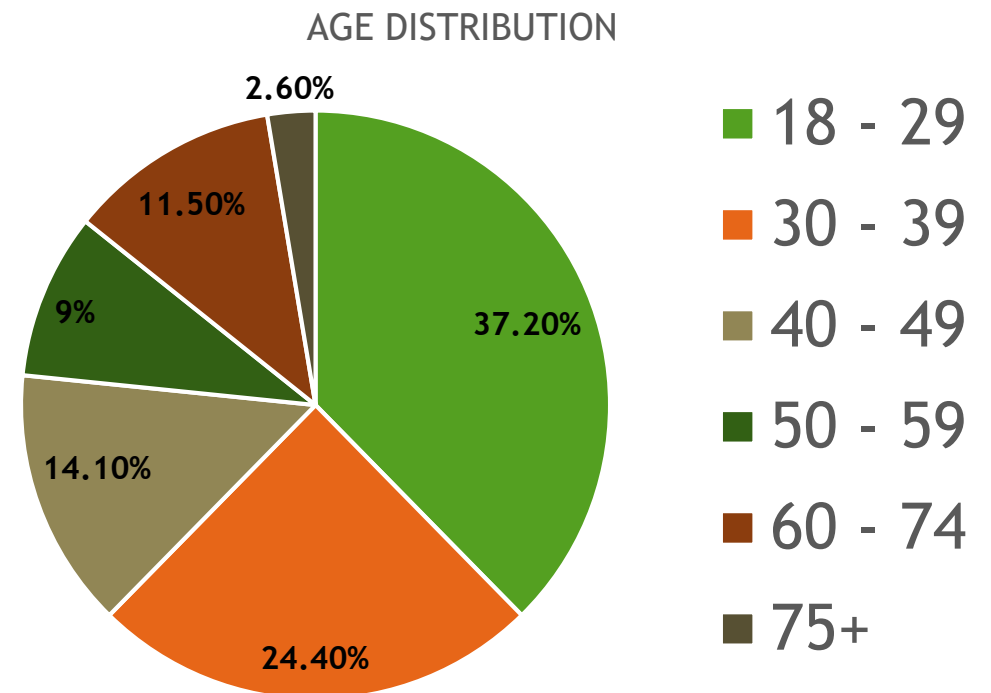
Survey co-developed by HNSRG and Living Links (multiple choice and open ended questions) focusing on:

- ▶ Frequency of park visit and duration, activities, companion
- ▶ Travel mode and time
- ▶ Satisfaction with features and facilities
- ▶ Community involvement
- ▶ Motivators and barriers of park use
- ▶ Notes from data collection
- ▶ Analysis:
 - ▶ Quantitative: SPSS25
 - ▶ Qualitative: thematical approach

- ▶ 77 participants from three parks

Koomba Park	13
Jells park	48
Tirhatuan Park	16

- ▶ 38 males, 38 females, 1 other
- ▶ Median age group: 30-39 years old



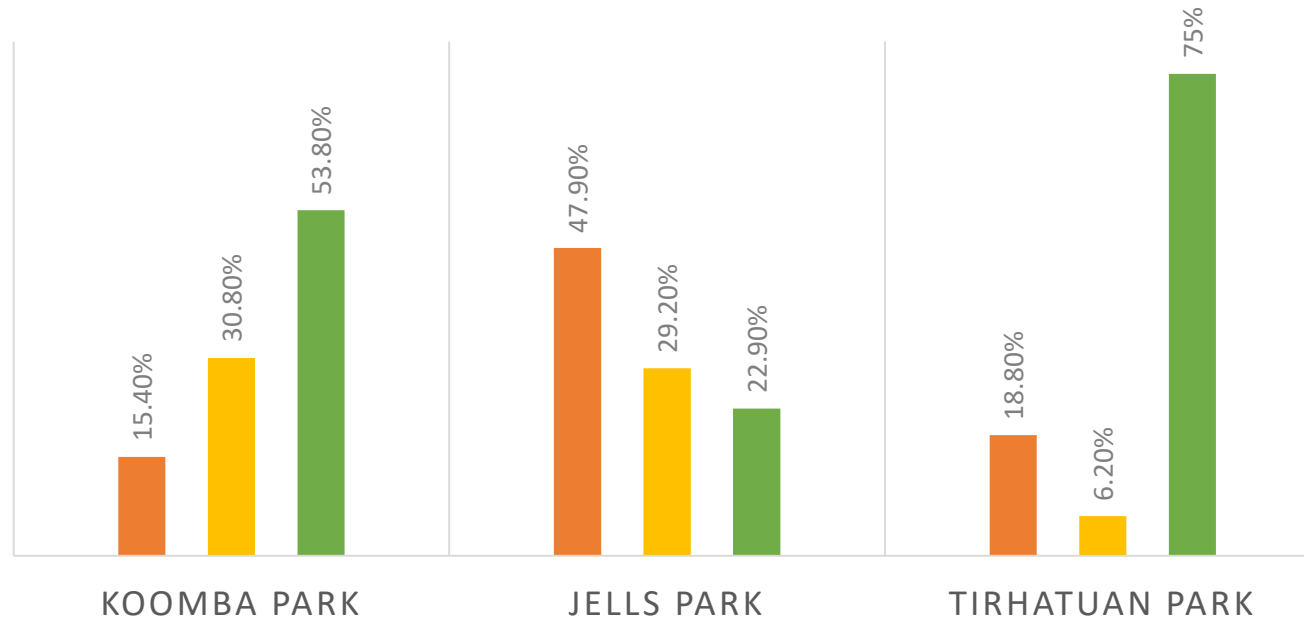
Results - Frequency of park visits

Living Links focus:

- Significant difference between parks and visit frequency profiles ($p=0.002$)
 - Koomba and Tirhatuan Parks: more regular visits
 - Jells Park: more occasional visits

VISIT FREQUENCY IN EACH PARKS

■ Less than once a month ■ Less than once a week but more than once a month ■ At least once a week



Academic focus

- No variables were found to predict the frequency of visits.
 - No association with overall impression and satisfaction
 - No association with accessibility and facilities

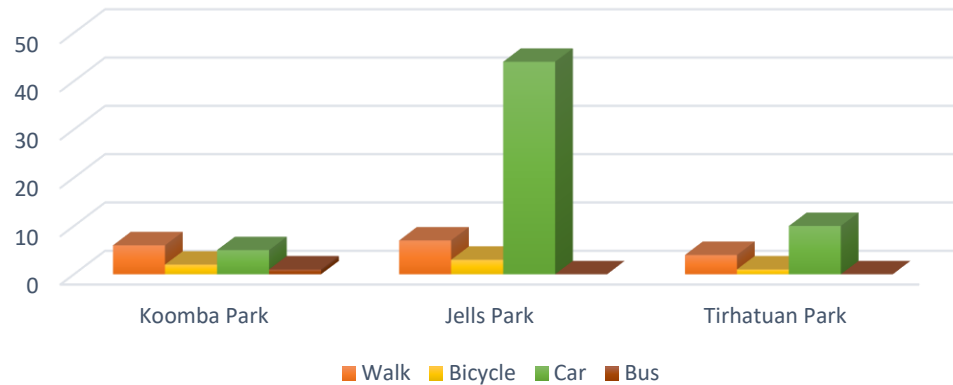
Associations:

- Visiting the park alone ($r=0.352$; $p=0.002$)
- Visiting the park with adults ($r=-0.267$; $p=0.020$)

Travel to parks

Travel mode

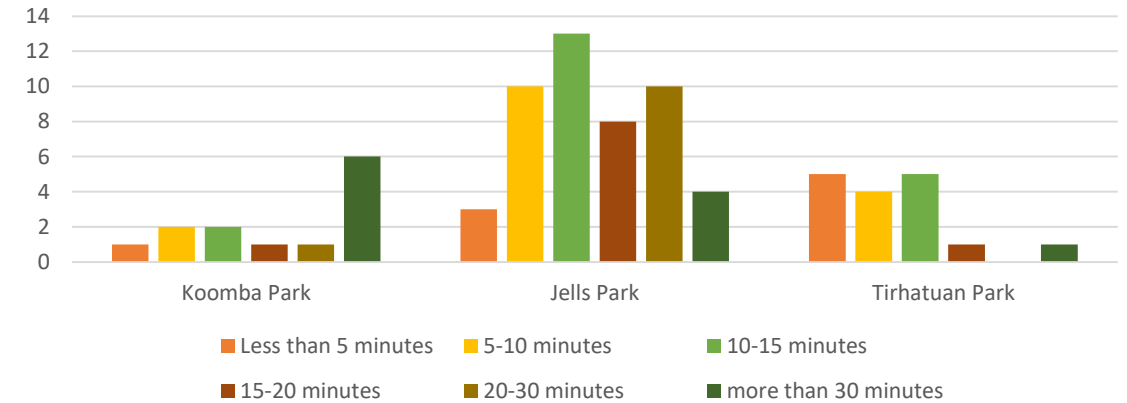
Mode of transport to each park



Significant association between parks and car use
(Fisher's Exact: 17.516; $p=0.000$)

Travel time

Travel time to each parks






Significant association between parks and travel time
(Fisher Exact: 18.900; $p=0.018$)

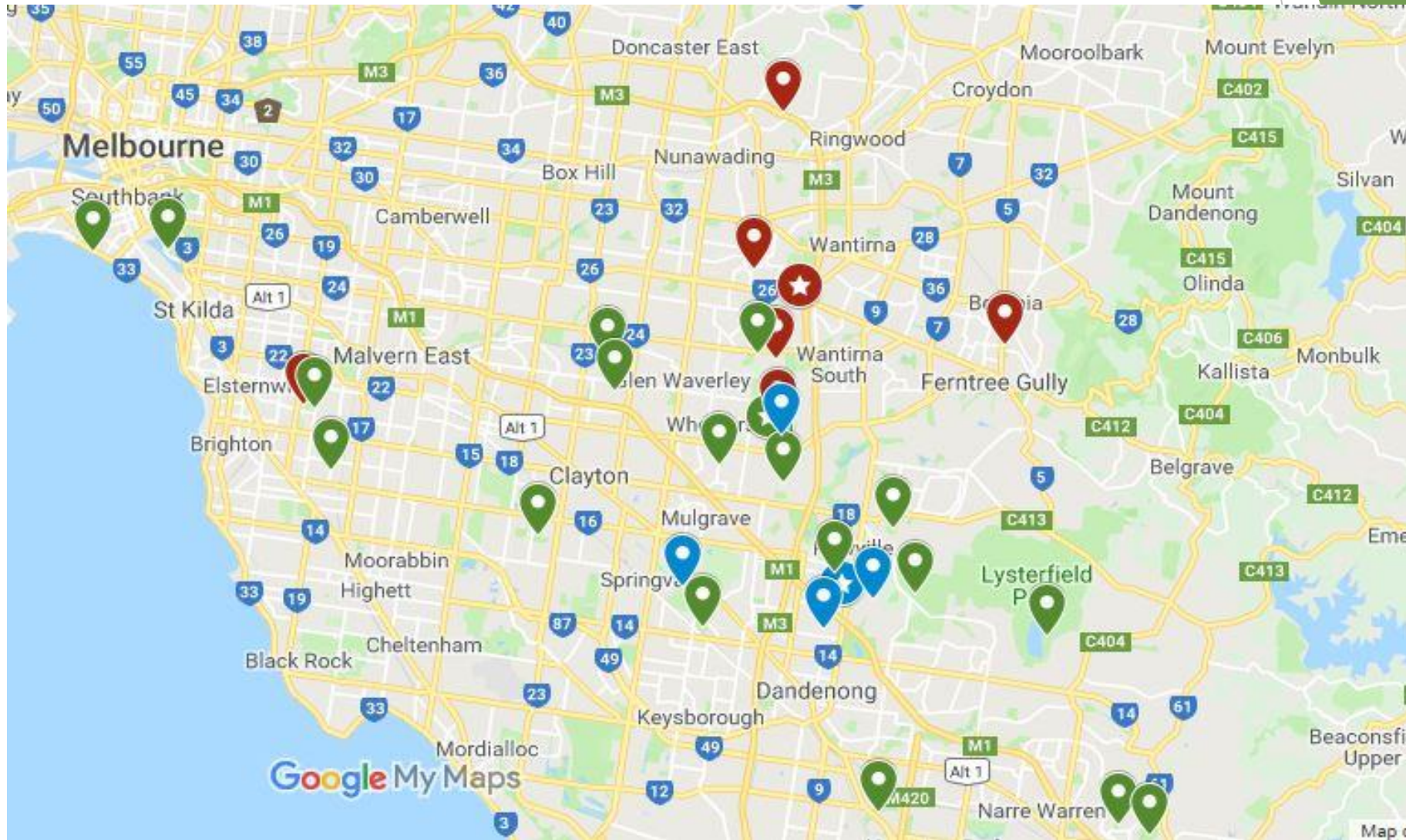
Academic focus

- No association between travel time/mode and park activity
- No association between travel time/mode and visiting frequency

- Sample characteristics?
- Park choice → travel decision?
- Free time → park visit?

Other parks visited - data for Living Links

-  - Parks visited by Koomba Park participants
-  - Parks visited by Jells Park participants
-  - Parks visited by Tirhatuan Park participants



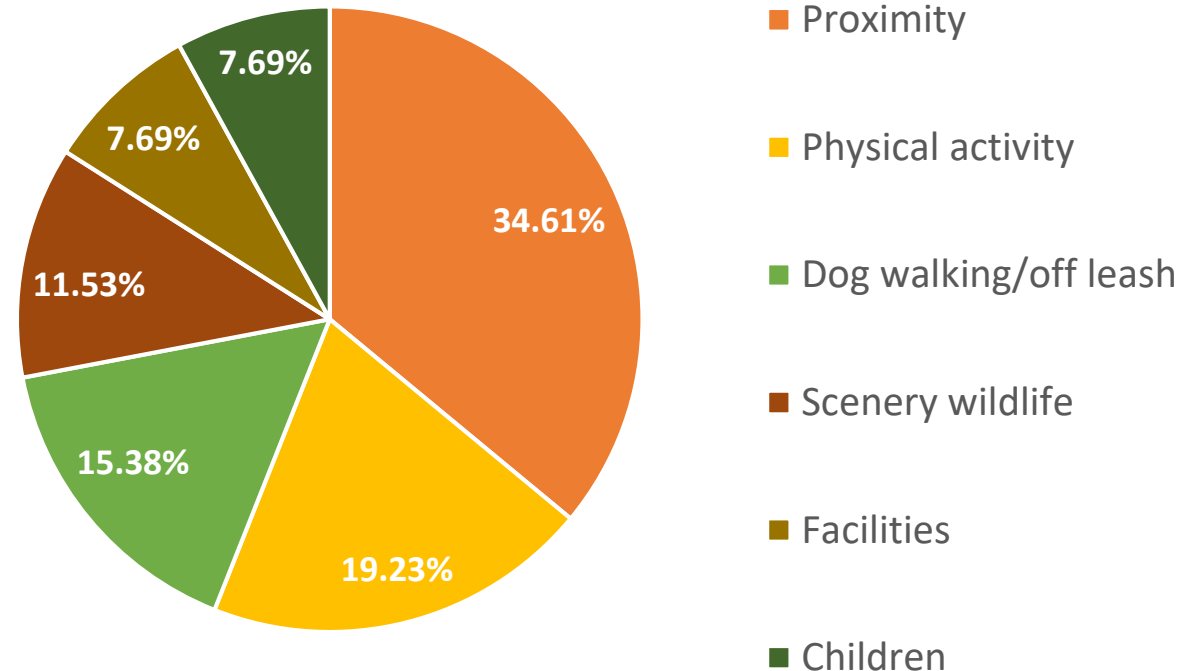
Other parks visited- exploring the reasons

REASONS FOR PEOPLE VISITING OTHER PARKS

- ▶ Based on qualitative data
- ▶ Only a segment of the participants answered this question
- ▶ Proximity - primary reason



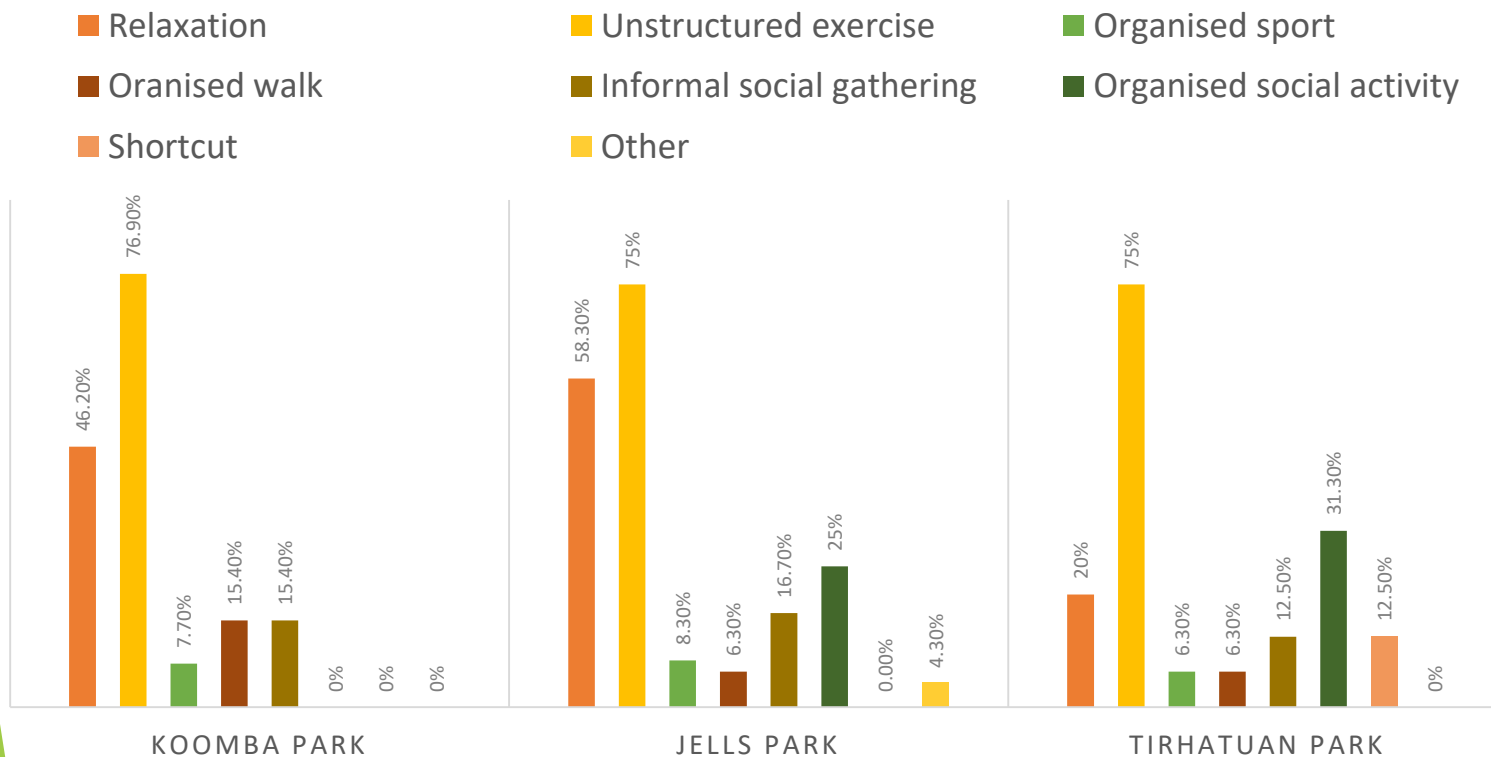
- ▶ No relationship between travel time and park visit frequency in the quantitative data
 - ▶ Data collection site visit might have been occasional
 - ▶ Further research on most frequently visited parks would be beneficial



Activity types

- ▶ No statistical difference between parks in the activities that are carried out by participants

ACTIVITIES IN EACH PARK

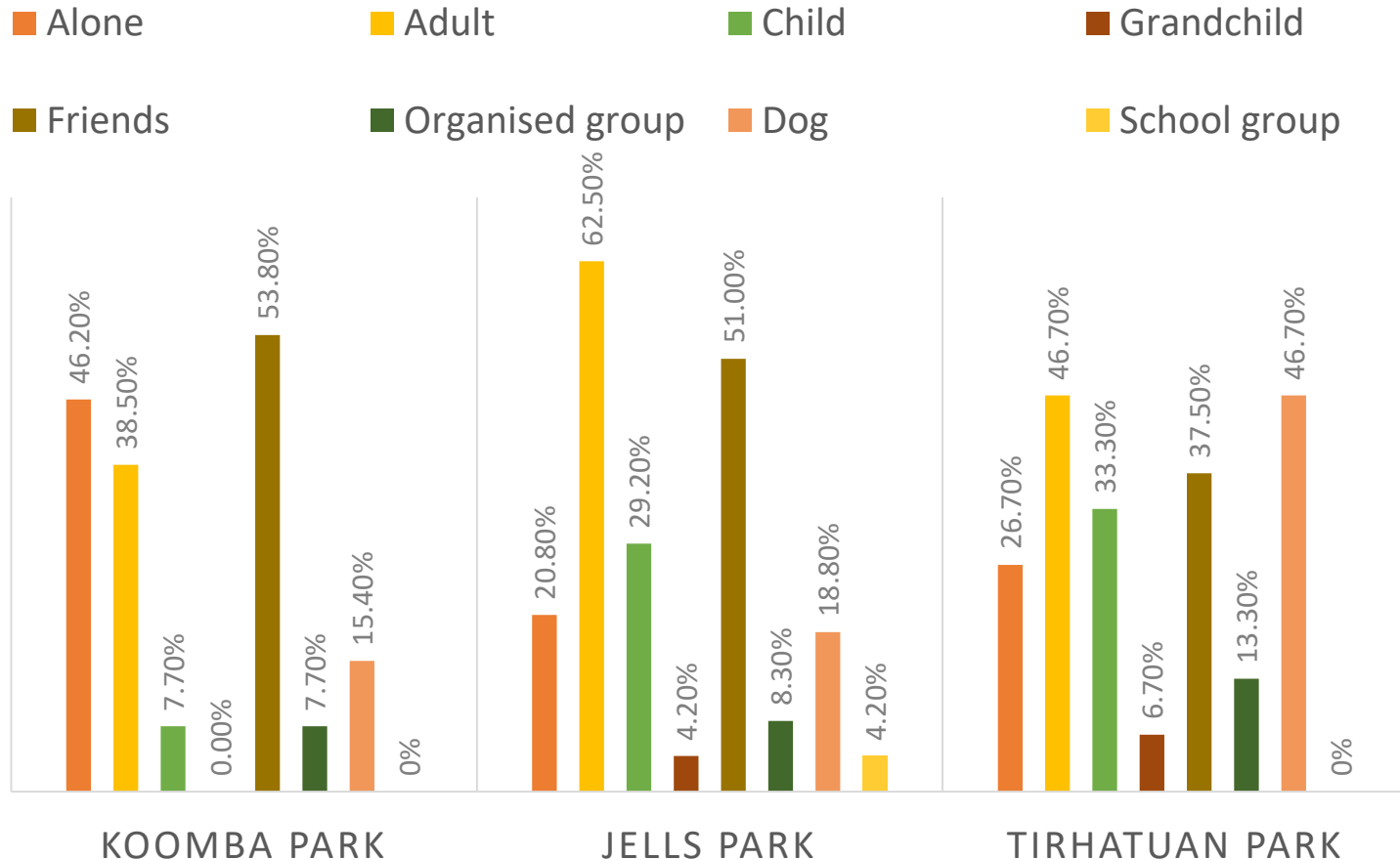


Academic focus

- ▶ Recoded variables by activity types:
 - ▶ Physical activity (PA)
 - ▶ Social activity
 - ▶ Relaxation
- ▶ Only associations with companion

Companion while visiting parks

WHO COMES WITH YOU NORMALLY?
BREAKDOWN IN PARKS (%)

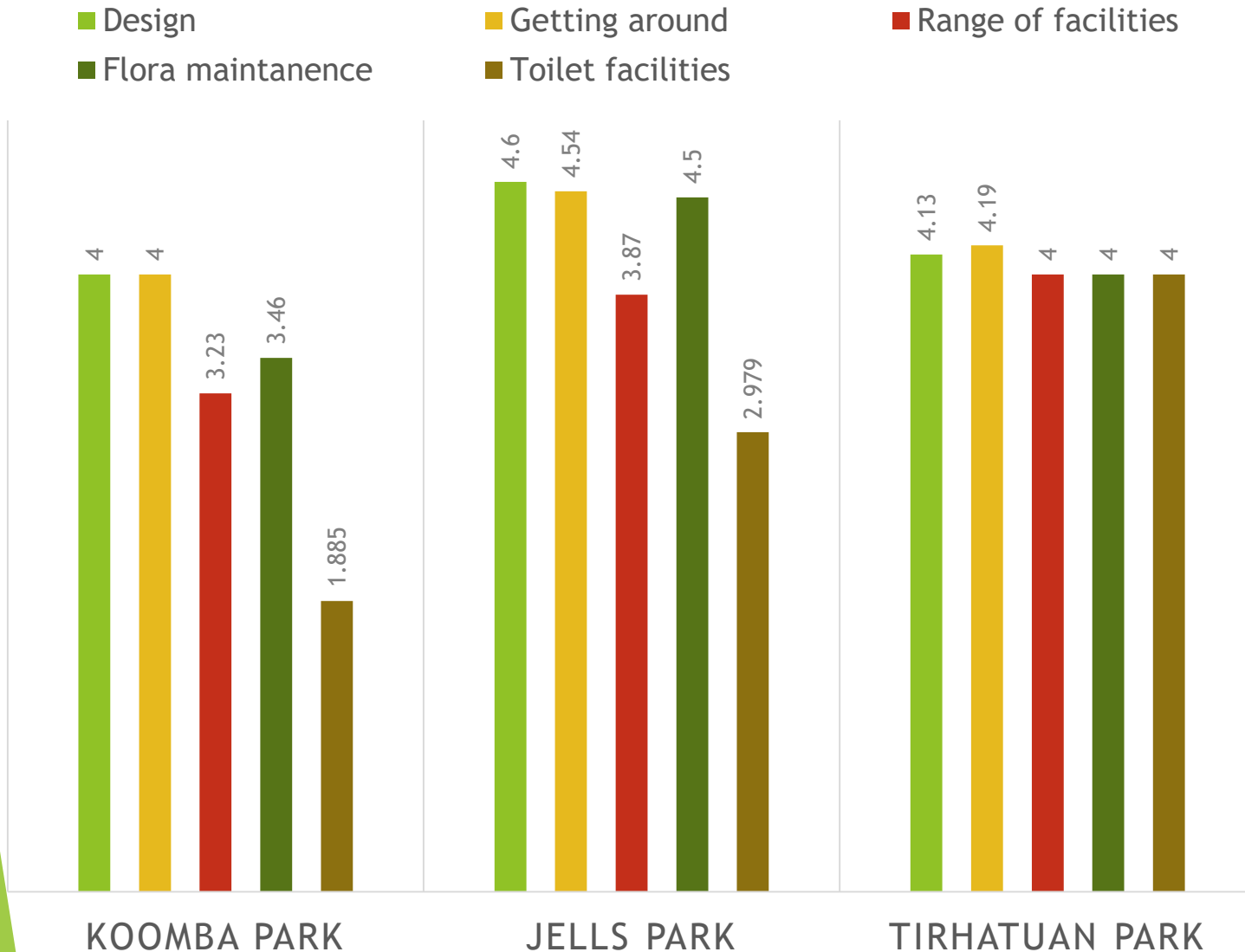


Academic focus

Relationship between companion and activity:

- Visiting with adult companion and relaxation ($\Phi=0.241$, $p=0.041$)
- Social activity was associated with visiting with
 - child ($r=0.289$; $p=0.011$)
 - grandchild ($r=0.320$; $p=0.005$)
 - friends ($r=0.423$; $p=0.000$)
- Physical activity was associated with visiting with
 - child ($r=0.241$; $p=0.036$)
 - dog ($r=0.295$; $p=0.010$)

Overall impressions and satisfaction



- ▶ Significant differences between parks in the satisfaction questions
- ▶ Overall satisfaction with Jells Park was the highest and Koomba Park the lowest.

Academic focus

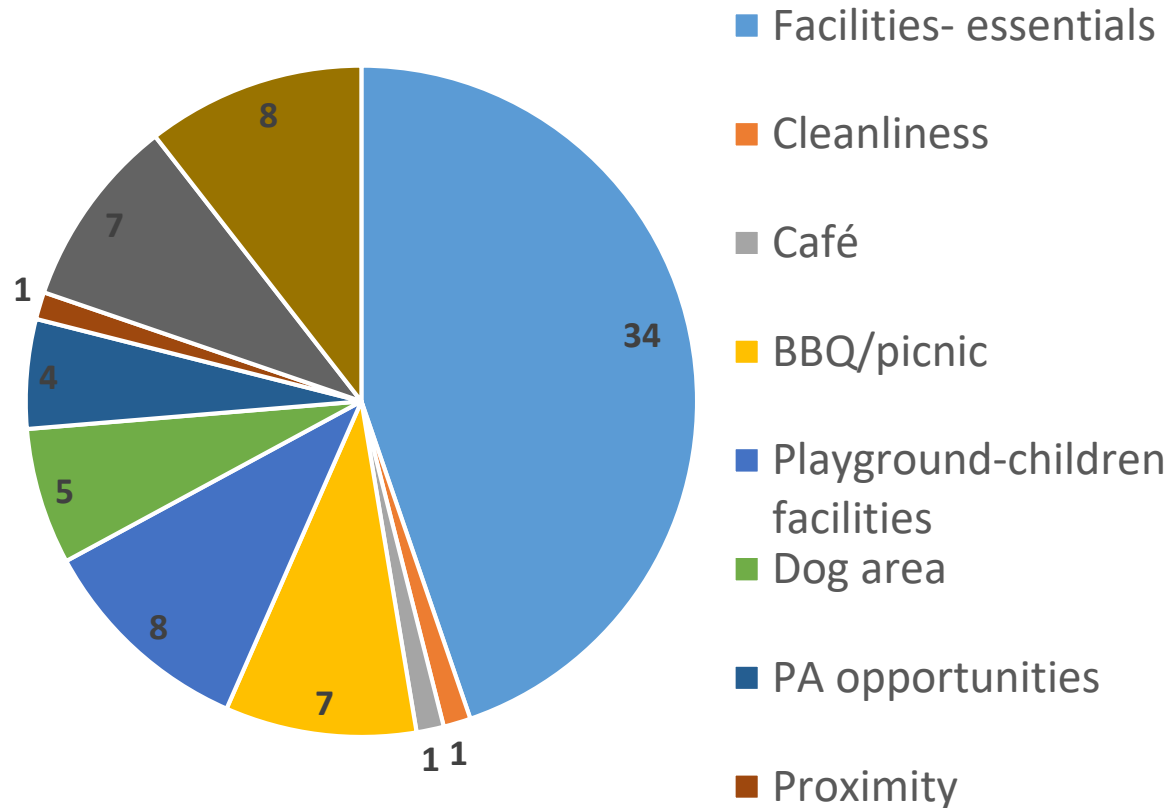
- ▶ Overall impression and overall satisfaction was not associated with any other variables
- ▶ Satisfaction with the design of the park - social activity ($r=0.253$; $p=0.026$)

What would encourage people to use the space more often?

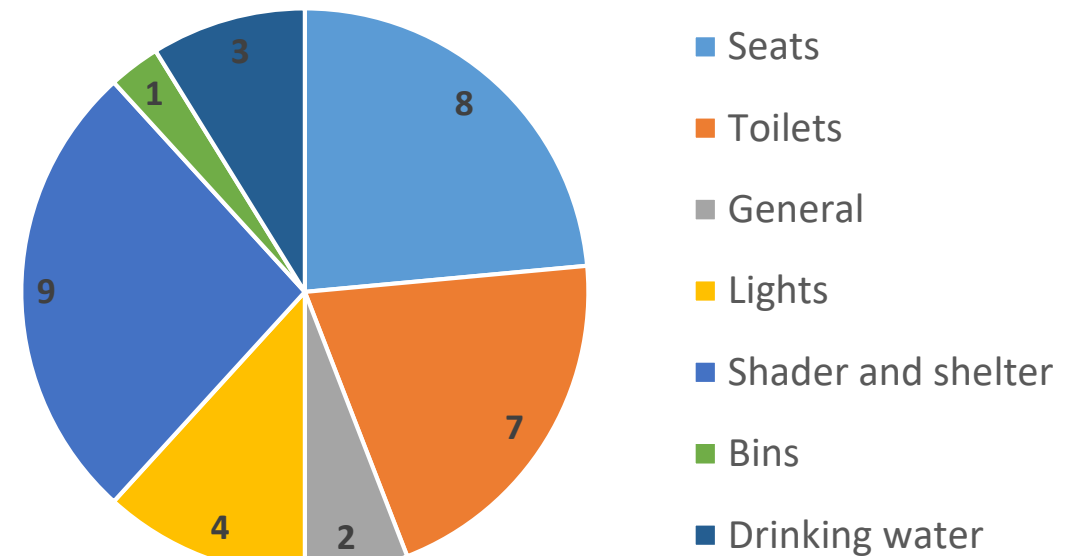
Open ended questions - thematical analysis

- Mostly facilities (and associated activity) related
- Few replies regarding programmes

What encourages people to use the space more often



What essential facilities encourage people to use the space more often

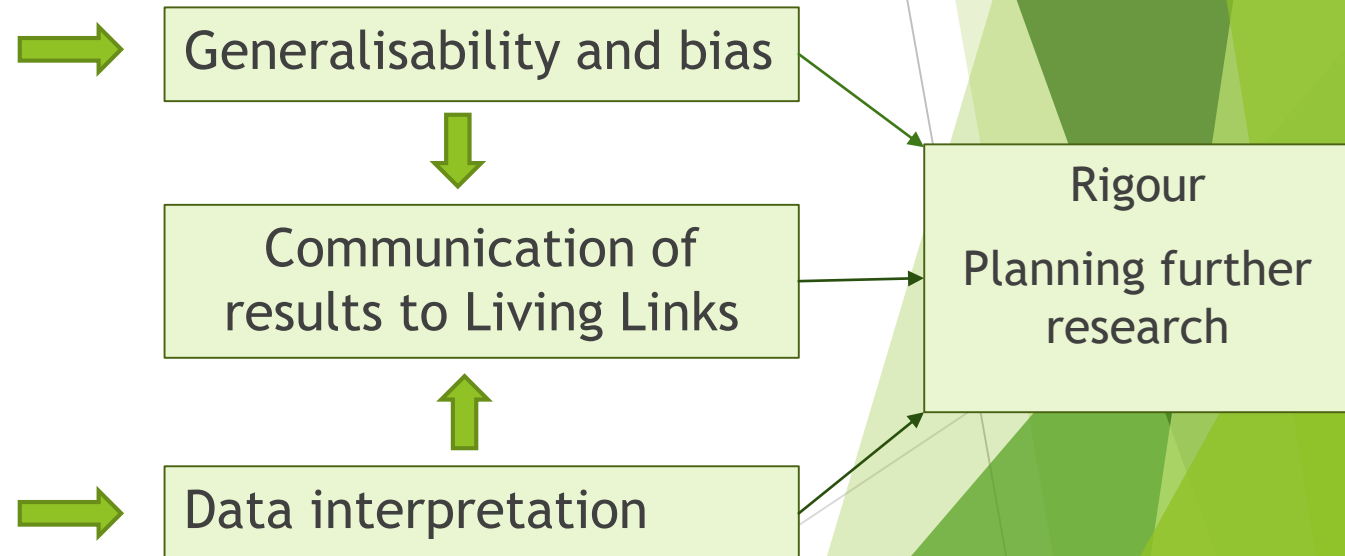


Research notes

Information for Living Links

- ▶ Observational notes
 - ▶ Visitors
 - ▶ Activities
 - ▶ Groups underrepresented in the sample
- ▶ Informal conversations with participants
 - ▶ Additional information: attitudes, things to improve
- ▶ Researchers' personal experience
 - ▶ Facilities
 - ▶ Accessibility: e.g. lack of sufficient public transport option

Academic interest



Conclusions

Results

- ▶ Significant differences between parks in visitor numbers, satisfaction and travel accessibility
 - ▶ In line with previous statistics and park reputation
- ▶ No conclusive result of predictors of park visit frequency
- ▶ Satisfaction with parks and motivation to use them more: primarily related to satisfaction with facilities and design
- ▶ Activities and related facilities were important reasons for park choice
- ▶ Few participants reported barriers
- ▶ Limitations:
 - ▶ Sample characteristics-short data collection period
 - ▶ Survey- revision needed

Research process

Different focus from community organisational and academic perspective

Living Links

- ▶ Summaries and statistics → base for infrastructural and programme development
- ▶ Knowledge of parks and their history- evaluation

Academia

- ▶ Focus on more complex relationship between factors
 - ▶ Relationship between green space characteristics and use (frequency, activities, visitor demographics)
 - ▶ Facilitators and barriers of park use



Resulted in further questions worth exploring

Contacts

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Thank you.

Links

- ▶ [Health, Nature and Sustainability Research Group, Deakin University, Australia](#)
 - ▶ [Healthy Parks, Healthy People \(2015\)](#)
- ▶ [Living Links](#)
- ▶ [Port Phillip & Westernport Catchment Management Authority](#)

