Recording and EValuating Activity in a Modified Park (REVAMP) Study

Submission date	Recruitment status No longer recruiting	Prospectively registered		
12/12/2013		[X] Protocol		
Registration date	Overall study status Completed	Statistical analysis plan		
10/01/2014		[X] Results		
Last Edited	Condition category	[] Individual participant data		
01/12/2020	Other			

Plain English summary of protocol

Background and study aims

Modifying the built environment by improving parks is potentially a long term and viable way to increase physical activity among people. In spite of considerable investment in parks and park renovations, little research evidence exists internationally examining whether improving amenities increases park use and park-based physical activity. This study is a natural experiment that aims to find out whether park improvement increases overall park usage, park-based physical activity and active travel to and from the park in the intervention compared with the control (comparator) park over a two-year period and to identify which specific aspects of the park refurbishment attracts park visitors and encourages park users to be more active.

Who can participate?

Adult residents aged over 18 years living within 5 km of Brimbank and Westerfolds parks in Melbourne, Victoria, Australia; families with children aged 2-15 years attending pre-school, primary school or secondary schools within 3 km of Brimbank and Westerfolds parks; and users of Brimbank and Westerfolds parks may participate in this study.

What does the study involve?

Local residents who participate would need to complete a survey in April-May 2015. Park users who participate would need to complete a park intercept survey in April-May 2014 and/or April-May 2015. The intervention park (Brimbank Park) is a large regional park (329 hectares) located in a low socio-economic status (SES) area north-east of Melbourne, Australia. The control park (Westerfolds Park) is a regional park (120 hectares) located in a high SES area in the eastern suburbs of Melbourne. Multiple methodologies to find out the impact of the park renovation are being employed including: surveys of local residents living nearby the two parks, direct observations of park users, intercept surveys with park users, and electronic monitoring of path usage and car traffic within the parks. Initial measures were conducted in April-May 2013.

What are the possible benefits and risks of participating? There are no perceived risks to participants.

Where is the study run from?
Brimbank Park and Westerfolds park, both in Melbourne, Australia.

When is study starting and how long is it expected to run for? The park renovation is scheduled for September 2013-February 2014 and follow-up measures are planned for April-May 2014 and April-May 2015.

Who is funding the study? This study is funded by the Australian Research Council, Australia.

Who is the main contact?
Dr Jenny Veitch
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Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number N/A

Study information

Scientific Title

A natural experiment examining the impact of park refurbishment in one park on park use and park-based physical activity among park users and local residents compared with a control park

Acronym

REVAMP

Study objectives

REVAMP (Recording and EValuating Activity in a Modified Park) is a natural experiment examining the impact of the refurbishment of a large regional park (Brimbank Park) located in an area of low socio-economic status (SES) of Melbourne, Victoria, Australia. Specifically the three main research objectives are to:

1. Examine whether park improvement increases overall park usage in the intervention park

compared with the control park.

- 2. Examine whether park improvement increases the number of local residents engaging in park-based physical activity and active travel to and from the park in the intervention compared with the control park.
- 3. Identify the specific aspects of the park refurbishment that attract visitors to the park and encourage park users to be more active.

Hypotheses:

Over the course of the intervention (park refurbishment) and follow up, in comparison with the control group:

- 1. Park usage in the intervention park will increase.
- 2. Parks users at the intervention park will engage in increased park-based physical activity and active travel to and from the park.
- 3. Aspects of the park refurbishment that attract visitors to the intervention park and encourage them to be more active will be clearly defined.

Ethics approval required

Old ethics approval format

Ethics approval(s)

- 1. Deakin University Human Research Ethics Committee (HEAG-H 46_2012)
- 2. Victorian Department of Education and Early Childhood Development (2012_001790)
- 3. The Catholic Education Office (GE11/0009 1850)

Study design

Repeated cross-sectional study conducted in two settings

Primary study design

Observational

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Health promotion for adults and children focusing on promoting physical activity in parks and active travel to parks and reducing sedentary behaviour.

Interventions

The refurbishment of Brimbank Park commenced in October 2013 and is expected to be complete by February 2014. It will involve the installation of an innovative play space (>\$1 million) suitable for children of all ages and abilities. This circumstance provided a rare opportunity to undertake a natural experiment, to observe changes that occur in a population before and after the park environment has been altered. Whilst the redevelopment will focus on the installation of a play space for children it is important to assess the broader impact of the refurbishment on parents, families, adults and older adults.

The control park is Westerfolds Park.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Data collection will occur at baseline, 12 months (3 months after intervention completed), 24 months (15 months after intervention completed). All measures will be completed at both parks and at all time points (except for the resident survey which will only be conducted at baseline and 24 months).

- 1. Park usage and park-based physical activity:
- Park usage will be assessed at the intervention and control parks via multiple methodologies:
- 1.1. Observations of park users will be conducted using the System for Observing Play and Recreation in Communities (SOPARC). This instrument is based on momentary time sampling and involves undertaking systematic observations (scans) of each participant within the park at a particular time on specified days. The observations will record the number of park users and the activity level they are engaged in.
- 1.2. Intercept surveys with park users will be conducted to examine frequency of park visitation and park-based physical activity. Face-to-face intercept interviews will be completed with English-speaking adult park users on days when observations are conducted. Adults with children will also respond to items regarding their child's park use.
- 1.3. Local resident surveys with will assess park visitation over the past 3 months and activity levels engaged in when at the park. This survey will be completed by adults and adults with children will also proxy-report items about their child's park use.
- 1.4. Electronic monitoring of path usage and car traffic will be undertaken to record the number of park users walking and cycling on specified paths and the number of cars entering the parks
- 2. Active travel to and from the park:

Active travel to and from the park will be assessed via the resident survey and park intercept survey

3. Aspects of the park refurbishment that attract visitors to the intervention park and encourage them to be more active. This will be assessed via the resident survey and park intercept survey.

Key secondary outcome(s))

Resident survey measures:

1. Sociodemographic characteristics:

Standard demographic and socio-economic information will be collected by self and proxy report. Age, sex, marital status, educational attainment, postcode, country of birth, family structure (e.g. siblings, number of people living in household), and dog ownership will be collected in the adult survey, child's age and sex will be proxy reported.

2. Physical activity:

Adults' transportation and leisure time physical activity and time spent sitting will be self-reported using validated measures. Child's time spent outdoors will be assessed using a previously validated proxy-report measure. Child's frequency of meeting physical activity and screen time recommendations will be proxy-reported using validated measures.

3. Neighbourhood social and environmental influences on park use:

A range of items examining perceptions of parks and features important for physical activity, neighbourhood safety, violence, crime, attractiveness, walkability, social norms, social trust and cohesion will be examined. These measures have been previously developed and have acceptable psychometric properties and predictive validity.

4. Biological and health-related measures:

Adults will self-report their height and weight, stress, depression and general health using validated scales

Completion date

01/12/2015

Eligibility

Key inclusion criteria

Participants will be:

- 1. Adult residents aged over 18 years living with 5 km of Brimbank and Westerfolds parks in Melbourne, Victoria, Australia
- 2. Families with children aged 2-15 years attending pre-school, primary school or secondary schools within 3 km of Brimbank and Westerfolds parks
- 3. Visitors to Brimbank and Westerfolds Parks

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

On ethical grounds there will be no exclusion criteria.

Date of first enrolment

01/04/2013

Date of final enrolment

01/12/2015

Locations

Countries of recruitment

Australia

Study participating centre Centre for Physical Activity and Nutrition Research

Burwood

Sponsor information

Organisation

Deakin University (Australia)

ROR

https://ror.org/02czsnj07

Funder(s)

Funder type

Research council

Funder Name

Australian Research Council (Australia) - Linkage Grant (LP120200396). This includes four partners: Parks Victoria, the Victorian Health Promotion Foundation (VicHealth), Brimbank City Council and City West Water.

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	04/07/2015		Yes	No
Results article	results	25/01/2018		Yes	No
Results article	results	01/05/2020	01/12/2020	Yes	No
Protocol article	protocol	13/06/2014		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes