

Design and Methods of Natural Experiments in Parks & Play Spaces

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Deborah Cohen, MD, MPH, Senior Natural Scientist, RAND Corporation

Questions and Answers

Data collection and management

1. Is the tablet connected to the computer for direct download or do you need to enter the counter data from the tablet into the computer separately?

Data are stored locally on the tablet in web browser cache, and are later uploaded to a server when the tablet has access to a wireless network. A network connection is not needed in the field, and the data entry forms do not allow real time data upload. Data can be exported from the server in a variety of formats.

2. Is the tablet-based counter app available to the public?

The counters are publically available for Android and iOS at <https://mmicdata.rand.org/parkcounter/index.html>. They are unsigned apps, so you may need to change your tablet settings to allow unsigned apps, or you may not be able to download them if you do not have access to tablet settings. Some tablets may not allow this. There currently no plans to make these apps available through the App Store or Google Play.

SOPARC

3. Is there an article(s) that have used this method and has published it in a journal?

Han B, Cohen DA, Derosé KP, Marsh T, Williamson S, Raaen L. Validation of a New Counter for Direct Observation of Physical Activity in Parks. J Phys Act Health. 2015 Jun 15. DOI:10.1123/jpah.2014-0592. <http://www.ncbi.nlm.nih.gov/pubmed/26103584>

4. How seniors are identified? How the observer can distinguish seniors from other adults? (What features are utilized for this?)

Data collectors are trained to make quick assessments of a person's age. Training involves reviewing and rating numerous pictures of people as a trainee group until sufficient agreement is achieved.

5. I used SOPARC on a project, and observers had a lot of difficulty with the ethnic designations, particularly Asian vs Hispanic participants. Any advice or suggestions?

Similar to the question above about seniors, this also gets back to training and practice. The goal is to get individual data collectors to use a standard set of guidelines to assess race/ethnicity. Practice and consistent communication between data collection staff are key to ensuring that data collectors record this similarly.

6. What do observers do in cases where gender and/or race are hard to determine using the SOPARC?

SOPARC does provide coding conventions for some special circumstances. If a person's head is covered, or s/he is lying down and difficult to see, the individual should be recorded as male, adult, sedentary. This convention was selected as this is the largest category seen in parks. Otherwise, going with gut instinct is generally the best option. Spending inordinate amount of time trying to be 100% certain of a single person's race/ethnicity or age will take time away from the rest of the park observations and should be avoided.

7. Would you use this same tool for a school playground as well?

You could use this for a school playground as well, though it was designed to record physical activity in situations in which four age categories are likely (child, teen, adult, senior). A tool designed for free play settings (e.g., recess and lunch at school), SOPLAY, is available at: <http://activelivingresearch.org/soplay-system-observing-play-and-leisure-activity-youth>.

8. And would you use it for a rail trail? (If you had a spot to stand and watch).

That depends to some extent what you want to record and how. These counters were designed for SOPARC target areas and are programmed to record three activity levels (sedentary, moderate, vigorous), rather than those often used for paths and trails (sedentary, walking, running, skating, biking). Target area data are recorded at the area level, and path/trail data at the individual level. Since two separate counters are used to record individual characteristics (one for age and activity, and another for race/ethnicity), and data on paths and trails are collected at the individual level it would be difficult to use these counters to record trail use accurately.

9. Is it possible to use SOPARC to observe a programmed area inside recreation centers (e.g. gymnasias) that might have multiple activities going on?

Yes. SOPARC provides for on-the-fly creation of subtarget areas. This means that if you encounter a gym with numerous activities occurring simultaneously, you could divide the full gym into smaller spaces to facilitate accurate recording of each activity.

10. Is it possible to classify mild, moderate and vigorous PA in parks by SOPARC?

Current data collection tools do not support this classification of activity levels. Analysis depends on an assignment of METs to the existing PA levels (sedentary, moderate, vigorous), which would need to be redefined.

11. Can you speak to the use of SOPARC with preschoolers, who engage in different types of activities than the codes accommodate? I used it and found that I needed to modify codes. Thoughts?

Researchers are free to modify the codes to meet their own specific needs.

12. Is SOPARC validated for Europe?

The tool has been used in Europe and there are published papers describing these studies.

Other

13. Who is collecting the data, volunteers?

Data collector positions are paid.

14. Since park surveys are anonymous and serial, isn't there a chance that you may survey some park users on more than one occasion, and others only once? If this does happen, some of your participants would fall into a repeated measures design, and others into a cross-sectional definition. It appears possible that a researcher could have a mix of dependent and independent observations. Is there a way to statistically address this issue? Are survey respondents asked if they have completed a survey like this before?

They are not asked if they have previously completed the survey. Researchers are free to add such questions and make adjustments with the analysis as needed.

15. Is there an ROI established that is considered desirable for METs/dollar?

See Wu S, Cohen D, Shi Y, Pearson M, Sturm R. Economic analysis of physical activity interventions. *Am J Prev Med.* 2011;40(2):149-58. This paper calculate ROI based upon Mets/dollar pegged to the association between physical activity and the cost of health care.

16. Do observers ever feel that people avoid using equipment or certain target areas because they don't want to be observed?

We have not heard any reports of this from data collectors. However, we have heard that the teenagers hanging out behind the building smoking often leave when they see data collectors coming.

17. Can people sign up for Rand's SOPARC trainings? When are they offered?

No trainings are planned at this time

18. In terms of "fitness zones", are there any liability issues for cities to put them in the park that they need to worry about?

We are not aware of any additional liability related to fitness zones that are not already existing with respect to other park facilities like playgrounds.