

## **Pilot 2 – Summary Report**

### **The potential of participatory research to explore the relationship between outdoors and health over time**

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*Suggested citation:*

Johnston, L., Farmer, J. and Currie, M. (2010). *The potential of participatory research to explore the relationship between outdoors and health over time*. Report for the Outdoors and Health Network, ESRC grant no. RES-355-25-0040.

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### **1 Purpose of the paper**

The purpose of this paper is to inform members of the Outdoor Health Network (OHN) about the potential for participatory research to explore the relationship between outdoors and health over time. The paper offers preliminary conclusions as to the usefulness of this approach in relation to three areas of interest identified by the OHN in November 2009. These are:

1. gathering information on outdoor use, health behaviours and health outcomes over time
2. engaging research subjects in 'data' collection and data collection that is repeated over time
3. connecting social and biological/medical data

### **2 Approach to preparing this briefing paper**

A time limited focussed review of literature, three group discussions and 11 meetings/interviews with health practitioners and researchers were carried out.

Three exploratory group discussions were held. All participants were members of a walking group. The discussions focussed upon participants reflecting upon their potential response, interest and likelihood to participate in research using a range of methods that were presented (see Box 1). Views on frequency and duration of participation in data collection, whether participation would impact on their behaviour, and reaction to collecting personal health data via questionnaires, tests and samples were also discussed. The findings will be presented in future papers.

### 3 What is participatory research?

Participatory research can refer to one of many research approaches – for example participatory action research, action research; community action research, participatory rapid appraisal, community participatory research and Community based participatory research (CBPR).

Whilst there are numerous definitions, theoretical and analytical approaches<sup>1</sup> and methods used (see Box 1) there is consensus as to why participatory research is used. All participatory research is praxis/action orientated and it is fundamentally aimed at changing behaviour, services, situations or environments. Primarily researchers have used participatory research, in the UK and internationally to explore and address health and other social inequalities and to identify the health needs of communities/individuals. There are examples of it being used to evaluate physical activity/health promotion initiatives.

Within participatory research the level of participation by individuals and communities varies. There is a continuum of experiences in participatory research. Participation can range from experimental where research subjects have no control to empowering where they can manage the research process. Rifken argues that the model for participatory approaches is still ephemeral and often rhetorical<sup>2</sup>.

#### **Box 1: Methods used in participatory research within literature**

Qualitative in-depth interviews

- Life Histories

Group work

- Focus Groups
- Community meetings/listening sessions
- Community involved in data analysis and interpretation

Observational

- Observation
- Participant observation

Visual/creative

- Participatory Photo Mapping
- Photo Voice

Mapping

- GIS
- GPS
- Concept mapping
- Household events mapping
- Timelines

Narrative

- Written stories
- Diaries/video diaries
- Self-portraits
- Collages and artwork
- Walkabouts / tours
- Participants' forum and drama workshop

<sup>1</sup> A number of under-pinning theories for participatory research were found in the literature. These included Habermass theories of communication, participation, and democracy; Critical theory; Ethnography; Constructivism; Phenomenology and Conscientization.

<sup>2</sup> Rifkin, S.B.; Lewando-Hundt, G.; Draper, A.K.; (2000) *Participatory approaches in health promotion and health planning: A literature review*. London School of Hygiene and Tropical Medicine; Health Development Agency UK

## 4 Longitudinal participatory research

The literature identifies a general gap in longitudinal research looking at health and outdoor use (*Munoz*). No identified papers looked at longitudinal studies of outdoors and health, using participatory research. Two papers focused on disadvantaged housing environments and one upon changes in opportunities for outdoor play in Japan<sup>3</sup>.

The large scale, mixed methods studies identified within the review illustrate the potential for utilising a range of methods to answer OHN research questions.

## 5 Potential

Participatory research is credited with improving participation in research projects. Specifically papers refer to better recruitment and retention (Claudio and Stingone; Sapienza et al.). The loss to follow up within longitudinal research is a consideration for OHN and participatory research may assist with this. The group discussion participants discussed ‘staying’ with a project for a number of months/years. The key motivating factor for group discussion participants to take part in a longitudinal study (regardless of methods used) was that it would be of direct local benefit to individuals in the community. (see also Chirowodza et al.)

Participatory research has potential for the OHN as it provides the prospect of an approach that can, according to some, overcome the limitations of quantitative measures (Adato, Lund, and Mhlongo). PR offers an opportunity to overcome the methodological limitations of “difficulties considering confounding factors” identified in Jin Park’s review of studies of nature and health. PR can result in a deeper, more nuanced understanding of people’s experiences of health, nature, health and physical activity (Adato, Lund, and Mhlongo; Baker T and Wang C) and the complex social environment within which these experiences take place (Baker T and Wang C; Galloway.S.; Mullings et al.). In addition, in the context of the work of the OHN, participatory research is well suited to answering ‘why’ people do things (Margaret W Leung).

Participatory research is promoted within a number of papers as bringing research and practice closer together (Brown et al; Chirowodza et al; Estabrooks et al; Fran Baum; Green and Mercer; Margaret W Leung). If the translation of OHN findings into policy and practice is a priority then PR has potential in this area too.

Three of the reviews of outdoors and health literature identify a need for improved monitoring and robust evaluation methods for physical activity programmes. They also criticise the fact that the sampling favours already healthy participants in activity projects (Jin Park’s Paper). Within this small scale review an emphasis of the use of participatory research with marginalized groups (Finney and Rishbeth; Teufel-Shone et al.) and those traditionally harder for researchers to reach. It may be that participatory research can provide an approach more acceptable to some groups – that would assist with targeted sampling.

All the literature illustrates the use and importance of mixed methods to maximise the potential of participatory research (Adato, Lund, and Mhlongo; Galloway.S.) Finally PR is seen as having potential for OHN as its inbuilt flexibility and creativity<sup>4</sup> may lend itself to the subjects under consideration.

## 6 Limitations

A key limitation of participatory research is also one of its key positive characteristics. The *raison d’être* of PR is to effect change in individuals and among communities. It is essentially a means to an end. OHN may

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<sup>3</sup> The transformation of children’s playing spaces in one neighbourhood in Tokyo were investigated as part of an action research project that was initiated in 1981 and followed up in 2005, play maps were created for residents of four generations (Kinoshita 53-77)(Kinoshita 53-77)

<sup>4</sup> Rifkin, S.B.; Lewando-Hundt, G.; Draper, A.K.; (2000) *Participatory approaches in health promotion and health planning: A literature review*. London School of Hygiene and Tropical Medicine; Health Development Agency UK

want to research 'uncontaminated' environments to look at the relationship between the outdoors and health, rather than evaluate interventions to increase use, understanding, in one or the other. Hayward et al 2004 provide a detailed discussion of this re whether participator research is a means, an end or both (Hayward).

Related to this is the potential for a different form of contamination resulting from participatory research. Group discussion participants discussed whether being involved in a research project would change their behaviour. Most thought that it would and Park's review also identified this as a potential methodological limitation for OHN.

Two other limitations identified in the literature are whether and how participants within PR can be representative of larger population<sup>5</sup> and the possibility that PR will be time consuming<sup>6</sup> and labour intensive<sup>7</sup>. The majority of focus group participants stated that they would not want to participate in a research project, regardless of method, that was related to their walking group. To some extent this raises questions relating to the acceptability of research within already established groups.

## Acknowledgements

This work was funded by the Economic and Social Research Council and Medical Research Council through the Outdoor Health Network award.

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<sup>5</sup> Viswanathan, M., et al; *Community-based Participatory Research: Assessing the Evidence*; Prepared for The Agency for Healthcare Research and Quality; U.S. Department of Health and Human Services, July 2004

<sup>6</sup> Rifkin, S.B.; Lewando-Hundt, G.; Draper, A.K.; (2000) *Participatory approaches in health promotion and health planning: A literature review*. London School of Hygiene and Tropical Medicine; Health Development Agency UK

<sup>7</sup> Blair and Minkler ; *Participatory Action Research With Older Adults: Key Principles in Practice*; *Gerontologist*; 49: 651-662; (2009)

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