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Participant-Guided Mobile Methods

Karen Block, Lisa Gibbs, and Colin MacDougall

Abstract

Health research is increasingly concerned with tackling health inequalities and inequities. Given that poorer health outcomes are often experienced by those who are suffering a degree of socially, economically, or environmentally determined disadvantage, it is incumbent on us as researchers to include the views and voices of diverse and sometimes marginalized or vulnerable population groups. Challenges which may accompany this imperative include engaging so-called hard-to-reach populations, and addressing an imbalance of power that often occurs between researcher and participant. Participant-guided mobile methods are one strategy for rebalancing this power differential when undertaking qualitative research. In this chapter, we describe the method and several case study examples where the authors have used it. We also discuss the types of research questions for which it is particularly well-suited along with its benefits and its challenges. When compared with a more traditional face-to-face interview, participant-guided mobile methods allow participants more power and control over the interview process. In addition, the method can yield observational and visual data as well as interview data, and is useful for including children and other participants who may be less articulate or lack proficiency in the language of the interviewer as it provides opportunities to “show” as well as “tell.”

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1 Introduction

Participant-guided mobile methods combine a participant-led guided tour with in-depth interviewing. The tour can take place on foot or using a vehicle and can even be virtual, investigating participants' online worlds or using technologies such as Google Earth or Google Maps to explore otherwise less accessible places. Combinations of walking and talking, sometimes described as "go along interviews," while still relatively uncommon in health research, have been used within a number of social science disciplines to investigate interactions between people and their social and physical environments (see, for example, Carpiano 2009; Kusenbach 2003; see also "► [Walking Interviews](#)"). The route for such walking interviews can potentially be determined to a greater or lesser extent by either the interviewer or the interviewee (Evans and Jones 2011). Our preferred term – participant-guided mobile methods – emphasizes a number of important attributes: the value of participants choosing the route, that interview data are only one of the multiple types of data that can be collected with this approach, and the fact that this is not a single method but rather a flexible set of methods that share particular characteristics. We discuss these attributes in more detail below.

The approach is best characterized as a type of *rapid ethnography*, which typically draws on a variety of data sources "to understand the social meanings and activities of people in a given 'field'" (Brewer 2000, p. 11). As with participant observation (but without the extended time commitment that method often entails), mobile methods provide an opportunity for researchers to gather multiple types of data simultaneously, adding contextual, observational, and potentially also visual data to interviews conducted in a naturalistic setting. There is, however, a critical difference between participant observation and participant-guided methods in the degree to which it is the participant or participants who decide what the researcher is shown and to what they should attend.

This characteristic of the method – the comparatively greater degree of control apportioned to participants – provides several advantages (and some challenges). In this chapter, we will discuss some of these methods’ key features: a rebalancing of power and control between participants and researchers, recognition that people’s lives are conducted in space, and the capacity of the method to yield rich, contextually informed data from a diverse range of participants. The discussion will draw on several case study examples where we have used this approach.

2 Power and Control

Health research is increasingly concerned with tackling health inequalities and inequities. Given that poorer health outcomes are experienced predictably along a gradient of socially, economically, or environmentally determined disadvantage, it is incumbent on researchers to include the views and voices of diverse and sometimes marginalized or vulnerable population groups. Challenges which may accompany this imperative include engaging so-called hard-to-reach populations, and addressing an imbalance of power that often occurs between researcher and participant. While research methods *per se* cannot reverse material, political, and social distances associated with different class and educational backgrounds, participant-guided mobile methods are one strategy for rebalancing some of the manifestations of these power differentials when undertaking qualitative data collection.

Bourdieu (1996, p. 19) has argued that researchers need to practice reflexivity along with “active and methodical” listening to avoid perpetrating “symbolic violence” on research participants who are frequently “disempowered” in the research process. He expands on this idea as follows:

It is the investigator who starts the game and who sets up its rules: it is most often she who, unilaterally and without any preliminary negotiations, assigns to the interview its objectives and uses, and on occasion these may be poorly specified – at least for the respondent. This asymmetry is underlined by a social asymmetry which occurs every time the investigator occupies a higher place in the social hierarchy. . . .

Thus, if we wish to avoid inflicting such real – albeit intangible – harms on our participants, it is incumbent on the researcher to seek to redress this asymmetry in power as far as possible. Qualitative research paradigms have developed, in part, from researchers’ discomfort with power dynamics in research and have been positioned by Denzin and Lincoln (2008) as democratically revolutionary. They take as a starting point the notion that research should be conducted *with participants* rather than *on research subjects*. Participatory methodologies take this idea further, seeking to engage participants throughout the research process including in conceptualizing the research problem or question, collecting and analyzing the data, and disseminating the findings (Cacari-Stone et al. 2014; International Collaboration for Participatory Health Research (ICPHR) 2013). It has been argued, however, that such practices do not automatically disrupt the power gradient between academic institutions and the communities they study (Janes 2016).

Qualitative and participatory approaches are influenced by feminist methodologies that “emphasize non-hierarchical interactions, understanding and mutual learning” with particular attention paid to the way in which data collection methods may reflect unequal power relations (Sultana 2007, p. 375). Participant-guided mobile methods sit within this broad family of qualitative participatory practices and, we would suggest, can reduce the power differences between researchers and researched. Inviting participants to take one on a guided tour of their community or environment, generally with a broad stated purpose associated with the research topic, explicitly casts them as the experts, with the researcher in the position of guest in their territory. Participants plan and control the route and point out features of importance. The interview and tour take place simultaneously, with prompts varying according to what the participant is showing the researchers. Along with observational and recorded interview data, visual data such as photographs or maps (produced manually or with digital technology) can also be generated. With participants “shaping the direction (both literally and metaphorically) of the interview” a “more democratic (co)construction of knowledge” is thus facilitated (Holton and Riley 2014, p. 60).

The case study below, *Mobile Me*, presents two themes from a study using mobile methods with Australian metropolitan children, focusing on their accounts of what assists or impedes their mobility when they are not in the direct care and supervision of their parents. The control that participating children were able to exercise during the data collection process was fitting, given the concerns driving the research, which were about understanding how and why adults ration children’s independence in everyday life.

Mobile Me

Children’s independent mobility – considered important for promoting health and well-being – refers to the freedom to travel or move about neighborhoods without adult supervision (Nansen et al. 2015). It has been argued that in recent times, we have been facing a moral panic, driving an unnecessary preoccupation with taking the risk out of childhood (Gill 2007), and research has found that parents determine boundaries for their children partly in response to fears about potentially dangerous people (MacDougall et al. 2009).

This study was conducted in the northern suburbs of Adelaide, the capital city of South Australia. Four boys and six girls aged 8–14 were recruited from a government primary school that had participated in a broader study (MacDougall et al. 2009). We chose to travel by minibus, rather than use walking tours, because of the distance between the places that children wanted us to see, and the fact that we wanted to explore places that were potentially unsafe. We conducted separate tours for boys and girls because, in earlier research using focus groups, we had observed boys talking over the girls. We recognized children as active social agents by asking them to plan the route for the bus driver, based on places that they considered important. They drew the route on an enlarged extract from a local street map. During the bus tours, the children were interviewed at places that they had nominated. Children also took photographs or suggested photo opportunities to the researchers. Two of the themes are described below.

2.1 Informal Play Areas: The Creek

Boys and girls of all ages described to us a local creek that they saw as important. In Australia, a creek usually connotes a river or stream in rural areas. When the children directed the minibus tour to this creek, however, it was apparent they had a different meaning. To the eyes of the adult researchers on the minibus, it was a concrete drain on the side of a busy road with houses backing onto one side and open farmland on the other. The children, however, directed us to trees in which they had constructed cubby houses. They showed us the bushes where they played “chasey” and ran around. A 10-year-old boy responded to a question of why he likes coming here by saying that “it’s like a big area and my backyard is not big enough to play chasey in.” They showed us ladders which had been placed over the fences of gardens of houses which backed on to the creek, allowing children easy access to the creek. Another 10-year-old boy said “it’s pretty much like my backyard” and added “last time I came here I spent probably about four hours here.” Children of all ages reported that sometimes their parents allowed them to go there by themselves to meet other children. Motorbikes were driven by young adults off the road on a track next to the creek, and some children said this stopped their parents from allowing them to go there without their supervision. The 10-year-old who described the motorbikes was asked “who decides whether you can play here by yourself or not?” He answered that it was mum, and the interviewer asked “do you think that’s fair that you can sometimes but not other times?” He replied “yes it is fair.”

2.2 Informal Play Areas: Vacant Land

The younger boys directed the minibus tour to small patches of vacant land which were odd shaped, smaller than a house block, and with bushes and trees. There was enough open space here for them to come with their friends and play improvised games such as football and cricket. These were not formal parks, but smaller areas maintained by the local government that were very important for these children because they were local. They did not have to cross busy roads to get there and their parents felt that it was safe enough to allow them to go there with friends.

3 Spatially Situated Research

As is evident from the case study described above, participant-guided mobile methods also acknowledge that people’s lives take place in spaces and involve travel. The health impacts of place, both direct and indirect – through its influence on social contexts and health-related behaviors – are well recognized. Scholars have argued that in order to gain a deeper understanding of place-based determinants of health, researchers need to engage explicitly with the “spatiality of social life” and peoples’ experiences of their social and physical environments (Rainham et al. 2010, p. 668; Finlay and Bowman 2016).

To this end, quantitative researchers have begun utilizing technologies such as GIS (Geographical Information System) and GPS (Global Positioning System) to track people's movements and interactions with the spaces in which they live (Rainham et al. 2010). Qualitative inquiries are also complementing these studies and providing a deeper understanding of the meaning of these interactions. Participant-guided mobile methods are particularly suited to studies concerned with people's relationships with their communities and their environments and to studies concerned with how people interact and are influenced by their space and place. These qualitative methods also obviate some of the ethical and privacy dilemmas associated with tracking technologies, which some participants might regard as constituting excessive and unwanted surveillance.

Mobile methods are also aligned with the "new mobilities paradigm" in social research, the proponents of which argue that social science has historically ignored people's systematic movements and corresponding continuous reconfigurations of networks of people, objects, and environments as foci of study (Sheller and Urry 2006). Underlying this paradigm are understandings of the embodiment of human experience in space and time, and of a fundamental difference between being in motion and being static, "both in terms of the kinds of engagement with the world that it prompts, and the kinds of knowledge and identities that it therefore engenders" (Hein et al. 2008, p. 1268). The mobilities paradigm emphasizes that all places are tied into at least thin networks of connections that stretch beyond each such place and mean that nowhere can be an island. It begins from the complex patterning of people's varied and changing social activities, which mean that travel is necessary for social life and connections. It examines the proliferation of places, technologies, and gates that enhance the mobilities of some while reinforcing the immobilities of others. A corresponding mobilized ethnography involves walking or traveling with people as a form of deep engagement in their worldview (Sheller and Urry 2006; see also "► [Walking Interviews](#)").

Studies using mobile methods have also demonstrated that there is a relationship between what people talk about and the places in which they are talking. Geographers Evans and Jones (2011) compared discourses produced in sedentary and walking interviews in the Rescue Geography project exploring peoples' personal connections to their area. They found that participants in the walking interviews focused more on environmental features while the sedentary interviews produced more narratives about people. Thus, mobile methods are most appropriate when place is a significant part of the research question and less so if researchers are primarily interested in people or narratives located remotely.

Participant-guided mobile methods are clearly suited to engaging with people's spatially situated and mobile experiences. In the case study below, *Beyond Bushfires: Community, Resilience, and Recovery*, participant-guided mobile methods were used as one part of a larger mixed-methods investigation into the medium- to longer-term impacts of the "Black Saturday" bushfires, which devastated many communities across the State of Victoria, Australia, in February 2009. The research was focused on the interaction between individual and community trajectories in the years following the fires.

Beyond Bushfires: Community, Resilience, and Recovery

The Black Saturday bushfires were responsible for the loss of 173 lives, the destruction of 3500 buildings including 2133 homes and profound and prolonged social disruption in many affected rural communities. For this large mixed-methods study (Gibbs et al. 2013), approximately 1000 people completed surveys 3–4 years after the fires and again 2 years later, and 35 participants from severely affected communities also took part in a qualitative study using participant-guided mobile methods. Participants ranged in age from 4 to 66 years of age and included two grandparents, 17 parents, five children, and two young adults who were teenagers at the time of the fires. Some chose to take part with family members, as a couple or parent with a child for example.

These participants were invited to take us on a guided tour of places in their community that were important to them, with questions focusing on why these places were significant. At the participant's discretion, some tours were conducted entirely on foot while others included a driving tour to explore more distant parts of the community. We took photographs of the significant places and objects, as indicated by the participants, during the tours, and the photographs served as additional data for analysis as well a useful way to illustrate the project. Given the potential to evoke past traumas, we did not ask participants directly about their fire experiences. Most, however, chose to describe those experiences in some detail and these stories were certainly rendered more vivid for the researchers by being told in situ.

4 Eliciting Different Data While Mobile

Perhaps because the participants felt like hosts – and because of the relevance of their houses, either surviving or rebuilt – in most cases, we were invited into people's homes as well as being taken on a tour. This meant that many of the interviews took place in two phases, beginning or ending with a (sometimes quite lengthy) additional sedentary interview over a cup of tea. When the interview data were analyzed, it was apparent that the topic of conversation almost invariably changed when the interview switched from sedentary to mobile (or vice-versa). In many cases, the sitting interview elicited more personal information and stories while the mobile phase tended to focus more on the broader community and the environment (Block et al. 2014).

5 Some Additional Risks to Consider with Mobility!

As already noted, our participants for this study included children and, in one case, a very articulate and independent 7-year-old boy was permitted to take us on a tour of his small town without a parent. He confidently took charge of the tour, instructing us as to which things we should and should not photograph on the way. At one point, however, our attempts to address the natural power imbalance between adults and

children appeared to have been too successful. We were impelled to wrest back some of the control we had relinquished when he suddenly dashed across the main road, apparently without looking for cars, and we had to exert considerable authority to convince him that he should not do so again (Block et al. 2014).

6 Generating Rich, Contextually Informed Data from Diverse Participants

As noted earlier, participant-guided mobile methods comprise a flexible range of techniques that are useful for conducting research with a broad range of participants. The multiple simultaneously produced forms of data that are generated – observational, visual, and interview data – can be integrated and synthesized to build a rich and contextually informed understanding of people’s lives in the spaces in which they are lived. These methods allow the researcher both to experience participants’ environments themselves and to interrogate people’s perceptions, interpretations, and navigations of those environments – providing a range of insights not generally accessed through (sit-down) interviews alone (Carpiano 2009). Concerning this last point, Evans and Jones (2011, p. 850) differentiate between walking (or cycling) interviews, whereby researcher and participant are exposed to the “multi-sensory stimulation of the local environment” and interviews that take place in a car or a train, for example, which are “essentially sedentary from [a] bodily perspective” although undertaken while in motion.

Many of the more common research techniques, such as interviews, focus groups, and surveys, are ideally suited for gathering data from relatively well-educated participants with opinions on topics that can be readily articulated. By way of contrast, participant-guided mobile methods, similarly to other innovative methods using photography or drawings (for example), can be used effectively to include participants who may be less articulate and can consequently be marginalized or disregarded in much research. As well as using these methods successfully with children (as in the case studies described here), we have also used them with recently arrived migrants, not yet fluent in the language of the researchers. The approach provides opportunities to *show* as well as *tell* and more readily accommodates nonverbal cues, pauses, and silences than a traditional interview.

Mobile methods can also be used to understand how places are diversely experienced, by comparing, for example, the way spaces are experienced and negotiated by different genders and races or by able bodied and empowered individuals compared with those with disabilities, the aged or the young (Finlay and Bowman 2016).

The third case study, *Stepping Out*, is described below and investigated how children negotiate their independent travel. The use of participant-guided mobile methods elicited more complexity and interdependency of contributing elements to those negotiations than was revealed by the other methods used in the study.

Stepping Out: Children Negotiating Independent Travel

This study, conducted in 2011–2012 in the inner northern suburbs of Melbourne, Australia, aimed to explore the role that children played in negotiating their own active and independent travel. Participants were children aged 10–12 transitioning from primary to secondary school, a time when children often begin to undertake travel – especially to school – that is less supervised by adults. The multimethods study included observation, focus group discussions, and interviews as well as participant-guided mobile methods. A small number of parents and teachers also took part in interviews to provide additional contextual information.

In keeping with principles of participatory research and a child-rights informed practice, a small group of child participants were recruited as research partners in the early stages of the study to inform subsequent stages. Without prompting, the group suggested we should go outside and trace the actual routes taken by children. Following one of these mobile methods journeys, a recommendation was made that researchers should accompany children on travel journeys using the same mode of transportation as participants, such as a bike. Consequently, ten participating children took us on a routine travel journey – in most cases to school but also in some cases to shops and parks – to demonstrate the way in which they usually traveled to that destination (Gibbs et al. [2012](#)).

7 Mobile Methods Enabling Complex Insights

A striking consequence of using participant-guided mobile methods in this study was that it enabled us to identify a considerably greater degree of complexity in children's independent mobility than was articulated through the focus group discussion. We found, for example, that when children told us they walked to school with their parents or with younger siblings, they did not necessarily walk side by side, but instead, they were often spread out along the route, perhaps regrouping at intersections to ensure safe crossing. We found that children's mobility was negotiated through multiple features of people, events, and environments. It was characterized by gradual transitions, use of technology such as mobile phones, significant influence of travel companions including friends and relatives, and the use of passive surveillance by parents on visible routes (Nansen et al. [2015](#)).

8 Participant-Guided Mobile Methods: Limitations and Challenges

This chapter has demonstrated that participant-guided mobile methods provide a valuable addition to the qualitative researcher's array of methods. Here, we discuss some limitations. Firstly, as already noted, these methods are useful when place is salient to the research question. If researchers are seeking to explore conceptual narratives unrelated to place, sedentary approaches may be more productive (Evans and Jones [2011](#)). As always, when undertaking research, reflexivity on the

part of the researcher is recommended. While a search for greater authenticity may underpin researchers' motivations for undertaking interviews in a naturalistic setting that is familiar to participants, we should still be aware that research encounters invariably comprise an element of performance where the participant and researcher are coconstructing a narrative and identity. A participant-guided tour is no exception to this rule, and the onus is on the researcher to reflect on their role as well as the role of their chosen method in coconstructing knowledge (Holton and Riley 2014).

There are also a number of additional challenges associated with this approach compared with a sedentary method. Weather – either very hot, very cold, or wet – may limit its feasibility and/or willingness of participants to undertake a guided tour. Both researchers and participants need to maintain a degree of flexibility in order to adapt to inclemency as well as other local conditions. As also noted previously, participant-guided mobile methods may be suitable for investigating the way in which participants with a disability or otherwise limited mobility navigate their environments. Any limitations to mobility, however, obviously need to be thought through when planning how to conduct the research. Limitations to mobility may occur because of personal characteristics of the participant or because the places under consideration are inaccessible. In one case, we were conducting research with recently arrived refugee background youth who were able to use Google Earth to show us places they had lived before coming to Australia.

In order to maximize the value of collecting data that is spatially situated, researchers will need to consider how they will include locational identifiers that can be linked to the generated narrative. These could include photographs, notes, maps, or conversational prompts that take note of local environmental features (Carpiano 2009; Evans and Jones 2011; Finlay and Bowman 2016). Researchers also need to plan how they are going to manage technical issues associated with recording the interview. While we have had success using a high-quality digital recorder held by the researcher, ambient noise and/or multiple participants may compromise the sound quality. Having more than one recording device and asking participants to hold one as well may help overcome this problem but clearly adds to the subsequent labor required when transcribing.

Finally, while empowering the participant has positive ethical implications, these methods also raise some ethical complexities. Safety is of course a primary consideration and various combinations of terrain and participant attributes may raise concerns as demonstrated in the *Beyond Bushfires* case study described above. Similarly, in the *Stepping Out* study, researchers had to take care that they did not divert the child participants from attending to traffic and other hazards. If the tour is undertaken while driving, then clearly driving skill of either the participant or researcher is relevant as are distractions associated with the research process. Confidentiality is also potentially more difficult to manage when using these methods – particularly if the tour is taking place in an environment where the participant is likely to be recognized and the researchers are conspicuously unfamiliar.

9 Conclusion and Future Directions

In this chapter, we have discussed some key features of participant-guided mobile methods along with some of their limitations and challenges. When undertaking research where space and/or movement are relevant to the research questions they provide a valuable addition to the researcher's cache of methods. They can be combined with other qualitative or quantitative methods and generate rich and contextually informed data that can help us to understand the ways in which place shapes and interacts with people's experiences. In such cases, these methods pass the methodological test, that increasing the number of data collection methods used is justified if they provide additional and complementary information (Darbyshire et al. 2005). They are particularly useful for including the contributions of participants who may be less articulate and can help to shift the balance of power between researcher and participant towards the participant in those cases. This feature makes them of particular use for health researchers seeking to investigate health inequalities and inequities affecting marginalized or vulnerable population groups.

In future research, we expect that using participant-guided mobile methods will assist researchers to extend their investigations of social determinants of health to incorporate more explicitly environmental, place-based, and mobility-associated determinants as well. Given the flexibility of these methods, the potential for researchers to incorporate new technologies and adapt them to new research questions in creative ways we have not yet imagined is considerable.

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