



APP BASED TOOLS FOR PARTICIPATION AND URBAN DATA COLLECTION

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TOOL: MAP MY COMMUNITY

PROJECT: NEW URBANISMS IN INDIA: URBAN LIVING, SUSTAINABILITY AND EVERYDAY LIFE (ESRC: ES/K00932X/2)

DR. SOPHIE HADFIELD-HILL / DR. CRISTIANA ZARA



The *Map My Community* mobile application was developed principally as a research tool to gather data on young people's use and experience of their local communities. The tool was developed as part of a suite of methodologies designed for the ESRC funded *New Urbanisms in India* project. Developed by social scientists at the University of Birmingham, the main aim was to capture data on the mobilities, patterns and everyday experiences of young people and their families living in a new urban development. The app has three main activities: Map my week; Capture that and Explore that space; in addition, a follow-up interview was conducted to co-analyse the app data with the participants.

APP ACTIVITY	AIM	DESCRIPTION
<p>Map my week</p>	To gather data on participants' everyday life, mobility and use space.	Using the GPS enabled on the smart phone, outdoor movements were tracked for up to a one week period. At regular intervals, participants were prompted to participate in a short survey, asking where they were, who they were with and how they were travelling. This process spatially verified the data and ascertained the social and spatial mobilities of young people and their families.
<p>Capture that</p>	To enable participants to share their emotional responses to specific features of the built environment.	Participants took photographs of their surroundings and commented on features which they liked or thought needed improving.
<p>Explore that space</p>	To explore participants' experiences of and feelings towards specific features of the built environment.	Informed by dialogue with key stakeholders (i.e. architects and urban designers) at the app design stage, a series of pre-defined areas were input into the app architecture. On a regular basis the app polled for the participant's position, if within one of the pre-selected boundaries, they were requested to complete a survey about their experiences of that space.
Follow-up interview	To co-analyse the data	Tracking data was inputted into Google Earth which enabled participants to follow their routes and view the data at different spatial scales. It was this layering of data which offered the most valuable insights into participants' experiences of urban space.

A PARTICIPATORY PROCESS

- App questions and consent statements were piloted with 100 young people in the UK to ensure understanding.
- A workshop ensured young people participated in the app design, layout, process and form.
- In India, young participants i) translated the app into the local language, Marathi; ii) adapted the app content to ensure age relevance and cultural specificity; iii) revised the app design, layout and the cultural appropriateness of the logos; iv) designed and implemented an app related consent form for young people and their guardians.
- During data collection, young participants actively facilitated the process through peer-to-peer learning, intergenerational guidance and digital literacy.
- Young people participants co-analysed the data with the researcher in a follow-up interview.

OUTCOMES

- The app-based tool was an effective conduit for data collection, complementing the other project methodologies.
- GPS tagged tracks were used as a prompt for discussion about everyday mobility based on actual mobility patterns.
- Survey data gave specific insights into location based experiences and photographs gave detailed insight into everyday life.
- Twelve core themes emerged from this research project ranging from education provision to experience of public space, inequality, nature and green space, to name but a few – which represent significant new knowledge about the everyday lives of children, young people and their families living in a site of urban transformation (see Hadfield-Hill and Zara, 2017 for the final project report and key findings).

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TOOL: MAP MY COMMUNITY – DELHI

PROJECT: MAP MY COMMUNITY: CHILD-LED PARTICIPATORY MAPPING OF URBAN LIFE IN DELHI (ESRC: ES/M500466/1)

DR. SOPHIE HADFIELD-HILL / DR. CRISTIANA ZARA

CO-APPLICANT: PREETI PRADA PANIGRAHI, NATIONAL HEAD, HUMARA BACHPAN CAMPAIGN (HBC)



Map My
Community

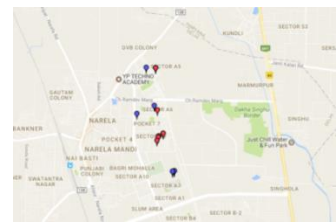
The *Map my Community* app was subsequently co-adapted and adopted as a participatory community engagement tool in collaboration with Humara Bachpan Campaign (HBC) in India. The aim of the project was to collate evidence about the lived experience of children and young people living in informal settlements in Delhi. An online mapping tool (hosted on a secure server) was used to inform stakeholders about living conditions and to advocate for change at the local, regional and national scale.



Young people working to co-adapt the app



Data collected from MMC



Mapping tool for data visualisation

Outcomes

- **Participatory work with young people:** The app was used by 21 children's groups across informal settlements in Delhi (involving 105 young participants).
- **Evidence:** Data collected through the app was used in meetings and interactions with local authorities as part of HBC youth-led advocacy work, leading to initial improvements in the communities.
- **Capacity building:** Youth groups and HBC staff have acquired new skills and tools in technology-based participatory methodologies to inform urban development.
- **Impact on the ground:** This work has led to the opening up of a children's park in one of the informal communities and the installation of a sewerage system for the benefit of another of the communities.



Young participants presenting data from the app to stakeholders



Children's park opened in one of the informal communities



Sewerage works started in one of the communities

APP BASED TOOLS

PARTICIPATION . URBAN DATA COLLECTION



TOOL: RECONNECT THE NEXUS APP

PROJECT: (RE)CONNECT THE NEXUS (RCTN): YOUNG BRAZILIANS' EXPERIENCES OF AND LEARNING ABOUT FOOD-WATER-ENERGY (ESRC: ES/N013190/1)



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The existing *Map my Community* app architecture has been adapted for use on the RCTN research project to collect data on young people's everyday uses of, experiences and interactions with food, water and energy. Young participants were invited to use the app for a two-day period and invited to a follow-up 'nexus mapping' activity to elaborate on the app data and represent their food-water-energy (dis)connections onto a visual web created by them.

It is expected that this methodology will provide important insights into crucial concerns such as persistently high levels of poverty amongst Brazil's children and young people, their unequal access to nexus resources, their resilience to nexus threats, and the role of education in addressing those threats in the future.

POSSIBILITIES FOR COLLABORATION

If you are interested in the potential of using app-based tools for participatory planning, urban data collection and working with young people, there are numerous possibilities for collaboration:

- Would you be interested in using the *Map my Community* app and functions in your existing programmes and work?
- Do you have ideas for developing your own version of *Map my Community* to meet the needs of the work that you are doing?
- Would you like support and guidance in conducting app-based participatory methodologies with communities?

We would be happy to discuss how app-based participatory methodologies could be used in your work and the possibilities for collaboration.

FOR MORE INFORMATION PLEASE CONTACT:

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