



LUND UNIVERSITY

# CASE

CENTRE FOR AGEING AND SUPPORTIVE ENVIRONMENTS

# Action! A novel multi-method approach – reflections from older adults and researchers

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## Highlights

- We captured older adults' walks in real-time and through participants' accounts by combining an action camera, researcher observations, and video-elicited interviews.
- This approach enabled natural walking patterns – often missed by traditional walk interviews – and participants' perceptions.

## Background

- Methods for investigating walking environments commonly include walking audits by an observer or walk interviews.
- However, they lack a combination of environmental observations, natural walking behaviour, and participants' accounts of their experiences.
- Here we share reflections on experiences with a novel multi-method data collection approach that we used in an ongoing pilot case study exploring how older people experience their daytime outdoor walks.<sup>1</sup>

## Methods

- Sixteen volunteers aged 71–89 (mean 79) took a self-selected daytime outdoor walk.
- *The multi-method data collection:* Participants wore a chest-mounted action camera to record the surroundings. Meanwhile, two researchers observed behaviour and environmental features and tracked the route. Immediately after the walk participants described their walk experience at home while looking at the video on a tablet to stimulate recall (Fig 1, 2, 3, 4, 6).
- *Reflections on the multi-method approach:* After completing the home interviews, the researcher then facilitated a group discussion at a senior citizen meeting point. In this session, participants jointly reflected on the multi-method approach. The results presented here are drawn from field notes and summaries of these group discussions (Fig 5).

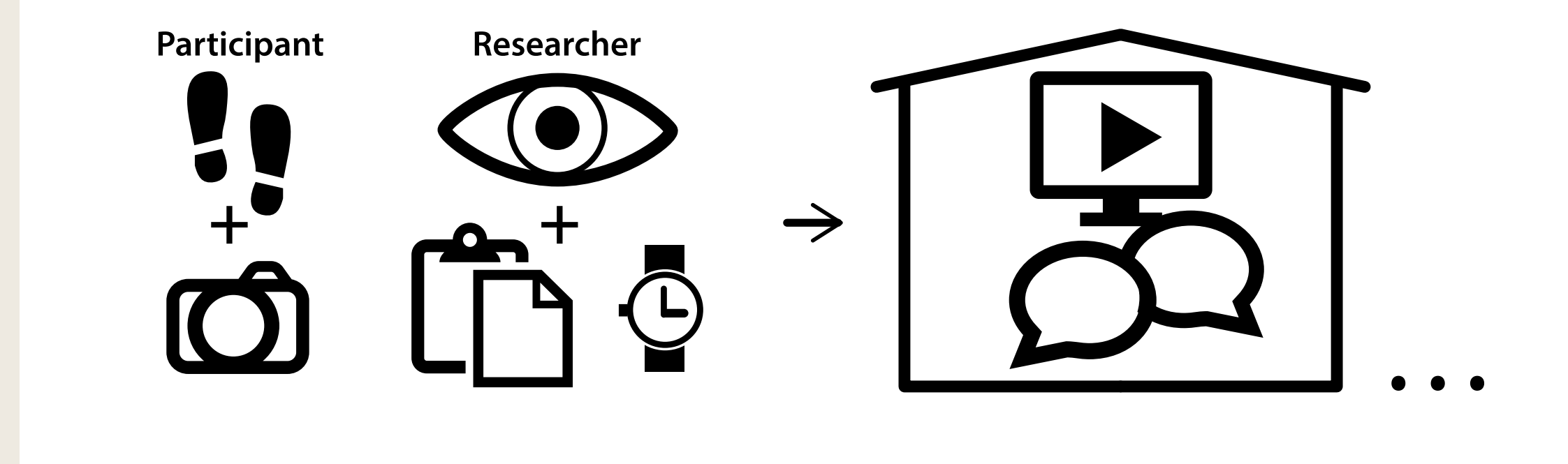


Figure 1. A novel multi-method approach

## Results

- *Participants' reflections:* While some preferred the non-interactive approach, others favoured a walk interview. Nobody was reluctant to wear the chest-mounted camera.
- *Researchers' reflections:* The multi-method approach enabled natural walking patterns (e.g. walking pace in motion, stops) and simultaneous observation of environmental features and behaviour. Video playback elicited participants' reflections on their walks – both as observers and as the ones being observed – despite occasional technical challenges (e.g. connectivity, freezes).

<sup>1</sup> Gerhardsson, K.M., Brogårdh, C., Tornberg, Å.B. et al. (2026). A municipality implemented behavioural intervention to improve quality of life among older adults: protocol for a mixed-methods pilot case study. *Pilot and Feasibility Studies*, 12(47), 1–13.

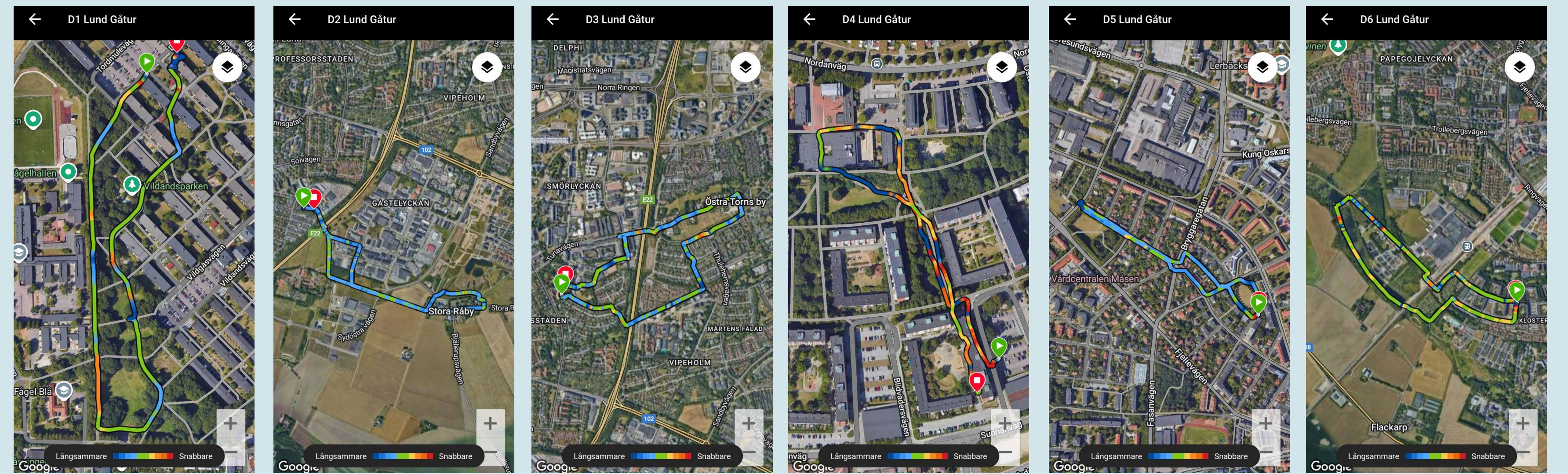


Figure 2. Screenshots from the mobile phone tracking app (paired with the researcher's GPS smartwatch) show 6 of 7 walks in Lund (55.7° N, 13.2° E). Walks, which occurred during March, lasted between 19 and 55 minutes and ranged from 0.85 to 4.11 km

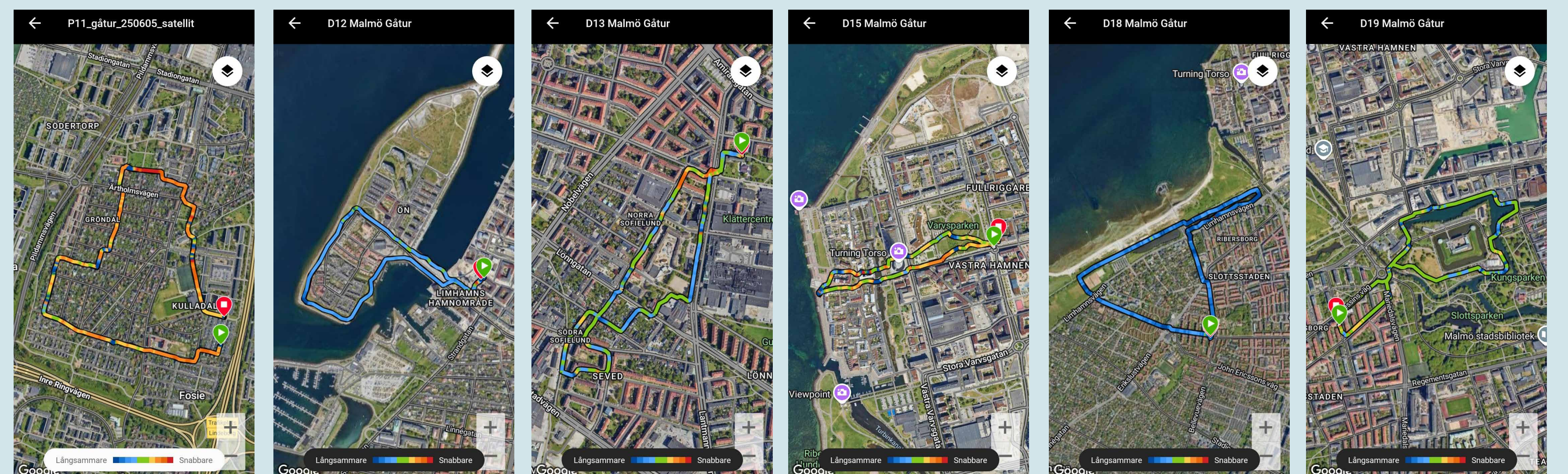


Figure 3. Screenshots from the mobile phone tracking app (paired with the researcher's GPS smartwatch) show 6 of 9 walks in Malmö (55.6° N, 13.0° E). Walks, which occurred during March except for one in June, lasted between 26 and 49 minutes and ranged from 1.42 to 4.85 km

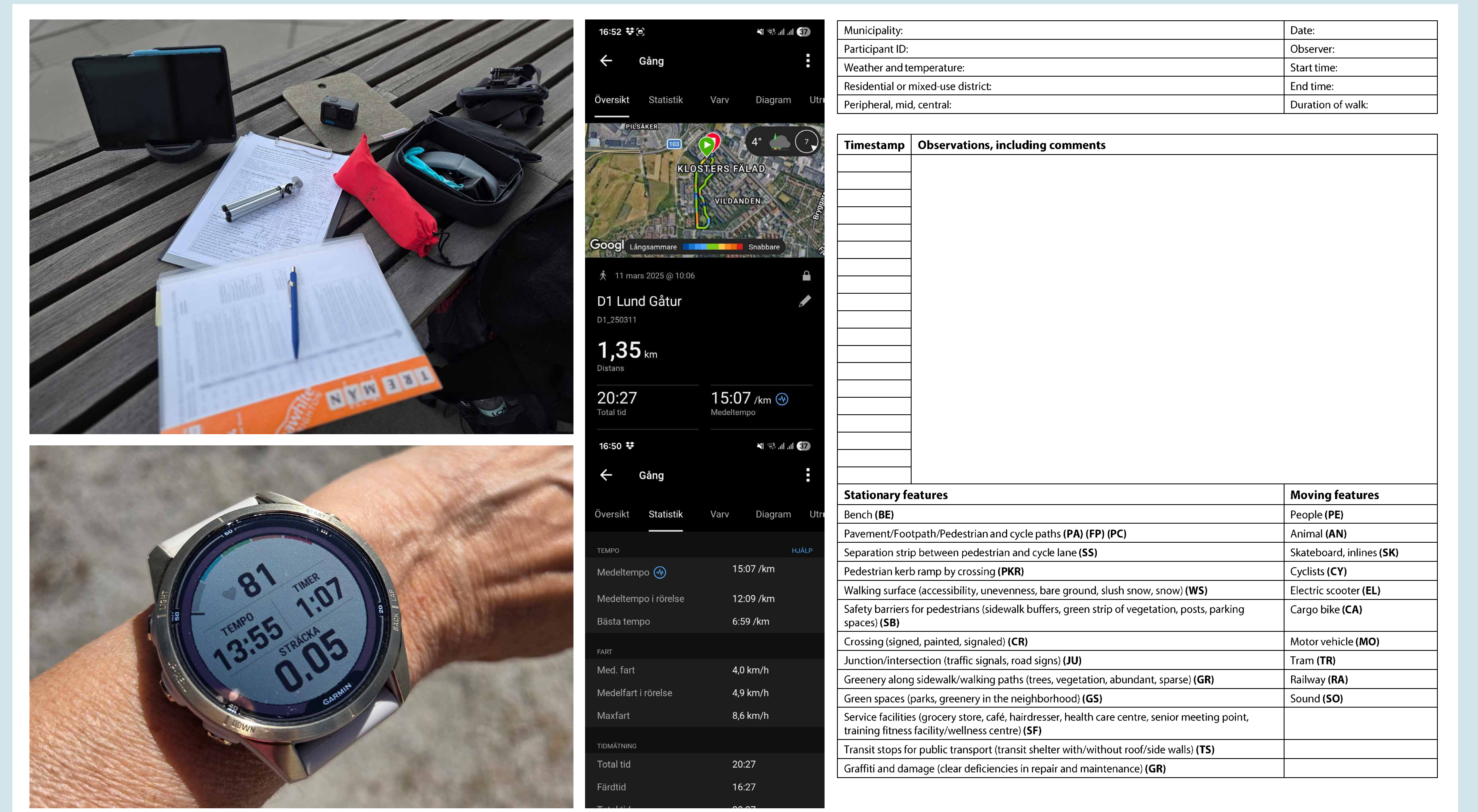


Figure 4. (a) Action camera with a chest belt for mounting, an audio recorder for interviews, a tablet to play back the recorded videos; (b) the smartwatch worn by the researcher to track the route, (c) screenshots from the mobile phone tracking app, showing distance, walking pace and speed in motion, total duration; (d) and a pre-prepared form to record observations. The form was inspired by walking environment assessment tools, such as the Microscale Audit of Pedestrian Streetscapes (MAPS)

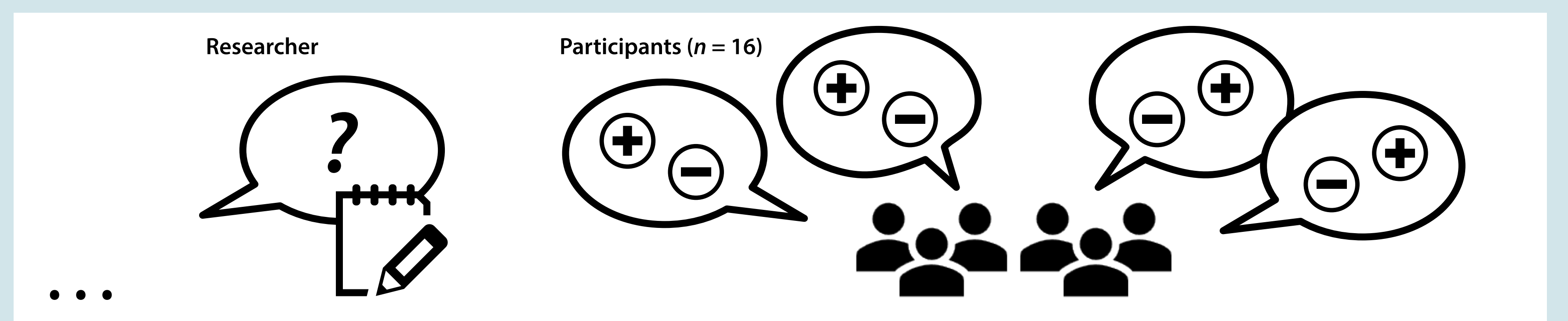


Figure 5. After the interviews, participants jointly reflected on the approach in a group discussion facilitated by the researcher

Figure 6. (below). Pre-testing the novel multi-method approach with a volunteer, who did not participate in the study

