Sustainability | Individual communication

IC - (20979) - EXPLORING THE IMPACT OF DIGITAL DATA ANALYSIS AND FIELD NOTE RESULTS ON PUBLIC SPACE RESEARCH IN RURAL AREAS

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Background and objectives

The previous results obtained by the research team from building digital sensor systems in a rural community for the past 3 years verified that these systems can digitally record community behavior trajectories 24 hours a day, demonstrating feasibility to preliminary application.

According to the aforesaid results, this study aimed to explore whether system sensitivity to environmental observation can be enhanced by adopting conventional environmental behavior maps and field notes.

Process and methods (for empirical research)

The researchers engaged in participant observation and conducted mixed method research by targeting 11 early career researchers. Data were collected from detailed field notes, field research reports, and open-ended questionnaires.

The research process are as follows:

(1) Learn how to use the sensor system to understand the presentation of behavior record findings and research results.

(2) Explore the methods for observation and data recording through field notes and environmental behavior maps, which can be applied in conventional environmental behavior research.

(3) Enter the research site to conduct environmental behavior research.

(4) Publish the research results and complete a questionnaire survey.

(5) Conduct research analysis.

Main results (or main arguments in the case of critical reviews)

The study results are as follows:

(1) The present researchers' understanding of the data sensing results affects their cognition of environmental research. This leads to differences in field investigation targets and results.

(2) Long-term data collection can complement the research limitations of field surveys. However, sole reliance on data observation can oversee the emotional resonance at the research site.

Implications for research and practice/policy | Importance and originality of the contribution

The research results can contribute to the accurate allocation of public resources to essential public spaces, thereby reducing resource waste. Data analysis allows for real-time observation of environmental behavior changes and rolling review of strategies for public space arrangement, thereby enhancing the sustainable value of senior-friendly communities.

Palavras-chave : Digital sensor data, Field notes, Environmental observation sensitivity, Rural community