

INFORMATION SHEET

Research study – Crowdsourced pilot study on indoor air quality

You are invited to participate in a research study that explores air quality indoors. We received your contact information after you expressed interest to participate in the study.

After reading this information sheet, you will have the opportunity to ask any questions you may have. You will be separately asked to provide consent to participate in the study.

Purpose of the research

The purpose of this study is to collect information about air pollution in your living environment, and to gain user experience on community-based measurements of air quality.

Description of the process and procedures for collecting research data

The study will begin with a workshop where hands-on training on how to use the air quality sensors will be offered. You will also get support with the placement of the sensor and other practicalities. Written instructions will be provided to support you with the study. After the workshop, you will take measurements in your home for approximately 2 weeks and make some notes about your observations related to air quality. During this time, you will have an opportunity to ask support from the research group.

After the measurement period, you will be invited to a second workshop. In this workshop, the sensor will be returned, user experiences will be collected and discussed, and you will be encouraged to brainstorm future research ideas based on your measurement experience in a facilitated session.

The study will include two questionnaires that will take place during the workshops introduced above. We will ask questions related to your prior knowledge on air pollution, expectations, motivation and learning process related to acting as a citizen scientist. Answering the questionnaires will take approximately 20 minutes each. In addition, we will collect user experience on the measurements as well as additional information to support the data analysis (i.e. some characteristics of your home, type of ventilation, placement of the instrument, and activities) during the second workshop.

The workshops and the borrowing of the sensors will be cost-free to participants. The sensors operate with mains power, the costs of which the participant is responsible for. Participants will not receive financial compensation.

Potential risks and benefits of participation

You will not receive any direct benefit from participating in the study. You will obtain some understanding of how the air quality inside your home changes through the day and in relation to your everyday activities and experience using air quality sensors.

The results of this study will be used to collect crowdsourced indoor air quality data, gather user experience on the usability and operation of the air pollution sensors, to formulate future research questions, involve participants in the research process, to learn about the citizen science related to air quality, to help participants understand more about the concept of healthy air, associated risks, and control methods of air pollution.

The procedures and methods used during this study do not involve health risks, social risks, financial risks or risks relating to personal data breaches.

Data confidentiality, processing and storage

At the beginning of the study, we'll collect your name, e-mail address and phone number as well as the individual identifier of the sensor that will be handed over to you. This data is only accessible by the Tampere University researches responsible for the study. After you have returned the sensor, personal data will be destroyed. All personal data collected during the study will be processed in compliance with the EU's General Data Protection Regulation (GDPR) and the data protection laws of Finland.

The data recorded by the sensor will be sent to the Tampere University server via wifi-connection. Only air pollution data and approximate location of the sensor will be stored. Data stored at the server is accessible only for the Tampere University researchers responsible for the study.

Protecting the privacy of participants in research papers/publications

The research materials and data containing personal information collected during the study will be retained by Tampere University until you have returned the sensor, after which they will be securely destroyed.

After retrieving the air pollution data from the server, the id number will be changed so that it's not trackable to the user anymore. After this, the data is considered as anonymised and will be analysed by the researchers and students.

Answers to the questionnaires are collected by using digital or paper form during the workshops. The questionnaires will be conducted and analysed anonymously.

Funding sources

The project is funded by the Sustainable Transformation of Urban Environments (PROFI6) action grant. The project is also supported by the T-Winning Spaces 2035 project, funded by the Research Council of Finland via the European Union – NextGenerationEU.

Voluntary participation

Participation in this study is entirely voluntary, and you have the right to withdraw from the study at any time either permanently or for a temporary period. Refusal to participate or discontinuing participation at any time will not affect you in any way.

The data collected about the participant up to the point of withdrawal will remain in the study database and may not be removed.

Insurance coverage and compensation

Tampere University's insurance policy covers any personal injuries and property damage incurred during the course of this study.

Privacy protection in the context of research papers and communicating about the study

The results will be used in reporting findings. This includes possible scientific publications, presentations and reports. In addition, results will be published in a bachelor's theses. The results will be published so that individual participants cannot be identified.

Participants will receive a general summary of the findings after the study has been completed.

Inquiries

Please direct all inquiries about the study to Anna-Kaisa Viitanen and Jonathon Taylor.

Researchers' contact details

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