

Case study

Data quality in citizen social science

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In the citizen science project called [*Young Adults' Political Experience Sampling \(YAPES\)*](#), school students from Austria took part in independent data collection to gather their political experience every day and send the data to a research group by email or WhatsApp. They were asked to photograph, document and comment on everything that was politically interesting and important to them. The scientists used data to identify the political issues that young people face in their everyday lives. The project focused on various aspects, including the places where political engagement occurs, the channels through which political information is received and the content of political communication among young people. Typically, researchers have limited access to this kind of data, often relying on surveys or a small number of qualitative interviews. The citizen science approach enables the collection of large amounts of real-life data. Despite being initially designed as a small-scale pilot project, YAPES managed to involve 254 volunteers who gathered a total of 1768 observations.

However, there are several challenges to implementing citizen science in social sciences projects like YAPES, including quality of data and ethical considerations. Ensuring data quality is a fundamental issue in citizen science, but it may be even more important in social science research. Instead of purely objective measurements facilitated by technical devices that are common in natural science projects, social science research heavily relies on human observation. Activities like observing, counting, documenting, and photographing are inherently subjective due to the observer's perception. Moreover, the measurement process can be biased and affected by the individual characteristics of volunteers, such as their political views etc. The ethical concerns are related, for example, to data sharing and privacy, especially when citizens use their smartphones to collect and submit data which could include sensitive information about themselves or others they observe. For instance, sharing data concerning an individual's political beliefs or interpersonal behaviour might raise greater ethical considerations than sharing data about a local species of insects in a natural sciences project.

Questions for discussion:

- 1) Data quality is one of the main challenges in citizen science in general, but arguably it might be an even bigger problem for social sciences research. What are the challenges for data quality that researchers might face in the case above? What are the reasons for those challenges? What can be done to mitigate these problems?
- 2) Develop a list of recommendations that the researchers should implement in this case and in citizen science projects in general to ensure data quality (use the table below for this task)!

Challenges for ensuring data quality (in this case and in citizen science projects in general)	Recommendations