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New strategies towards a representative sample: app-based travel survey with non-probability sampling in Dresden

It can be observed that response rates in traditional travel surveys, usually randomly sampled from resident's registers, are declining in Germany and beyond. Consequently, risks of selectivity as well as costs and efforts to achieve high-quality data increase. Apart from traditional surveys commonly conducted by questionnaires and telephone interviews, innovative methods such as smartphone apps open up promising possibilities for data collection via GPS-tracking and allow a wide variety of analyses. This even presents opportunities for new recruitment strategies but entails challenges regarding representativeness and biases as well. The objective of this project is to gain experience in non-probability sample recruitment and data collection with a digital travel survey app developed by the Swedish company Trivector. This will be achieved by planning and conducting an app-based travel survey in Dresden in autumn 2019. It is aimed to reach a representative net sample of at least 1,000 individuals of the city's population and to target all relevant person groups. As the project is embedded in a European collaboration called 'Travelviewer – data for low-carbon sustainable transport systems' financed by EIT Climate-KIC, the survey will be hold with three other sites participating. At first, literature research on survey methodology focusing on non-probability sampling will be done. Then, recruitment strategies will be developed aiming for the defined sample target. This will include questions on the approach, motivation and support of individuals. In conclusion, the survey will be evaluated regarding sample representativeness and recommendations for future application in travel surveys will be given.

Key Characteristics
Travel surveys · Apps