

New method contributes to better transport services

January 15 2019



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How the user perceives accessibility is an important factor in the development and evaluation of attractive and sustainable transport services. Despite this, the user perspective is generally left out in



traditional accessibility evaluations, in favor of a focus on objective measures. In her dissertation, Katrin Lättman at CTF, Service Research Center at Karlstad University, has developed a new method that captures accessibility as experienced and perceived by the users.

In the dissertation, perceived accessibility is defined as "How easy it is to live a satisfactory life with the help of the <u>transport</u> system". The new method PAC, Perceived Accessibility Scale, includes four questions that participants rate on a scale from one to seven. For example, the PAC measures the possibility and ease of travel to activities based on your own preferences, such as going to work, school, the <u>grocery store</u> or leisure activities, using various modes of transport.

"Objective measures such as <u>travel time</u> and distance are important, but they do not capture the entire concept of accessibility or even all destinations that people want, or need to, travel to in their everyday life", says Katrin Lättman, Ph.D. in Psychology at CTF.

PAC enables the possibility to compare experiences of accessibility between different groups of people, and for different combinations of travel. It can be used to evaluate accessibility before and after the implementation of different accessibility/transport solutions as a complement to objective measures.

"One of today's major societal challenges is developing sustainable transport solutions that also provide "accessibility for all". It is especially important to ensure that the sustainable travel alternatives provide satisfactory perceived accessibility for different groups of people, in order to avoid social exclusion and to be able to offer realistic alternatives to the car", says Katrin Lättman.

The method has already gained interest among practitioners, and has been used in accessibility evaluations in several cities in Sweden and



Europe, as well as in Singapore.

Factors that affect perceived accessibility

The dissertation consists of three studies with data from travellers in Karlstad and Malmö. Study one and three emphasize the development of PAC, which measures perceived accessibility by 1) a specific mode of transport or 2) with different (combinations of) transport modes, such as car, walking and public transport. Study two focuses determinants of accessibility and shows, among other things, that safety, quality, age and travel frequency affect the experience of accessibility.

"The method is designed to capture and identify differences between individuals. As an example, for study three we collected data from different residential areas in Malmö, where the objective accessibility level was considered equal for all residents within the area, but where PAC was able to identify groups with lower levels of perceived accessibility", explains Katrin Lättman.

More information: Perceived Accessibility: Living a satisfactory life with help of the transport system. <u>kau.diva-</u> <u>portal.org/smash/record.jsf?pid=diva2</u>%3A1258116&dswid=9029

Provided by Karlstad University

Citation: New method contributes to better transport services (2019, January 15) retrieved 26 June 2024 from <u>https://phys.org/news/2019-01-method-contributes.html</u>

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