Summary:

Mobility and welfare among people with physical disabilities – the role of the car

The project reported here has studied the role of the car for mobility and welfare among people with mobility and physical impairments in Sweden and barriers for car use. A questionnaire study shows that there is a linkage between driving a car on a regular basis and degree of disability. Furthermore, the same study reveals that the car drivers have more work trips, even when controlling for degree of disability. Moreover, they have a higher fulfilment of travel needs, especially in regard to leisure travels. The focus groups interviews show that the fulfilment of travel needs is essential for the quality of life. Moreover, the study shows that the private car has qualities beyond the fulfilment of travel needs, like control over one's own life, self-confidence and joy. The project has also revealed weaknesses in the regulations for assigning support for car purchase, for car adjustments, and for public car transport service trips.

Background and research questions

The purpose of the project reported here was to understand the impact of the car on mobility and welfare among people with mobility and physical impairments, and to reveal the potential barriers for car use in this group. The focus was on individuals aged 18-69, that is, on people that are old enough to drive a car and that are in the active life phase. It is reasonable to believe that people in this age have different travel needs than older, often retired people.

The major research questions in this study have been the following:

- Is there any association between car use, mobility and welfare among persons with mobility and physical impairments?
 - What is the role of the car both for actual travels to different welfare arenas and for the satisfaction of travels to various welfare arenas?
 - o Is there any association between car use and quality of life?
- Can we identify the various barriers to car use that affect people with mobility and physical impairments?

"Car use" is broadly defined as the use of either private cars or the public car transport service in Sweden, but the main focus has been on private car use as a driver.

Theoretical background

The study uses the definition of welfare given by the Finnish sociologist Erik Allardt (1975). He defines welfare as the degree of satisfaction of needs along three dimensions:

- *To have*. This refers the need for material resources (i.e. work, education, money).
- *To love*. This refers to need for social relations, such a friendship and family ties.
- And finally, *to be*. This comprises the need for self-realization and for positive judgment of oneself (which might be fulfilled through education, work and friendships).

The point of departure for this study is that these needs can to a certain extent be fulfilled on different arenas outside the home, such as at work, at social gatherings or at sport activities. For such participation, transport is essential. A major question in this study was what impact the car would have on the satisfaction of these travel needs.

In order to study the impact of the car on the quality of life, we have used the definition of the term given by the Norwegian sociologist Siri Næss (1974). According to Næss, quality of life includes four major characteristics; That a person 1) is being active, has control of her/his life, experiences the joy of life and is self-realized, 2) has self-esteem 3) has tight and good relations with others, 4) has a thorough feeling of joy, safety and harmony.

Methods

Three different methods were used to explore the research questions:

Focus group interviews. Six interviews were carried out with groups of three to six persons from the Stockholm area. The interviews were used to explore both of the two research questions. In addition, hypotheses were developed in order to be tested in a larger questionnaire survey.

Questionnaire survey. The primary purpose of the questionnaire survey was to explore the differences between those who have a driver's license and those who don't, in regard to opportunities (transport resources, physical ability) for driving a car, degree of car use, travelling and fulfillment of travel needs and in regard to attitudes and judgment of various transport means. The study comprised 1238 people with mobility and physical impairments in Sweden. A precondition for the generalizations of the differences between those who have a driver's license and those who don't is that these two groups do not systematically depart from the same groups in the population.

A study of Swedish *regulations for assigning support* for car purchase, car adjustments and for public car transport trips. The purpose of this study was to explore potential barriers in the regulations that might have an effect on either private car use and/or on the use of the public car transport service.

The relation between the car, mobility and welfare

The main conclusions from the study of the relation between the car, mobility and welfare among people with mobility and physical impairments can be summarized as follows:

- Both the private car and the public car transport service in Sweden are essential preconditions for participation on several welfare arenas.
- There is an association between driving a car and the degree of disability.
- But having a driver's license does not necessarily mean that one drives on a regular basis. Many counterexamples were identified in the survey. In contrast to the ones that do not have a driver's license, this group comprises first and foremost those who have become disabled during the life course (as opposed to being born with a disability). Furthermore, they have a stronger degree of disability than those who drive a car on a regular basis (at least four times a month).
- There is an association between driving on a regular basis and travelling to work ("to have"), where those who drive regularly are more active than those who do not (irrespective of having a license or not). The effect of driving on a regular basis holds even when controlling for background factors such as degree of disability.
- There is an association between car use and the fulfillment of travel needs. Those who do not drive on a regular basis are more likely to have unfulfilled travel needs, especially in regard to the needs "to love" and "to be". This association applies to the ones who state that participation on a given activity arena is possible regardless of their physical impairment.
- These results show that there is an association between using a car and welfare (satisfaction of different needs, as defined by Allardt 1975). To lead an active and independent life is, according to Næss (1974), a necessary precondition for quality of life, thus there is reason to believe that unfulfilled travel needs lead to reduced quality of life.

The car and quality of life

Moreover, the focus group interviews show that the car entails qualities essential to the quality of life, beyond the fulfillment of travel needs, especially compared to the disadvantages experienced when using the public car transport service. These qualities of the car can be related to the Næss's definition of quality of life as follows:

• *Freedom to, independent, control of one's life.* When using the public car transport service one often lacks control of when and where to go, and when to stop. This is mostly due to lack of flexibility in the ordering of a trip and that it is hard to know how long an activity will take. One might for example risk being picked up too early (i.e. a meeting taking longer time than scheduled) or that one has to wait for a driver because the activity lasted shorter than expected. This is the major disadvantage stated in the questionnaire survey. Insecurity of being on time is another aspect affecting the public car transport service, since trips are being shared between several persons, making detours before destination. The

booking system does not allow for many departures within an hour and is thus not open to spontaneity. Moreover, the public car transport system does not allow trips without a well-defined purposed. Thus, one cannot take a trip just for the joy of the ride. Being able to drive a car oneself releases a person from the disadvantages related to the public car transport service, in that one is more free to determine the time and place oneself.

- Driving a car contributes to good self-esteem/self-confidence in at least two different ways. To be able to drive a car gives *freedom from* being dependent on others, something that is probably more important for a group that are in general more dependent on others than the rest of the population. Moreover, driving a car also offers the possibility to be the one that drives others rather than not always being the one relying on others.
- Many of the interviewees experience that, when in a car, even as a car passenger, they do not stand out from the rest. The feeling of being equal and not being stigmatized as a disabled person contributes to good self-esteem/self-confidence when driving or being a passenger in a car.

Mobility demands

- The main advantage with the public car transport service, pointed out in the focus group interview and confirmed in the survey, is that this transport brings you door-to-door. Both the focus groups and the questionnaire study show that public car transport service is used in situations when driving a car or other means of transportation is more problematic, i.e. if one is going to the city centre and it might be difficult to find a parking spot close enough to the destination. Thus, the results indicate that the public car transport service is an important supplement even to car drivers.
- People with a driver's license wish to drive a car more often than they do today, both among those who drive on a regular basis and those who drive less frequently.
- There is a wish to ride as a passenger in a private car more often, especially among those who do not have a driver's license and among those who have, but who do not drive on a regular basis.
- There is a wish to use the public car transport service ("Färdtjänst") more often (irrespective of driver's license holding).
- The greatest wish is, irrespective of driver's license or of how often one drives a car, to use public transport more frequently.
- Both the questionnaire study and the focus group interviews show that the people with mobility and physical impairments would like to be able to use all means of transport and choose according to need and situation.

Bureaucratic barriers for car use

Even though car use is essential for participation on different welfare arenas and for quality of life, there are many weaknesses in the regulations for assigning support for private car use:

- Little information is available on the support service, on how to proceed in order to get support, and on what rights a citizen has.
- A complexity of players involved in the application process.
- The various support services often have differing timeframes. Parking permission for people with disabilities has one, support for car purchase has another, et cetera.
- If you get support to purchase a car, one cannot change it in nine years. This implies that a person has to plan his/hers life for a long time ahead. Will the person get married? Will he/she have children?
- Support for adjustments to a car applies only for one person. If a person with physical disability gets a boyfriend/girlfriend with a similar problem, they cannot use the same car.
- A requirement for getting support for car purchase/car adjustment, is that the car is used for purposes that "benefit society", such as work, studies or rehabilitation. Thus, support for car use just to increase an individual's freedom or mobility is not seen as having a proper purpose.
- The support for car use has a limited annual budget. Those who apply first will have priority before those applying later. The latter may have to wait until the next budget year.

It should be pointed out that there might be local variations in the general regulations for support of car purchase or car adjustments. The support for public car transport service is regulated by the municipality. In our study, the focus was on the regulations for this support in the municipality of Stockholm. Here, we have revealed the following regulatory barriers to using the public car transport service;

- A person gets no more than 72 trips each year. This implies that a person has to plan and distribute his/her trips for a whole year.
- One can apply for "extra trips", but these trips must have a welldefined purpose. Again, one cannot get support just to increase the free mobility of an individual.
- When travelling by the public car transport service, one cannot bring along other people on the trip beyond those to whom the support applies. This implies that in some cases one has to use several vehicles to the same destination.