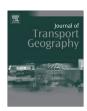
EL SEVIER

Contents lists available at ScienceDirect

Journal of Transport Geography

journal homepage: www.elsevier.com/locate/jtrangeo



Mobility in different generations of older persons The development of daily travel in different cohorts in Denmark, Norway and Sweden

Randi J. Hjorthol ^{a,*}, Lena Levin ^b, Anu Sirén ^c

- ^a Institute of Transport Economics, Gaustadalléen 21, No. 0349 Oslo, Norway
- ^b Swedish National Road and Transport Research Institute, Linköping, Sweden
- ^cTechnical University of Denmarks, Department of Transport, Kgs. Lyngby, Denmark

ARTICLE INFO

Keywords: Everyday mobility Older people Cohort analysis Scandinavia

ABSTRACT

In the Scandinavian countries Denmark, Norway and Sweden, the proportion of older people in the total population is expected to reach about 25% in 2060. The ageing of the population has a variety of social implications. One aspect of population ageing that has relatively little attention in the Scandinavian countries is the question of everyday mobility. The purpose of this paper is to get a better understanding of the activity and travel patterns of different groups of older people, examine how travel- and activity patterns are developing during the life course, study the changes over time and how the "new" generations of older people behave compared to the older ones. The method used is cohort analysis of National Travel Surveys from the three countries in a 20 years perspective. Results show a significant period effect in car ownership and use among older people in Denmark, Norway and Sweden with a clear increase during the past 20 years. This is especially true for women. The increase in the number of driver's licenceholders and car availability is reflected in travel mode choice among older people: both men and women maintain their car-use habits at old age. Another clear finding is that older people today travel more than the comparable age groups 20-25 years ago: everyday trip rates are higher and activities outside home are more common. While commuting and work-related trips decline after retirement, shopping and leisure trips do not start to decline before high age. From the cohort analysis we see that leisure and shopping trips are maintained in the period after retirement, and the car is important to reach shopping malls, health service, leisure activities, visit relatives and other social company.

© 2010 Elsevier Ltd. All rights reserved.

1. Introduction

The developed countries are undergoing a significant demographic change involving the ageing of the population. In Europe, the share of people aged 65 years or over in the total population is projected to increase from 17% in 2008 to 30% in 2060 (Eurostat, 2008). In the Scandinavian countries (Denmark, Norway and Sweden), the proportion of people 65+ years in age is expected to be about 25% in 2060 and it is likely that this population will be a heterogeneous group in regard to both age and other characteristics (Eurostat, 2008; Brunborg and Texmon, 2009).

The ageing of the population will have a variety of social implications for, among others, the care and health systems, the labour market and pensions, and has put the issue squarely on the sociopolitical agenda. One aspect of population ageing that has received

relatively little attention in the Scandinavian countries, however, is everyday mobility of the ageing population in the transport system (Levin et al., 2007). Ageing and transport have some important societal implications.

First, mobility is closely connected with the well-being and health of older people (Banister and Bowling, 2004). Mobility and the ability to get out of the home are essential in their quality of life (Farquhar, 1995). Being unable to drive is one of the strongest predictors of increased symptoms of depression among older people (Marottoli et al., 1997), and an individual's ability to use the transportation system freely has long been defined as one of the seven important areas in the Instrumental Activities of Daily Living (IADL) of the elderly (Fillenbaum, 1985). Providing satisfactory opportunities for independent travel and mobility will support the older population in independent living and well-being.

Second, it is likely that the travel demands of older populations will have an impact on the entire transport system, i.e. in shaping the way transportation is planned, organized and managed. Older

^{*} Corresponding author. Tel.: +47 22573800/+47 22573867; fax: +47 22609200. E-mail address: rh@toi.no (R.J. Hjorthol).

populations may also form a significant transport resource providing informal transportation to other older persons and grandchildren, for example.

In 2005, about 95% of the age group 35-55 years held a driving licence in Norway (Denstadli et al., 2006). In Denmark and Sweden, the proportions were a little lower, but the tendency is the same (SIKA, 2006; Kjær, 2005). Previous research indicates that these generations will most likely keep their licence into old age (Golob and Hensher, 2007; Hakamies-Blomgvist et al., 2005; Hjorthol and Sagberg, 2000; Rosenbloom, 2001; Wretstrand et al., 2009). Improved health conditions, active lifestyles, increased access to a car and, for some groups, higher income create possibilities and needs for more varied activities and extended travel than for the previous generations of older persons. On the other hand, a large proportion of the new generation of the elderly will belong to the oldest group, i.e. those 85 years of age and older who may have problems related to travelling – walking and use of a car, or getting on and off public transport. Understanding the travel needs and travel patterns of these different groups of older people will be a challenge for traffic and transport planning authorities. Yet, in the Scandinavian countries, little research has been done on the ageing population's various activities connected with travel needs.

Most research on the elderly and their daily travel, especially by car, has been done in the USA (Nordbakke, 2006), where people tend to be older when they stop driving than in Europe (Hakamies-Blomqvist et al., 2004). Individuals who do not have a driving licence or access to a car are much more dependent on others to fulfil their activities than Europeans in general (OECD, 2001). In the USA, there has been an increase in car-use, number of trips and proportion of driving licence-holders among elderly persons. Those with no access to a car, however, have problems getting around, and a large majority is women (Rosenbloom, 2001).

Car-use among the elderly in European countries has also increased over time; for example, in England (Oxley, 2000), Sweden (Krantz, 1999; Dillen, 2005), Denmark (Magelund, 2001) and Norway (Hjorthol, 2004). The same studies also indicate gender differences. In general, the proportion of women holding a driving licence is smaller than it is for men. Some studies have differentiated more between groups of elderly. Hildebrand (2003) identified six lifestyle groups among elderly people 65 years and over in Portland. A national study in Finland found that mobility problems in the elderly population were significantly related to the absence of a driving licence, and that older women did not have the same option to drive as often as men did (Siren and Hakamies-Blomqvist, 2004).

Since the car is important for the activities of elderly people, it would be of interest to know at what age car driving ceases. In a British study in 1996 the average cessation age for car driving was 72 years (Rabbit et al., 1996). Rimmö and Hakamies-Blomqvist (2002) show that there is a significant reduction in car driving from the age of 75 years in Sweden. Another Swedish study indicates that women stop driving earlier than men (Dillen, 2005), and the same has been found in Finland (Siren and Hakamies-Blomqvist, 2004). These are mostly cross-sectional studies and, as such, provide information about what is happening in an age group at a specific period.

In the present study, data from the National Travel Surveys in Denmark, Norway and Sweden from respectively 1981/1985 and 2005/2006 were analysed. These datasets provide a unique opportunity to follow cohorts or generations in a 20/25 years perspective and to study the parallel development of daily mobility in three countries. This type of analysis makes it possible to examine three effects: the *cohort effect*, i.e. the effects of belonging to a specific generation; *the period effect*, i.e. the time period between surveys and what is happening in this period; and the *age effect*, i.e. the effects of growing older. All are dealt with in Section 3.2.

The aim was, first, to get a better understanding of the activity and travel patterns of different groups of older people, where gender and age are important variables, and to scrutinize the distribution of transport resources as an indicator of welfare, and, second, to examine travel and activity patterns during the life course. In other words, which activities cease with age and which remain? And how important is age compared to the (historical) period people live in? The cohort analysis will be helpful in distinguishing between the different effects. A third aim was to identify the changes that have taken place over time and to some extent foresee how the "new" generations of older people act compared to the older ones?

Before presenting the data and results, we introduce a theoretical framework of the relation between welfare and mobility and end the paper with a summary and discussion.

2. Welfare and mobility

In order to grasp the connection between travel and welfare, we applied Allardt's (1975) theoretical framework defining welfare as satisfaction of needs related to three aspects of life or welfare dimensions – *having*, *loving* and *being*. Allardt's definition of wellbeing (or happiness) is the subjective experience of these three welfare dimension. We are leaning on Allardt's definitions of welfare and well-being in this paper.

Income, standard of housing, employment, health and education are classified as *having*. Relations with family, friends and other social relationships are connected with the dimension of *loving*. Self-esteem, leisure activities, social reputation, political resources are aspects of *being*. These components are partly values by themselves, partly resources (Allardt, 1975), and they are important both as input in a welfare arena and as results. Employment, i.e. having a job, provides income and at the same time is often an important aspect of self-realization. Thus, employment can be seen as belonging to both *having* and *being*. Welfare is measured by indicators of these three dimensions, and changes in welfare as changes in these indicators.

We connected travel activity to this theoretical model of welfare and well-being, seeing mobility and transport resources as remedies and tools satisfying needs in welfare arenas. Access to transport resources contributes to possibilities for attending different welfare arenas, and mobility and travel are rough estimates of participation. Simplified, we might say that holding a driving licence, having access to a car, being able to go on shopping trips, service trips and commuting are indicators of having; visiting trips and chauffeuring are expressions of social interaction - of loving; while trips connected with different types of leisure activity can be seen as indicators of being. Some of the transport indicators can satisfy various needs. Studies among the elderly in rural areas in Norway indicate that the possibility of being able to shop is seen as important for welfare and well-being because not only is it necessary in mastering daily life, it is also very often combined with socialising (Hjorthol et al., 2009).

The differences in welfare in the three arenas are reflected in the activity patterns and mobility of different groups. Changes in the indicators can be seen as changes in welfare. Mobility and travel can be considered as rough indicators of welfare, but they are difficult. They are not like other resource components, for instance education and income, the more of which one has the more of an advantage it is. Commuting long distances is usually not an advantage, but not having the possibility to take a job because the transport resources are inadequate or unavailable might be worse. But if friends or relatives live beyond a comfortable walking distance, accessible transport, private or public, is important. The main point is the possibility to satisfy these social needs, needs which might also be satisfied by other means (e.g. telephone or other information and communication media), and which in turn might give

Download English Version:

https://daneshyari.com/en/article/1059650

Download Persian Version:

https://daneshyari.com/article/1059650

Daneshyari.com