MOBILITY PATTERNS AMONG OLDER PEOPLE IN SWEDEN: A STUDY OF WOMEN'S AND MEN'S EXPERIENCES AND MODAL CHOICES FROM A LIFE COURSE PERSPECTIVE

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SUMMARY

In Europe people in urban areas, generally have access to some sort of public transport (PT). Sweden is one of the European countries with high level of ambition trying to increase the proportion of the older and impaired travelling with PT. Since a few years ago there is a programme about to increase accessibility and user-friendliness, and the program declares PT should be accessible for all older and impaired persons. However, this is not yet the case. Still many older persons (65+) do not use ordinary PT at all. The purpose of the present study is to investigate older people's visions of their opportunities to use various transportation modes for daily travel and especially their experiences of PT.

Methods and materials: in total 30 individual in depth interviews and 9 focus groups with older people. The youngest is about 62 and the oldest is 93 years.

Some of the informants in the study (more men than women) never or very seldom go by bus even if there is a bus stop close to their home. Whereas many of them travel a lot and use different transport modes frequently. The study shows there are pertinent gendered variations in the use of transportation modes. The differences are not always due to issues of accessibility, but rather to habits and life course trajectories. According to the stories told by older informants from both urban and rural areas, it is concluded that habits and experiences during the life course influence the travel mode choice and options in later life. Previous mobility patterns have an effect on mobility patterns today. It was also found that the informants in this study travelled a lot more than expected from the researchers in the beginning of the study: one or two trips out of the home every day are not unusual. Even among the oldest, for example 80-90-year old people, many like go on trips for shopping, and visit recreation centres, restaurants, and to see children, grandchildren and friends several times a week.

How the mobility patterns are accomplished and accounted for by the subjects' in this study contradicts previous apprehensions about the increasing number of older people with unfulfilled mobility needs. Mobility barriers are noticeable but also strategies the interviewees have developed to make every day travel work.

We conclude that service route traffic and flex routes provide better travel opportunities for older people with minor disabilities than ordinary public transport. However for those who are not experienced at booking their trips, the requirement of doing so seems to be a barrier to their travelling. Also waiting time and the inconvenience of not being able to control the travel agenda by themselves could be barriers. On the other hand, ordinary public transport is considered to be too busy,

too crowded and sometimes the interviewees worries if they could not find a seat on the bus. Many older people are quite aware of their abilities and they choose transport mode according to both their life experiences and the current situation. To add knowledge about older people's experiences and choices from a life course perspective, will increase readiness to understand their mobility patterns now and in the future.

Key Words: modal choice, experience, life course, older people, mobility.

INTRODUCTION

In Europe people in urban areas, generally have access to some sort of public transport (PT). Sweden is one of the European countries with high level of ambition trying to increase the proportion of the older and impaired travelling with PT. Since a few years ago there is a programme about to increase accessibility and user-friendliness, and the program declares PT should be accessible for all older and impaired persons. However, this is not yet the case. Partly due to the conditions of PT but partly also due to their own experiences and travel trajectories, many older persons do not use ordinary PT at all. We argue that modal choice can be analysed from a life course perspective.

PURPOSE OF THE STUDY

The purpose of this paper is to discuss results from empirical studies of older people's visions of their opportunities to use various transportation modes for daily travel and especially their experiences of PT. Here the definition of "older people" is following the retirement age i.e. about 60-65 years and over.

MATERIALS AND METHODS

The basis for the analysis is in total 30 individual in depth interviews with older people living in two middle sized Swedish cities and surrounding areas, of who also 15 persons wrote travel diaries during two weeks, and 9 focus groups with older people living in the capital of Stockholm and in a rural area of Sweden. The youngest informant is about 62 and the oldest is 93 years. The data collections were carried out in 2008 and 2009. The results in this paper is based on qualitative content analysis of the interviewees own stories (narratives).

POINTS OF DEPARTURE

Mobility among older people is considered important from the perspective of well-being and quality of life, as a means to reach desired places and out-of-home activities (Alsnih & Hensher, 2003; Banister & Bowling, 2004; Farquhar, 1995; Hjorthol, Levin, & Sirén, 2010; Metz, 2000). Older people today travel more than previous generations and for many retired people, men especially, car driving has

developed to being the dominant transport mode. On average people in Sweden travel 45 kilometre per day (Westin & Vilhelmson, 2011).

Among older people in general, the use of conventional public transport (PT) is quite low. For example, previous research in Sweden (Svensson, 2003; Transek, 2005) shows that about 40 per cent of the older population do not use public transport at all and that only about 5 per cent of everyday journeys among older people in the year 2000 were accomplished using conventional public transport (60 per cent of the journeys were by car) (Svensson, 2001).

From previous studies we know that in Norway, 5 per cent of daily trips were by public transport in the age group 67–74 years in 2009 (Vågane, Brechan, & Hjorthol, 2011) and in Sweden about 8 per cent of all trips in the older age group were done by public transport (Transek, 2005). Comparisons with other Western countries show that older people generally avoid travelling in public transport (Currie & Delbosc, 2010; Levin, Ulleberg, Siren, & Hjorthol, 2012; Mitchell, 2001; Rosenbloom, 2001a, 2001b, 2003, 2009; Whelan, Langford, Oxley, Koppel, & Charlton, 2006). However, there are differences between countries and within countries, often due to the transport service provided for older and disabled people.

Accessibility measures are considered necessary if older people's travel needs are to be met. Recent projects show that the use of public transport among older people can increase in areas where specific measures (e.g. service buses) have been implemented to meet the needs of the older population (see for example Göteborgs stad & Västtrafik, 2010), but some studies also show that despite such objective accessibility measures, journeys with public transport among older people do not increase to the extent expected (cf. Wretstrand, Svensson, Fristedt, & Falkmer, 2009). During the past two decades, several studies have been carried out in Sweden showing that the theory of the design of public transport in urban areas has improved to meet the experiences and needs of disabled and ageing people (cf. Arnör, Pettersson, & Folkesson, 2006; Björnehult, Ingelsson, & Rosén, 1996; Lindahl, 2007; Lindahl & Odebo, 2007; Linder, 2007; Ståhl, 1996; Ståhl, Brundell-Freij, & Makrí, 1993; Ståhl & Ivarsson, 2007; Ståhl & Petzäll, 1997; Westerlund, 1991; Wretstrand, et al., 2009). Accessibility measures in the past ten years have been taken from the theory level to practice. The policy assumes that no community can be fully served with just one transport mode. Solutions are based on various combinations of buses, trams or metro-trains, service routes and flex-buses, and the special transport service (STS) for disabled people (Ståhl, 2000; Ståhl, et al., 1993).

A model developed for urban public transport solutions based on three levels:

1. Traditional Fixed Route Service. Standard 12-metre low-floor buses, trams or metro-trains supporting the mass transportation of people with little or no mobility limitations.

2. Service routes, fixed routes or flexible routes on demand. These are usually operated by smaller low-floor buses routed as closely as possible to where people live and to service centres and health facilities. This sort of service mainly serves older and disabled people who have difficulty using the ordinary

Fixed Route Service.

3. The Special Transport Service (STS). Special mobility services available to people who are seriously disabled and require door-to-door transport and/or more personal assistance. The STS is mainly operated with taxi-cars or multi-purpose vehicles.

Special transport services (STS), traditionally demand-responsive, eligibility-restricted door-to-door services, are provided for people with severe functional limitations who cannot use ordinary public transport. Recent research investigations show that there are variations between the Scandinavian countries, but also within these countries. In Scandinavia counties or municipalities are required to provide STS services, although in many counties/municipalities there is extensive development of alternatives and also restrictions in STS eligibility in order to control the costs. There are variations in how STS is organized; for example, in the number qualified to receive STS, the extent to which they may use it, and the number of trips each traveller can go on (Levin, et al., 2012). The back ground for measures done to increase older and disabled people's access to ordinary public transport, is in many cases connected to an aim of reducing individual solutions i.e. traditional STS operated with taxi cars and a high level of individual service. Previous research has also shown that there are many obstacles standing in the way of increasing older people's use of public transport, including service routes and flex routes. Underlying reasons mentioned were difficulty "boarding/alighting" and a feeling of insecurity when travelling alone. One conclusion is that the answer "boarding/alighting" probably meant more than actually getting on and off the high platform, since only low-floor vehicles were in use in these municipalities. Far more men answered that they travelled by car rather than bus, while women preferred STS (Wretstrand, et al., 2009). In this study we take a life course perspective and discuss on older people's travel mode choice from their experiences and daily activity (cf. B.-M. Öberg, Närvänen, Näsman, & Olsson, 2004; P. Öberg, 2002).

RESULTS

We think that service route traffic and flex routes provide better travel opportunities for older people with minor disabilities than ordinary public transport. In spite of many accessibility measures there seems to be barriers to their travelling but also strategies which will be illustrated in a few examples from the interview data.

Example 1
Zohreh 75, Lkpg C:

Often I get a seat on the bus, but it happens also that there isn't, then it was a little weird with a walker, no one who tried to offer help and it sometimes happens that when I see that it is full of people I step off and try to call transportation service, I cannot be bothered to stand so much.

Ofta får jag sittplats men det händer också, att det inte finns sen det var lite

konstigt med rollator, ingen som försökte erbjuda hjälp och det händer ibland att när jag ser att det är fullt med folk så stiger jag av och försöker ringa färdtjänst, jag orkar inte stå så mycket.

Example 1 shows some obstacles when going by ordinary bus, e.g. taking the walker on the bus and on the bus sometimes difficulties finding a seat. In his example Zohreh tells a story about herself and also what she has seen during her bus travels. Her story highlights different moments in the travelling which is important for how the journey will be perceived. The moment when she looks for a seat is important for how she may go on with the trip. Sometimes she steps off because the bus is full. Taking public transport always also means some other out-of-home movement before the stops or share-points are reached (e.g. walking, bicycling). Examples of restrictions might be long walking distance to the bus stops, stairs, travel centres and other interchange points at different levels/floors, timetables that are not synchronized or buses that do not fit people's daily activity habits. From the interviews in this study it is pertinent that the small details constructing the whole journey. There could therefore be a need to understand the *whole journey*. The outcome from previous research is that public transport measures promoting older people's mobility are not possible without the entire journey being considered.

Some of the interviewees in the study (more men than women) never or very seldom go by bus even if there is a bus stop close to their home. Whereas many of them travel a lot and use different transport modes frequently. The study shows there are pertinent gendered variations in the use of transportation modes. The differences are not always due to issues of accessibility, but rather to habits and life course trajectories. However, the place of living is of course important. Next example (2) illustrates how a 71 year old man living in the countryside considering his car driving habits.

Example 2
Bengt 71, Landet Jkpg:

It is, well to hope it gets ... a future like today. You can drive as long as possible. And then, when they cannot solve it, then ... I do not know. Have not thought so much about the future.

Det är väl att hoppas det blir... en framtid som idag. Man kan köra bil så länge som möjligt. Och sedan, när man inte orkar med det, då... vet jag inte. Har inte tänkt så mycket… about the future

Some women mentioned that they have thought about their travel in the future will consist of more bus trips when they plan to move to where public transport is. In example 3 Inga tells about how she will organize her life later on.

Example 3
Inga 69, Landet Jkpg:

When we move from our agency in the country, I will have to plan so that we can ... make use of public transport later. / ... / Then I will have the bus stop outside.

När vi ska flytta från vår fastighet på landet så ska jag ju planera så vi kan… använda oss av kollektivtrafiken sen. /…/ Då ska jag ha busshållplatsen utanför.

The women in the present study describe the bus in more positive terms than men. Many of those who want to travel by bus believe that the bus is a good means of transport and describe it in certain ways: efficient, safe, environmentally friendly and economically efficient. More women than men in the study also describe that they are happy to choose other means of travel instead of the car in order to be able to relax, watch and meet other people, but also to have some time for themselves.

Since women travel more often than men by public transport in younger ages, we assume this result could be a travel trajectory which is grounded earlier in the life course. Women in this study also demonstrate a high degree of competence in using public transport where they live, combining different modes, minimizes costs in different ways and traveling together.

Example 4
Marta 90+ Lkpg C:

M / ... / is it that if I can take the bus, I do it.
I: Do you think it is nicer or easier to take the bus or ...?
M / ... / nicer, more pleasant to ride the bus than the transportation service. For the during the trip I will always be in contact with other people, both at the bus stop and the bus and there is always someone to talk to and I'm happy to talk, haha

M: /…/ är det så att jag kan ta buss så gör jag det.
I: Tycker du att det är trevligare eller enklare att ta bussen eller…?
M: /…/ trevligare, trevligare att åka buss än med färdtjänst. För då kommer man alltid i beröring med någon människa både på busshållplatsen och i bussen och det är alltid någon att prata med och jag är glad för att prata, haha

It also seems that personal preferences, previous life style for example, play an important part in activity patterns of the seniors today. As Marta tells in example 4 she likes to meet and talk to other people and thus she likes to go by bus instead of special transport service. It is nicer to be one who can travel with ordinary buses than one who needs special treatment in the transport system (e.g. STS). This is a rather typical statement from our interviewees. They are reluctant to use their STS eligibility because of inconveniency with the booking system, waiting time and also feeling uncertainty because they could not control the travel by their own agenda. Also service routes are considered inconvenient if they include a booking system.

According to the stories told by older interviewees from both urban and rural areas in this study, it is concluded that habits and experiences during the life course influence the travel mode choice and options in later life. Previous mobility patterns have an effect on mobility patterns today. It was also found that the interviewees in this study travelled a lot more than expected from the researchers in the beginning of the project: one or two trips out of the home every day are not unusual. Even among the oldest, for example 80-90-year old people, many like go on trips for shopping, and visit recreation centres, restaurants, and to see children, grandchildren and friends several times a week. Also small movements seem to be important in their daily life, such as going for at daily walk to the grocery.

Example 5
Inga-Maj, 80, Stockholm:

Yes I want to come out every day to go for a walk and if nothing else, I will go to the grocery, yes I have no home service yet, more than with cleaning.

Ja jag vill ju komma ut varje dag för att gå och om inte annat så handla, ja jag har inte hjälp än, mer än med städning.

Shopping trips, leisure trips and service trips are dominant travel aims in this study. Also trips for social activities are pertinent, e.g. taking care of grandchildren. Noteworthy is that all sorts of trips can include some sort of social activity or be an activity for social purpose by itself (cf. Levin, 2009).

DISCUSSION

A demographic change inevitably leads to societal change in the future which also may concern the transport system. Thus we expect that a society with a large population of older people with a high level of activity, and travel habits which are established during the entire life course, will post many questions about environmental impacts, traffic safety, urban planning and accessible public transport solutions. Studies in Sweden and other Nordic countries show that it is not until high age that the patterns of activities and travel are reduced (cf. Hjorthol, et al., 2010; Westin & Vilhelmson, 2011).

However, the mobility patterns accomplished and accounted for by the subjects' in this study to some extent contradicts previous apprehensions about the increasing number of older people with unfulfilled mobility needs. Even the oldest people in this study are travelling a lot more than we expected. Men and women in their 90s walk quite long distances and a few of them still drive a car. Most of them are active in planning their own mobility. Also some of the oldest interviewees in this study travel by ordinary public transport, in combination with their eligibility to special transport service.

The result from this study also confirm previous research about older people's travel habits – many of today's retirees and future retirees have adapted their life pattern after the car, especially men. Women are more comfortable with taking the bus and

particularly appearing from the study is how some of them talk about future living near the bus stop to be sure to maintain their activity patterns and mobility needs. The image of older peoples' travel choice is complex, since both ability and health conditions may vary not only between groups but also between individuals. Thus, for the same individuals, modal choice may vary from one day to the next. Thus their opportunities to use the transport system need to be various, e.g. eligibility to use STS when they need and also ordinary public transport with high accessibility and design meeting an ageing society's active mobile citizens. Our study shows that many older people are quite aware of their abilities and they choose transport mode according to both life course experiences and the current situation.

CONCLUSION

Mobility barriers are noticeable but also strategies the interviewees have developed to make every day travel work. To add knowledge of this kind, about older people's experiences and choices, will increase readiness to understand their mobility patterns now and in the future. It means to understand older people's travel mode choice from a *life course perspective* is in fact a combination of *former travel trajectories, their preferred activities and their depending on present day occasions and health status*.

From the interviews in this study it is pertinent that the small details constructing the whole journey. There could therefore be a need to understand the *whole journey*. The outcome from previous research is also that public transport measures promoting older people's mobility are not possible without the entire journey being considered.

We conclude that various forms of service route traffic and flex routes provide better travel opportunities than ordinary public transport for older people with minor disabilities. However for those who are not experienced at booking their trips, the requirement of doing so seems to be a barrier to their travelling. Also waiting time and the inconvenience of not being able to control the travel agenda by themselves could be barriers. On the other hand, ordinary public transport is considered to be too busy, too crowded and sometimes the interviewees worries if they could not find a seat on the bus.

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