Examining the process of driving cessation in later life

Dr Charles B A Musselwhite (corresponding author)
Senior Lecturer in Traffic and Transport Psychology
Centre for Transport & Society
University of the West of England
Frenchay Campus
Coldharbour Lane.
BRISTOLBS16 1QY. United Kingdom.
T: +44 (0)117 32 83010
Email: Charles.Musselwhite@uwe.ac.uk

Ian Shergold
Research Associate
Centre for Transport & Society
Faculty of Environment and Technology
University of the West of England
Frenchay Campus
Coldharbour Lane
BRISTOL BS16 1QY. United Kingdom.
Telephone: +44 (0)117 32 81178
Fax: +44 (0)117 32 83899
Email: Ian2.Shergold@uwe.ac.uk

Abstract

Driving cessation for many older people is associated with a poorer quality of life and can lead to health problems such as depression. This paper aims to reveal the process of giving-up driving, examining in particular triggers for giving-up driving, how information on alternative modes of transport is sought and how new transport and travel behaviour is integrated into older people's lives. It examines the challenges faced and how these are overcome and what impact the process has on self-reported quality of life, as articulated by the participants themselves. To this end, twenty-one individuals from three locations in the United Kingdom (UK) were followed over a period of ten months, through five waves of data collection. Each participant took part in three interviews, a focus group and completed a diary of travel behaviour. Findings suggest that although a similar pattern was found between the trigger and life post-car, not all older people go through the stages of giving-up driving in the same way. Instead, a range of responses are seen, from contemplation of gradually reducing driving, through to stopping abruptly, with the route taken having consequences for the eventual outcome for any individual. Triggers for contemplating driving cessation could be varied and often involved health and social factors. Importantly, people who engaged in pre-planning reported a relatively higher quality of life beyond the car, whilst for those who were more reactive and engaged in little or no pre-planning a poorer quality of life resulted. In addition (and in conjunction with planning), other factors, such as flexibility in travel destinations, the role of family and friends, and wider support networks are also seen as important. With such evidence of the importance of pre-planning it is suggested that more could be done to support giving-up driving and encouraging contemplation at a younger age to mitigate the negative effects experienced by some.

Keywords

Driving, quality of life, cars, qualitative, independence.

Introduction

From the age of fifty, people's travelling tends to decrease both in terms of numbers of journeys made and the distance travelled (DfT, 2010). This reduction is partly explained by a change in lifestyle, for example retiring from work, but in addition, changes in physiology and cognitive ability can make it harder and indeed sometimes impossible to move or perform the actions required to travel. It is often thought that the car is the panacea to this problem, enabling older people to move distances with minimum amounts of physical and cognitive effort, compared to that required in other more active modes (such as walking, cycling). The car also reduces the 'inconveniences' of public transport that older people are less able to deal with given changes in their physiology, for example having to carry shopping, or waiting for long periods of time at a stop. Eventually though for many older people the physiological and cognitive effort is too much for safe driving, and driving has to stop. In fact, declining health is often a predictor of this outcome (Hakamies-Blomqvist and Wahlstrom, 1998; Marottoli et al., 1997). There are though of course other factors not directly linked to physical health which can also be motivators for giving-up driving, for example increased nervousness behind the wheel (Persson, 1993).

Being mobile in later life has been linked with a reduction in older people's quality of life. The concept of quality of life is usefully classified in three ways, objective life conditions (the external assessment of individuals and their circumstances), subjective wellbeing (personal satisfaction with their current lifestyles) and personal value attachment, (individuals weigh up their objective life conditions and subjective wellbeing giving various weights to different elements that vary between people) (Felce and Perry, 2001). Perhaps not surprisingly, giving-up driving for older people is often associated with a range of negative impacts. Previous research around older people and driving cessation has found a reduction in quality of life, as measured through either subjective wellbeing (Ling and Mannion, 1995; Schlag, et al., 1996) or personal value attachment (Carp, 1988; Ieda and Muraki, 1999; Lawton and Nahemow, 1973). In some instances, giving-up driving has also been linked with depression, as measured on a validated depression scale (Fonda et al., 2001; Marottoli et al., 1997).

It is not just a reduction in the ability to fulfil day to day needs as conveniently and quickly as possible that is missed when giving-up driving, but also an affective component including reduced independence and status and of being out of step with societal norms and roles (Musselwhite and Haddad, 2010b). The car is linked to identity, self-esteem, autonomy and prestige (Ellaway. et al., 2003; Guiver, 2007; Steg, 2005). For older people in particular, driving is linked to personal identity and is associated with masculinity, youthfulness, status and power and it can be seen as a way of "warding off old age" (Eisenhandler, 1990; Siren and Hakamies-Blomqvist, 2005). The car also fulfils another level of needs identified by Musselwhite and Haddad (2010b) in that older people travel for its own sake, to "get out of the house", to visit nature, the sea and to test their own skills. This leads to what is viewed as discretionary travel, the needs of which are hardly met at all following giving-up driving (Musselwhite and Haddad, 2010b).

The negative effects of a lack of mobility associated with driving cessation can to an extent be mitigated by the availability of lifts from family and friends or through the availability of alternative and accessible modes of transport (Musselwhite and Haddad, 2010b). However, psychological

barriers affect the usage of these alternatives, with for example, older people not wanting to feel a burden to others and not being able to reciprocate lifts given (Taylor and Tripodes, 2001). In addition, geographical barriers effect the willingness of people to provide lifts and the availability of viable public or community transport (Musselwhite and Haddad, 2010b).

The UK has a relatively liberal driving license policy (licences expire at age 70 and must be renewed through self-declaration of fitness to drive), thus in most instances, the decision to stop driving remains with the driver themselves. Driving cessation is often closely linked to medical conditions, implying perhaps a clear role for healthcare professionals to be involved in the decision making process. It is suggested that older people favour their doctor having a role in decision-making and in initiating discussions over driving cessation (Coughlin et al., 2004), but this appears to happen irregularly (Hawley, 2010). More usually, the process often involves family members and is often not instigated by the person who is the target of the possible cessation. As Coughlin et al. (2004) point out, however, the discussion with family members is not always harmonious and although almost 60% followed the advice given by family members, over half of these were upset by the decision. Some older drivers self-regulate, gradually reduce driving by for example not going out at night, or in the rush-hour, and avoiding difficult turns and motorways (Baldock et al., 2006; Holland, 2001; Musselwhite and Haddad, 2010a; Rabbitt et al., 1996; Rabbitt and Parker, 2002). In addition, some older people seek out advice or training on their driving skills (Musselwhite and Haddad, 2010a; Musselwhite, 2010). Although it seems this is to reaffirm their ability to drive rather than to enable them to cease driving. What is not so well known is the reasons for following different pathways to giving-up driving and what the consequences are of individuals following different paths through this decision-making process and whether broader categorisations of differences might be developed. For example, older men in particular being more likely to refute advice given by doctors or friends that they should give-up driving (Coughlin et al., 2004).

In line with previous research on driving cessation amongst older people (e.g. Siren and Hakamies-Blomqvist, 2005; Steg, 2005), this paper takes the stance that travel behaviour cannot be viewed in isolation to its wider social context (Musselwhite et al., 2010a,b; O'Connor, 2002) and hence decisions made about mode of travel (e.g. choosing whether to use public transport, to walk, to cycle or to use a car) and behaviour therein (e.g. driver behaviour, user behaviour) are intrinsically linked to social processes. It takes the concept that to understand travel behaviour the wider context within which decisions are made must be investigated, including for example the role of family and friends, travel needs and desires and barriers and frustrations. The research reported here has allowed participants to discuss the process as they go through it, so that the findings are very much bottom-up in line with the work of Siren and Hakamies-Blomqvist (2005) and Steg (2005). It also addresses some shortcomings in previous research which has often been limited to using methods that investigate the effects of giving-up driving on older people who have already given-up or will in the future give-up driving (Musselwhite, 2010; Musselwhite and Haddad, 2010a,b; Siren and Hakamies-Blomqvist, 2005; Steg, 2005; Liddle et al., 2008). As a consequence of the latter, little is currently understood about the process older people go through when they give up and how this affects their life beyond the car. The process is known to be important as it contains efforts to seek out further information of alternative travel which may have varying degrees of success in effecting the subjective wellbeing component of their quality of life beyond the car (Musselwhite, 2010; Shergold et al., 2012). In addition, it contains vital affective and social information and dialogue between friends and family that help meet needs post the car (Musselwhite,. 2010). So whilst others

have proposed stages that are common to all those experiencing driving cessation (e.g. Liddle et al., 2008) the exact nature of the process has previously not been researched and documented, which may mean vital nuances of behaviour are left unknown.

This paper looks to redress some of the deficit by following a group of older people through the process of driving cessation, from contemplation to completely giving-up the car. It aims to map the process, examining in particular triggers for stopping, how information on alternative modes of transport is sought and how new transport and travel behaviour is integrated into their lives. It aims to detail the challenges faced and how these are overcome and what impact the process of giving-up driving has on the self-reported, subjective wellbeing aspect of quality of life, as articulated by the participants themselves (this paper will not attempt to measure quality of life through standardised tools or means, rather rely on participants to express this themselves). It will also look to detail any differences between different groups or categories of older people based on how they go through the process of driving cessation.

Method

Design

This paper reports on a study that followed a selection of older people as they went through the process of giving-up driving, documenting decisions made at various stages, examining how travel needs change and the subsequent effect on subjective quality of life. In order to collect data from the participants as they went through the process and gather data, a mixed method approach was adopted utilising interviews, focus groups and travel diaries.

Participants

Recruitment occurred via two main channels. First, adverts were placed in local papers near to Bristol in the South West of England, UK. Secondly, recruitment occurred via two established groups of older people, one in Porthcawl, Wales UK and one in Titchfield, Hampshire, England, UK. Each area was selected on the basis of establishing a rural (Porthcawl), semi-urban (Titchfied) and an urban (Bristol) area, since travel behaviour patterns and potential travel opportunities vary based on density of population and type of location (Musselwhite, 2010; Musselwhite and Haddad, 2010b). In all cases the same recruitment message was written asking for volunteers who were considering giving-up driving and were likely to give-up driving over the next six months to take part in a series of focus groups, interviews and diary keeping. Such instructions brought forward some 60 participants, 31 from Bristol, 12 from Porthcawl and 17 from Titchfield. A total of 25 participants actually fitted the criteria in that they were still driving prior to recruitment. The other 35 had either already given-up driving (n=32) or were not drivers (n=3). Subsequently, four of the 25 are not included in this analysis, two dropped out (one from Bristol and one from Titchfield) and two did not give-up driving (both from Porthcawl) during the nine months of the study, resulting in 21 participants, with ten from the Bristol area (urban), six from Titchfield (semi-urban area) and five from Porthcawl (rural).

Background details of the participants were captured. The sample consisted of 12 males, 9 females, an age range of 69 to 86 and a current driving mileage (prior to giving-up) of between 1,000 miles over the past year to 10,000. All owned their own vehicle, and held a full UK driving licence. One person had two endorsements (both three-point penalties for speeding) and two had one

endorsement (both people's points were for speeding). A total of 12 lived with a partner, 8 lived alone and 1 lived with his daughter and her family. All except the latter owned their own home (although three were still paying a mortgage and so did not officially own the home outright). Health data was collected through a self-report method during the first interview. Initially participants were asked to declare any long term illness they suffered, as well as any health problems that had caused them to alter their everyday activities in the previous three years. Self-reported health varied amongst the group, from five stating their health was excellent, no long terms health problems and nothing that had impaired everyday activity in the last three years, through to three who had within the previous three year had serious medical conditions that restricted their movement (e.g. two with strokes and one a broken hip). The qualitative self-report method was chosen to reduce problems of misinterpreting questions and intended meanings in answers that can occur on self-reported health questionnaires (see Mallinson, 2002).

Procedure

The engagement phase lasted ten months (between March and December 2010 inclusive) and involved five waves of data collection with the participants.

Wave 1, which took place in March 2010, involved a semi-structured in-depth individual interview (Chilban, 1996; Johnson, 2002) examining induction and contemplation carried out with the researcher and each participant in their home, lasting around one hour. An interview was selected at this stage to establish a bond with the participant in order to create a foundation for continued involvement and support throughout the research. This involved capturing travel and driving history, background characteristics, health and family status. In addition, basic level information was sought on motivations for travel, mode used and attitudes to traffic and transport, based around questions asked in similar previous research (Musselwhite and Haddad, 2010b). Finally participants were asked about their motivations for giving-up driving. Apprenticing technique was used to collect data on travel behaviour. This is a technique based on a research method used in computer software requirements and needs elicitation (see Holtzblatt and Jones, 1993; Robertson and Robertson, 1999) whereby the interviewer gets the participant to talk through their current transport behaviour step by step as if they were an apprentice learning a trade, the interviewer asks questions and repeats the process back at the end for verification and the process continues until the teacher is happy the apprentice understands the process.

Wave 2 involved the completion of a travel diary by the participants by hand. The travel diary was designed to collect qualitative and quantitative data that would be discussed at a subsequent interview, rather than be a standalone data collection method. A diary was selected as an appropriate tool for this wave of data collection as it helps elicit issues and problems as they occur rather than simply relying on a retrospective process in interviews alone. It was based on traditional travel diary (e.g. Buliung and Remmel, 2008; Butcher and Eldridge, 1990) but also borrowed elements of social diary making (Plummer, 2002). The final product was similar to that used in previous research to glean travel and driver behaviour in Musselwhite and Haddad (2007, 2010a,b) and consisted of a proforma to log every journey, mode, distance, date and time and any noteworthy events that took place around physical, geographical, economic, social or skill based activities for each journey. Participants were handed the diary and given completion instructions during wave 1 interviews and given an example of a completed proforma. They were asked to log

one month's details. The details of these diary logs were then discussed both at the subsequent focus groups (wave 3) and interviews (wave 4).

Wave 3 (June 2010) looked at alternatives beyond the car in three in-depth semi-structured focus groups (Bloor, 2001; Fern, 2001) established by location, one took place in the urban location (Bristol) with 11 participants, one in the semi-urban location (Titchfield) with five participants and one in the rural location (Porthcawl) with five participants. The social setting of the focus group allowed a generation of ideas amongst the participants, particularly useful when discussing differences between situations they are in now and possible futures This wave looked at differences between contemplation and actuality of giving-up driving, which was ideal in the social setting as in all groups there were two sets of individuals, those who had by then given-up driving and those who were still contemplating (6 given-up, 5 contemplating in Bristol; 3 given-up and 2 contemplating in Titchfield and 2 given-up and 3 contemplating in Porthcawl). In addition, attitudes to alternatives to the car were explored, including availability of and perceptions of public, active and virtual mobility, again using a schedule adapted from Musselwhite and Haddad (2007, 2010a,b).

Wave 4 (September 2010) was a second chance for a semi structured interview with each participant. The interviews again took place in the participant's home offering them the chance to reflect in a more private situation on the discussions held in the more public arena of the focus groups at Wave 3 – interviews lasted just under one hour each. These interviews focussed on the barriers to giving-up driving but also the potential benefits to giving-up driving. A time-series interview took place, logging linearly contemplation and perceptions to each issue over the past year or so.

Wave 5 (November - December 2010), the final wave, consisted of another semi-structured interview with each participant. An interview was selected to allow for more private contemplation and reflection on the process of giving-up driving that had taken place over the previous 8 months. Here all 21 participants whose data is covered in this paper had given-up driving and hence it was time for the participants themselves to reflect on the process drawing out issues that had worked better than expected and those that were worse than expected. It gave the participants a chance to offer recommendations based on their own experience to other (albeit hypothetical) individuals. It also asked questions about how quality of life in general had changed in relation to giving-up driving.

Analysis

Findings from the interviews and focus group were transcribed verbatim following each wave of data collection. Given the amount of data collected across the five waves, data was managed using a structured matrix mapping process (as has been used previously in large scale qualitative data analysis e.g. Musselwhite et al., 2010; Owens et al., 2008) based around thematic analysis proposed by Aronson (1994) and Leninger (1985). The data is subjected to a thematic analysis and placed within a matrix developed around the key concepts being collected at each stage. Room is made for the matrix to expand based on new key themes that are found in the data and alternatively other themes are collapsed together on closer inspection where they are found to be addressing very similar issues. This process is an adapted version of the template approach which allows data to be compared and placed within initial templates, but also allows for further elaboration or adaptation

of the templates (see Denzin and Lincoln, 2005; Miles and Huberman, 1994; Silverman, 2001). As Leininger (1985) proposes many themes do not develop until the data itself is analysed, so space must be kept for this to happen. Themes are then constructed into a valid argument based on propositions made by Aronson (1994). Within case matching of themes occurred to detect consistency and discrepancies followed by between case analysis addressing consistency, similarities, differences and discrepancies. Linkages of similar and dissimilar themes are then mapped. The data from each wave was then subjected to a further level of scrutiny at the end through comparing themes across the different fields and detecting units of meaning that are similar and distinct. Elements of similarity and difference are in particular noted in the subsequent narrative (Aronson, 1994) and are reported in the findings section that follows.

To help manage and structure the data that came from different stages of data collection, a model of 'phases' was adopted as a wrapper or framework overarching the thematic analysis. A model of phases that accords with that developed by Liddle et al (2008) in their work on older people and driving cessation was used, where people went through were 'predecision','decision' and 'post-cessation' when giving-up driving. These addressed becoming aware of the need to stop driving, making (and owning) the decision to stop, and then finding new ways of mobility (and coming to terms with them). The model was used so that the participants in this current study experienced these same phases, but the research approach here facilitated an understanding that people gave more or less time, or emphasis to each of them, and crucially took a pro-active or reactive stance to the change. This understanding has allowed the process (and variation in it) to provide a more detailed framework on which to explore the findings from this study.

Findings

The findings are presented in terms of a linear process that accords with the Liddle et al (2008) model involving 'predecision', 'decision' and 'post-cessation'. In each case the themes as derived from the thematic analysis are presented.

For the first section of the findings, consideration is given to the overall process that participants went through. Beginning with the 'trigger' for change, followed by an information gathering phase for life beyond the car, and trials of other transport modes and patterns of compensating for the loss of the car before a final consolidation of these changes into a life beyond the car. In the second half of the findings, there is an exploration of how different groups of people encounter the stages differently, along with the subsequent effect this might have on their subjective quality of life and wellbeing. It is acknowledged of course that such a process may vary for different people and that the type of data collected here limits how far a single model might pertain to a wider sample of the population. However, it is the case that all participants went through the same key stages.

Findings: Process of giving-up driving

Key events as triggers to contemplation about giving-up driving

The process of giving-up driving often seemed to stem from a significant realisation that driving may not be something that can be continued any longer. For some people this might be driven by a key event, sometimes linked to a (potentially) dangerous incident,

"This woman stepped out in the road and I nearly hit her…. I mean I'm only getting worse, so I think its time to stop" (male, aged 82)

Alternatively, it could be exposed through more trivial experiences around their ability to park or manoeuvre for example

"I got down the town and couldn't park. I tried it again and again….and I thought that's it. That's enough. I can't do this anymore" (male, aged 80)

The trigger may not be directly related to driving and be derived from a wider physiological decline or a health issue (and concerns about the possible consequences as a driver),

"When I had a stroke …..that got me thinking, what if I had a stroke at the wheel" (female, aged 81)

Role of society, family and friends in the decision-making about giving-up driving

The realisation of a decline in driving ability can also be coupled with a confirmation from others (often family and friends), before contemplation of driving cessation really begins. It also seems to be the case that in some instances such a trigger can actually be proactively sought by older people,

"I asked my son one day and he said look dad, you are getting a bit dangerous yes. I started planning to retire from driving then" (male, aged 88)

For some people the trigger was related more widely than transport, to more social elements, and occasionally it was linked to views coming from other people, from wider society or the media,

"I saw a documentary and then there was a radio phone-in. It took me a while, then I thought cor this is actually about me, now. I suddenly realised I was old and needed to be more careful. It was that that started me thinking" (female, aged 75)

There was almost unanimous acknowledgement by the participants that giving-up driving had the potential to affect their quality of life, but the subsequent phases show how that motivates people in different ways, some more proactively seeking to maintain (or even improve) quality of life, others through a resigned acceptance it will be worse.

Information gathering on alternatives to driving

Whatever the trigger was for people, a period of contemplation then began. This may involve acquiring information on alternative transport in order to continue to be able to access current commitments and engagements and maintain current levels of quality of life as best they could,

"So, the first thing I did was check how I can carry on getting to my yoga class, that was even before I started looking for something that'd get me to the shops" (female, aged, 74)

This might involve practical considerations such as locations, costs and timetables, but having acquired this information this may then create uncertainty, or even discourage people from giving-up driving,

"It'd be the end of me going to my singing. I love my singing too. I just can't get there on the bus. It doesn't go anywhere near the village hall you see" (female, aged 70)

But it may not just be practical information, it can also be necessary for some to acquire what might be best termed 'informal information', such as the norms associated with a new mode of travel, and

this can be less easy. There is also an affective component in people's decision making about alternatives, where individuals judge whether they view themselves as identifying with that mode of transport, perhaps particularly pertinent in the realm of dial-a-ride and community transport services,

"Well, do I really need to use community transport? Is it really for someone like me? I might be a bit sprightly for that aren't I? It's not really fair if I use that." (male, aged 76)

Participants then began to put the information they had acquired into practice and changes to behaviour were then made by trying out the new travel modes and behaviours before a more settled pattern of travel behaviour ensues. As an example, the knowledge gleaned about the norms of transport were sometimes further tested through trial and error and this was evaluated before altering new patterns of behaviour,

"Yes, its trial and error. I went once and it was full of kids. So I tried the later one." (female, aged 78)

Findings: How the process effects self-reported quality of life

The research sought to understand how far participants' subsequent quality of life was altered following giving-up driving and in particular note how the process the participants had been through had effected their quality of life. A total of fifteen (nine female, six male; seven from urban areas, five from semi-urban and three from rural areas) reported their quality of life had not dramatically declined (with some noting improvements in certain aspects as outlined below), and six (all male, three from urban, one from semi-urban and two from rural areas) reported their quality of life had dramatically declined.

Quality of life not adversely affected – the importance of home and 'local'

People who maintained a high quality of life post-driving had engaged not just with no modes of travel but moreover different travel patterns. They discussed how elements more local to them had become more salient and important. This had often been a revelation which had helped them realise there is less need for travel,

"I am happy, yes still. I'm enjoying life. Even without my wheels. It hasn't effected me like I thought it might or like you hear you know. I'm happier not working now, spending more time at home. I still get out and about and realise I don't have to do so much" (male, aged 80)

It helped them re-engage and connect with the local environment, for elements such as shopping,

"I don't go into the city anymore anyway for shopping. I do it all locally. Less hassle, less bustle. You know. And I like it. I know what to expect. I know the shopkeepers, the locals!" (female, aged 80)

And (re)discovering hobbies that can be done locally,

"You begin to notice things more close, well in your home. I think it happens with having more time and being around the home more. So I'm in the garden more. I know it's a cliché! But since retiring I love my gardening. I don't see the need to travel.... most of my time is now spent here. Which is really great" (male, aged 80)

Individuals with a good quality of life post-car almost exclusively carried out a great deal of planning for a life after driving. There is evidence of both thoughtful contemplation about the process of giving-up driving, stemming back over several years in some cases, and also much deliberate thought gone into issues about travel and transport in the future. This had involved collection of formal and informal travel information and also much personal research about what other people in similar situations had done. Their planning had not ended yet either and much thought was going into the next stages of their lives,

"Well H and S use the local community bus. It's great. Takes them to do the necessaries you know. Like shopping, drawing their pension and going to the doctors. So I am looking into that now for me for the next few years, you know, I see that could be useful" (female, aged 70)

The role of family as support can maintain quality of life

Some individuals continued to have a decent quality of life post-car even if they had not planned well in advance. Those who had a relatively sudden decision to stop had a reduction in quality of life mitigated by having close family and friends who were around to help out,

"Since the car's gone you do miss it. I'd be lying otherwise. And it is frustrating to rely on others for getting things and getting out. But I remain content. Happy that I have the support. For some others they haven't got that." (female, aged 80)

Quite often the family had been involved in the whole process, right from the initial trigger through to support with lifts even while the person still drove, which then continued after driving, meaning most practical concerns over going shopping, to the hospital and the doctors were met.

"My daughter told me I had to give-up. It came as a surprise she said that to me. Big surprise. I hadn't realised I'd got that bad. Well, she said it with tears in her eyes, so I think I thought she's being really genuine here" (Male, aged 78)

"I got a lift with P to the library event every now and then, other times I'd drive myself. I'd give him a lift too" (male, aged 79)

In addition, some discretionary travel was also evident, especially where families were really close, both in a geographical and a personal sense.

The closeness of the relationship with family (or sometimes close friends) is further evident in the theme of reciprocation. For example, where lifts could not be given in exchange for those given-up driving, it was important to be able to offer other ways of saying thanks, like buying the food when out,

"So <my daughter> takes me to the hospital and on the way back we always stop for a meal or for chips and I pay. It's my treat. And it's a way of saying thank you and possibly offering a contribution to petrol and that" (female, aged 80)

Consolidation into new behaviour patterns for most of this group happens relatively quickly, whether that is on public transport, walking or with lifts and after a period of sharing driving with these new modes, driving is given-up altogether.

Poor quality of life post-car

Those participants who suffered with a much poorer quality of life post-driving, all six of them male, were often bitter and angry and were suffering difficulties in acclimatising, often drawing on the wider significance of the event to life in general,

"I suppose that's it now. A general sense of life being over… I mean what have I too look forward to really. It does get me down. Everything I enjoyed is not possible to do anymore" (male, aged 81)

This was coupled with a lack of planning. The trigger had either been an acute health episode resulting in instructions to give-up driving by their doctor or their insurance company. Two participants had had keys taken away by a family member. All had been heavy and habitual car users and although the thought of no longer driving had crossed their minds, none of them had ever seriously contemplated it, let alone made plans for life beyond the car,

"I suppose that it's something I never really contemplated. I thought I'd always drive. I couldn't, and maybe I still can't, imagine life well having a life without the car" (male, aged 81)

They were not actively searching for information and all had relied on friends and family to tell them about walking and using public transport. They had used public transport but were very negative about its role. They tended to feel that the alternatives available to them were of poor quality

"The bus I am using now. It takes twice as long as it did to drive… Also, it's expensive and only runs every other hour" (male, aged 79)

It was frequently believed there was no alternative transport provided. This was true even in focus groups situations where they met people who lived in the same area as them who had managed to make alternative travel arrangements. They still firmly believed they themselves were at a disadvantage and that others were not. In general, they were unable to move past feeling incensed at this disadvantage and this made them angry and upset,

"So I now miss out on seeing my family when I want to. I used to go round my daughters for Sunday lunch. I can't now, there is no buses" (male, aged 81)

In conclusion for those individuals who had poorer quality of life beyond the car, in all cases the trigger and control over the decision to cease driving was held by someone other than the individual concerned.

Discussion

Across the participants in this study, those who appeared most satisfied after ceasing to drive were those who had been 'long-term' planners and self-reported subjective quality of life beyond the car is maintained when meticulous planning, especially through gathering of information, takes place. For them, new forms of independence had been achieved through changes in mode, but also changes in destination and a re-appraisal of their local environment. Negative experiences with transport modes had been gradually eroded over long-periods of deliberation and trial and error. Trade-offs had been achieved between accessing services, shops and places they had been

accustomed to using in light of new travel patterns using new modes. This had resulted in feelings of achievement for using and mastering new modes of transport. In addition, novelty of trying out new areas for shops and services had contributed to a positive sense of exploration. However, the most positive individuals had trialled this over long periods of time (around 1-5 years amongst this group) and had gradually weaned themselves off driving. The time taken perhaps being a measure of the dependence on the car felt by those individuals, or a reflection on the alternatives available (or perceived to be available).

It was beyond the scope of this research to investigate whether long-term planners were a subset of the population who were regular planners for other events in their life. It was evident, however, that some were clearly motivated to plan meticulously by the anxiety of losing the mobility that the car had afforded.

This paper suggests older people who have family and friends intervening and providing lifts were generally satisfied with life beyond the car, and this approach was evident among the short-term planners. Lifts enabled this group to largely continue in similar patterns of travel for shopping and for accessing services, although the frequency might be less than when they could drive. Hence, they remained satisfied at being able to access vital destinations as when they had a car. For some the sharing of lifts gave them a sense of closeness with their family, which perhaps for some had been missing previously. Hence, the reduction of travel independence is replaced by enhanced social interaction with family and friends. This was not the case for all participants in this study, however, and for some there was a lack of family or friends living close-by meaning lifts were impossible and hence the frequency of trips was hugely reduced and this could result in some detrimental effects. It is also the case that a reliance on family for lifts may be misplaced, as Rosenbloom (2010) found that some children may have reservations about the 'burden' of replacing their parents previous mobility in this way. On a more positive note though, giving up the car had allowed some of these individuals to explore new places with friends and family that they did not go to when they were driving themselves. This was especially true in terms of what traditionally might be termed non-essential travel, to visit nature, just to see places and enjoy being out (see also Davey, 2007 and Musselwhite and Haddad, 2010).

The participants who had to be give-up driving immediately, with no time for contemplation or trialling other transport, clearly found no longer driving hugely debilitating and were finding it very difficult to adapt and cited having a worse quality of life as a result. It could be argued that these individuals had left it too late and need to contemplate it earlier. In particular being told to stop by family members or healthcare professionals was seen negatively by this group. Individuals who did little or no planning tended to blame external factors for the lack of transport options, there was no public or community transport, or that the service was poor. In all cases the lack of alternatives was not their fault and was out of their hands. This was evident when they met other people from the same area who had been planners, who they believed were lucky to have good public or community transport in their area, rather than being a result of good planning. This is in line with theory, for example, O'Connell (2002) suggests that a 'fundamental attribution error' leads people to overestimate the impact of factors in the environment or situational influence on own behaviour, while underestimating the impacts of the same factors on the behaviour of others. They believed that others actually had more access to public transport, for example, whereas actual provision was the same and it was the planning that had led to knowledge and use of transport. In addition, 'Actor-

observer differences' might explain why an individual's own situation is perceived as a result of situational and contextual factors leading to it, whereas another's situation may be more likely to be attributable to personal factors or characteristics.

From the small number taking part in this study, it is hard to quantify numbers of people who successfully give-up driving, as articulated by maintaining quality of life, compared to those who have a reduced quality of life. Similarly, those who fall into categories of planners, those more reliant on family and friends and those who have had to give-up relatively suddenly need further investigation with larger subsets of the population. Finally, although there are links in this study between length of time planning and quality of life post-driving, it is not possible to generalise from this with any certainty to the general population, in this and other countries. Further research is suggested to discover how prevalent such categories are in different populations.

Although there is a need to be tentative with the small sample, there seems to be a gender split emerging, with the beginnings of a pattern that suggests males are more likely to have to be told to give-up driving, than females who are more proactive. This could be a result of their relationship with the vehicle prior to giving-up driving and previous transport history. Musselwhite and Haddad (2010b) suggest that older females view their car in more practical terms, males much more likely to note the affective qualities of a car. Rothe (2004) notes that the car extends masculinity and normalness for men well into later life which suggests reluctance to let go of something fundamental to their identity. For females driving is more about enabling multiple identities, fulfilling tasks and roles (Siren and Hakamies-Blomqvist, 2005). This more practical view of driving may explain why they are willing to look for alternative means of transport earlier on in life in order to keep these tasks and roles going. For example, men discussed their cars more in terms of relating or amplifying status and roles, females more in terms of something useful for getting from A to B quickly, efficiently and safely. It could be argued that practical values are more easily substituted for other means if relevant information is sought and that affective values are perhaps less transferable to other modes, making it harder for males to give-up the car. It could also be argued that females are more likely to have used a variety of modes during their lifetime than men (DfT, 2010; Siren and Hakamies-Blomqvist, 2005) and hence are more primed and find the adaptation to using different modes beyond the car easier. In any case further research into male and female differences and giving-up driving is suggested as appropriate, especially investigating the social and affective side of transport and gender difference.

What emerges as crucial in the process of giving-up driving is where the locus of control lays in the process. For most participants in the study the decision to give-up stems from the individual themselves and this aids the planning process and allows the individual to be happier beyond the car. The benefits of being in control are true for those who take a long time planning the change as well as for those who do little planning. Previous research has highlighted how important this sense of control over mobility is to older people. For example, Webster, et al. (2002) cited the ability "to go where you want to" as one of main advantages of cars and driving for older people. Metz (2000) refers to the importance of *potential travel*, which he describes as the knowledge that a trip could be made even if it is not actually undertaken. Independence that travel affords has been well documented (e.g. Burns, 1999; et al., 2000), but the additional sense of control the car creates is important. It is well documented that perceived control is vitally important to people's health and happiness (Langer and Rodin, 1976) and a lack of perceived control over life can lead to learned

helplessness and depression (Seligman, 1975). In respect of driving cessation, 'owning the decision' to give up has been seen to be important to ex-drivers irrespective of the actual extent of control that they exercised over it, and some may even retrospectively alter their perception of how involved they were in the process (Liddle et al., 2008). It is also suggested that feeling that you are in control of this process may help mediate depression for those stopping driving, even if this is achieved through some form of 'cognitive reappraisal' (Windsor et al., 2007).

One distinction between long-term and short-term planners though seems to be in the role of family and friends in life beyond the car. Those who take the long-term approach do not want to be a burden to their family and friends and wish to remain independent in their transport choices. Their approach is meticulous and, and over time they plan to reduce and then eventually give-up driving. It is not quite clear which of the two motivations: the will to remain an independent traveller or the need not to burden family and friends is strongest as both are present in the discussions amongst this group. Further research could try to examine this relationship more closely. The short-term planners had family and friends who were willing to take responsibility for lifts, and there seems to be a shared attitude and norm amongst some families that adult children will help out when individuals have given-up the car. This is further enhanced if the relationships with the family are generally very supportive and the older person giving-up driving is able to ask for the lifts without feeling a burden. This is maximised when the older person feels they can ask for lifts beyond practical day to day necessity to those discretionary journeys that are very important to wellbeing (Musselwhite and Haddad, 2010b; Steg, 2005). Perhaps some, or all, of this group would have been long-term planners if family and friends had not intervened and given help and lifts. Reciprocation aids the process, too, but people have different understandings over what they can offer, for example some are happy to offer food in exchange for the lifts. Families seem to have an unwritten rule about this that extends back in time and is often not linked to travel and transport, which may not have been openly discussed; perhaps families have helped each other out throughout life and this continues into older age. However, previous research suggests about 60% of older people view discussion about driving with friends and family negatively (Coughlin et al., 2004), hence how it is approached and the pre-existing relationship is crucial to success of family and friends helping in later life.

Where alternative transport is provided, consideration of information provision needs to be addressed. Information must be targeted at all levels of need highlighting how the alternative transport can meet practical, affective and aesthetic needs. For example, information about public transport must go beyond formal timetable and destination provision to supporting and helping with norms of travelling by public transport (Gilhooly et al., 2002; Musselwhite, 2010). In addition, it is clear that for some individuals information alone is not enough; people will not seek information that they do not think they need yet (Shergold et al., 2012). Hence, there is a need to raise into consciousness the potential need for someone to give-up driving. The findings suggest older people should consider giving-up driving from a much younger age and practical and emotional support is needed to both prompt and support giving-up driving. Musselwhite (2010) suggests the idea of a social travel group, run-by and for older people to give both practical and emotional support as older people cease driving. Such a group would give training for driver improvement but also act as help for using alternative transport, perhaps promoting buddying support for those wishing to try out alternative transport. There is also the need to encourage older people to be more multi-modal and try out alternative means of transport and this should happen from a much younger age. It is wise to

encourage being multi-modal throughout life and governments should continue to emphasise the importance and promoting of alternative modes to the car for all members of society and should not single out older people, alone.

Conclusion

This study has illuminated the process that older people actually experience when they give up driving. It builds on existing understandings of the 'process' by identifying differences of approach and outcome in terms of quality of life. It seems that those that plan ahead, who accept and embrace a change in travel patterns, and flexibly change destinations of journeys have the prospect of a better quality of life beyond the car. The importance of the locus of control cannot be overlooked though, and for an individual giving up driving, remaining in control or allowing some control to be relinquished to family and friends is key. The role of the family is also vital in raising awareness of the need to give-up driving early on and perhaps in some instances reducing the need for as much (meticulous) planning through practical and emotional support. Evidence from this study also suggests that less habitual travel needs, and multi-modality prior to giving-up driving are also important beneficial behaviours in this respect (although there would be merit in further testing these points on a wider sample of the general population to substantiate these findings). In this study, it was the 'reactive' group who tended to be the most depressed about life beyond the car, yet this segment was probably under-represented in the sample. The proportion of people not pre-planning or contemplating giving up driving is potentially higher in the wider population - given that this study asked for participants already contemplating giving-up. Thus some wider statistical analysis of the prevalence and depth of this group in the population would also be beneficial in better understanding the scale of this group in society.

The study shows that it is disingenuous to accept that patterns of travel that occur in younger life can be sustained throughout life. Planning for giving-up driving in older age needs to occur much earlier in life, including reducing reliance on the car, reducing habitual patterns of travel and mode choice and altering origins and destinations in line. Overall, there is a great need to discuss travel within family and friends and to normalise the giving-up process. Hence, it is suggested that people spend time gradually reducing their car driving in later life and replace it with a new schedule of travel behaviours. Developing the ability to flexibly change destinations of journeys will also be vitally importance to quality of life beyond the car. This further highlights the importance of peer group support who could help practically and psychologically for life beyond the car (Musselwhite, 2010) or personal travel planning to tailor changes to individual travel behaviour (Parker et al., 2007). There is also a need for health professionals to play a greater role in helping older people transitioning to a life beyond their car. This highlights the need for a discussion earlier on in life.

Pre-print version of: Musselwhite, C.B.A. and Shergold, I. (2013). Examining the process of driving cessation in later life. European Journal of Ageing. 10(2), 89-100

References

Aronson, J. (1994) A pragmatic view of thematic analysis. *The Qualitative Report, 2(1).* Found at http://www.nova.edu/ssss/QR/BackIssues/QR2-1/aronson.html (last accessed 9th January 2012)

Baldock, M. et al. (2006). Self-regulation of driving and its relationship to driving ability among older adults, *Accident Analysis and Prevention*, 38: 1038–1045.

Berry, C. (2011). *Can Older Drivers Be Nudged? How the Public and Private Sectors Can Influence Older Drivers' Self-Regulation.* England: RAC Foundation and ILCUK.

Bloor, M. (2001) *Focus groups in social research.* Sage: London.

Buliung, R. N. & Remmel, T. K., (2008). Open source, spatial analysis, and activity-travel behaviour research: capabilities of the aspace package. *Journal of Geographical Systems*, **10(2),** 191-216.

Burns, P.C. (1999), Navigation and the Mobility of Older Drivers, *The Journal of Gerontology*, **54B (1)**, 49-55

Butcher, R. & Eldridge, J. (1990) The Use of Diaries in Data Collection, *The Statistician*, 25-41.

Carp, F.M., (1988). Significance of mobility for the well-being of the elderly. In: Transportation Research Board (Ed.), *Transportation in an Aging Society: Improving Mobility and Safety for Older Persons, vol. 2*. National Research Council, Washington, DC, pp. 1–19.

Chilban J. (1996) Interviewing in Depth: the Interactive Relational Approach. Thousand Oaks, California: Sage.

Coughlin, J., Mohyde, M., D'Ambrosio, L.A and Gilbert, J. (2004). *Who Drives Older Driver Decisions?* AgeLab/The Hartford. Available at http://stuff.mit.edu/afs/athena/dept/agelab/news_events/pdfs/AgeLab_driver_decision.pdf (last accessed 9th January 2012)

Davey, J. A. (2007). Older people and transport: coping without a car. *Ageing and Society,* **27,** 49-65

Denzin N. & Lincoln Y. (2005) *Handbook of Qualitative Research*. *3rd edn*. Thousand Oaks, California: Sage.

DfT (Department for Transport) (2010) *Transport Statistics Great Britain 2010 Edition.* London: Department for Transport.

Eisenhandler, S. (1990). The asphalt identikit : old age and the driver's license. *International Journal of Aging and Human Development*, **30(1**), 1–14.

Ellaway, A., Macintyre, S., Hiscock, R. & Kearns, A. (2003). In the driving seat: psychosocial benefits from private motor vehicle transport compared to public transport. *Transportation Research Part F*. **6**, 217-231

Pre-print version of: Musselwhite, C.B.A. and Shergold, I. (2013). Examining the process of driving cessation in later life. European Journal of Ageing. 10(2), 89-100

Felce, D., & Perry, J. (2001). Quality of life: The scope of the term and its breadth of measurement. In R.I. Brown (Ed.), Quality of life for people with disabilities (2nd ed., pp. 56–71). London: Stanley Thornes (Publishers) Ltd.

Fern, E.F. (2001) *Advanced Focus Group Research*. Sage: California

Fonda, S. J., Wallace, R. B., & Herzog, A. R. (2001). Changes in driving patterns and worsening depressive symptoms among older adults. *Journal of Gerontology: Social Sciences,* **56B(6),** S343-S351

Gilhooly, M.L.M., Hamilton, K., O'Neill, M., Gow, J., Webster, N., Pike, F. and Bainbridge, C. (2002) *Transport and ageing: Extending quality of life via public and private transport*. ESCR Report L48025025, Brunel University Research Archive. Available at: http://v-scheiner.brunel.ac.uk/bitstream/2438/1312/1/PDF%20ESRC%20Transport%20Final%20Report.pdf Accessed 19th April 2012

Guiver, J. W. (2007) Modal talk: discourse analysis of how people talk about bus and car travel, *Transportation. Research Part. A* 41:3, 233–248

Hakamies-Blomqvist and L. Wahlstrom, B. (1998). Why do older drivers give-up driving? Accident Analysis and Prevention, **30**, 305-312

Hawley, C. (2010). *The Attitudes of Health Professionals to Giving Advice on Fitness to Drive*, Road Safety Research Report 91, London: Department for Transport.

Holland, C. (2001). *Older Drivers: a Review*, London: Department for Transport.

Holtzblatt, K., and Jones, S. (1993) Contextual Inquiry: A Participatory Technique for System Design. In *Participatory Design: Principles and Practice.* A. Namioka and D. Schuler, Eds., Erlbaum, Hillsdale, NJ,.

Johnson J. (2002) In-depth interviewing. In: Gubrium J, Holstein J, eds. *Handbook of Qualitative Research*. Pgs. 103–19. Thousand Oaks, California: Sage

Kostyniuk, L. P., Shope, J. T., & Molnar, L. J. (2000). Driving reduction/cessation among older drivers: Towards a behavioural framework. In *9th International Association for Travel Behaviour Conference, Gold Coast, Queensland, Australia, July 2-7, 2000.*

Ieda, H. & Muraki, Y., (1999). Can improved mobility raise the elderly's sense of fulfilment? Japan Railway & Transport Review, **20**, 14–21.

Langer, E.J. & Rodin, J. (1976). The effects of choice and enhanced responsibility for the aged: A field experiment in an institutional setting. *Journal of Personality and Social Behaviour,* **34,** 191-198.

Lawton, M.P. & Nahemow, L., (1973). Ecology and the aging process. In: Eisdorfer, C., Lawton, M.P. (Eds.), *The Psychology of Adult Development and Aging.* American Psychological Association, Washington, DC.

Leininger, M. M. (1985). Ethnography and ethnonursing: Models and modes of qualitative data analysis. In M. M. Leininger (Ed.), *Qualitative research methods in nursing* (pg. 33-72). Orlando, FL: Grune & Stratton.

Pre-print version of: Musselwhite, C.B.A. and Shergold, I. (2013). Examining the process of driving cessation in later life. European Journal of Ageing. 10(2), 89-100

Liddle, J.,Turpin, M., Carlson, G and McKenna, K., 2008. The Needs and Experiences Related to Driving Cessation for Older People. *British Journal of Occupational Therapy*, **71**,379-388.

Ling, D. J. & Mannion, R. (1995), Enhanced Mobility and Quality of Life of Older People: Assessment of Economic and Social Benefits of Dial-a- Ride Services, in *Proceedings of the Seventh International Conference on Transport and Mobility for Older and Disabled People*, Vol. 1, DETR, United Kingdom.

Mallinson, S. (2002). Listening to respondents: A qualitative assessment of the Short-Form 36 Health Status Questionnaire. *Social Science & Medicine*, **54,** 11-21.

Marottoli, R.A., Mendes de Leon, C.F., Glass, T.A., Williams, C.S, Cooney, L.M., and Berkman, L.F. (2000) Consequences of driving cessation: decreased out-of-home activity levels". *Journals of Gerontology: Series B, Psychological Sciences and Social Sciences,* Vol 55B (6), S334-S340.

Marottoli, R. A., Mendes de Leon, C. F., Glass, T. A., Williams, C. S.,Cooney, L. M., Berkman, L. F., & Tinetti, M. E. (1997). Driving cessation and increased depressive symptoms: Prospective evidence from the New Haven EPESE. *Journal of the American Geriatrics Society,45*, 202–206.

Metz, D. (2000). Mobility of older people and their quality of life. *Transport Policy*, **7**, 149–52.

Miles M & Huberman A. (1994).An Expanded Sourcebook: Qualitative Data Analysis, 2nd edn. Thousand Oaks, California: Sage

Musselwhite, C.B.A. (2010). The role of education and training in helping older people to travel after the cessation of driving*. International Journal of Education and Ageing*, **1(2),** 197-212

Musselwhite, C.B.A., Avineri, E., Susilo, Y.O., Fulcher, E., Bhattachary, D., Hunter, A. and Stockley, R. (2010). *Understanding the public attitudes to road user safety: Final report. Road safety research report No.111*. DfT: London

Musselwhite, C.B.A. and Haddad, H. (2010a). Exploring older drivers' perception of driving. *European Journal of Ageing,* **7(3),** 181-188.

Musselwhite, C. and Haddad, H. (2010b). Mobility, accessibility and quality of later life. *Quality in Ageing and Older Adults***, 11(1),** 25-37.

O'Connell, M. 2002. Social psychological principles: 'The group inside the person'. In Fuller, R. and Santos, J. A. (eds.) *Human Factors for Highway Engineers.* Amsterdam: Pergamon. pp. 201–215.

Owen, R., Sweeting, A., Clegg, S., Musselwhite, C. and Lyons, G. (2008). *Public acceptability of road pricing*. Final report, Department for Transport, London

Parker, J, Harris, L., Chatterjee, K., Armitage, R., Cleary, J. and Goodwin, P., (2007). Making *Personal Travel Planning Work: Research Report.* Integrated Transport Planning Ltd. Report to Department for Transport.

Persson, D. (1993) The elderly driver: deciding when to stop. Gerontologist, **33,** 88-91

Plummer, K. (2002) *Documents of Life,* Allen & Unwin: London.

Pre-print version of: Musselwhite, C.B.A. and Shergold, I. (2013). Examining the process of driving cessation in later life. European Journal of Ageing. 10(2), 89-100

Rabbitt, P., Carmichael, A., Jones, S., and Holland, C. (1996). *When and why older drivers give up driving*. AA Foundation for Road Safety Research

Rabbitt, P. Carmichael, A., Shilling, V., and Sutcliffe, P.. (2002). *Age, Health and Driving*, Age and Cognitive Performance Research Centre/AA Foundation.

Rabbitt, P. & Parker D. (2002). *The Ageing Driver*: A Programme of Research, London: Department for Transport.

Robertson, J. and Robertson, S. (1999). *Mastering the Requirements Process.* Reading, MA: Addison-Wesley

Rosenbloom, S., 2010. How adult children in the UK and the US view the driving cessation of their parents: Is a policy window opening? *Journal of Transport Geography*, 18(5), pp.634-641.

Schlag, B; Schwenkhagen, U & Trankle, U. (1996). Transportation for the Elderly: Towards a User-Friendly Combination of Private and Public Transport, *IATSS Research,* **20(1)**.

Shergold, I., Parkhurst, G. and Musselwhite, C. (2012). Rural car dependence: an emerging barrier to community activity for older people? *Transportation Planning and Technology,* **35(1),** 69-85.

Seligman, M. E. P. (1975) *On depression, development and death*. San Francisco: Freeman.

Silverman D. (2001) *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction. 2nd edn.* London: Sage.

Siren, A. & Hakamies-Blomqvist, L. (2005). Sense and sensibility : a narrative study of older women's car driving. *Transportation Research, Part F: Traffic Psychology and Behaviour,* **8**, 213–28

Steg, L. (2005). Car use: lust and must. Instrumental, symbolic and active motives for car use. *Transportation Research Part A*, **39**,147–162.

Spinney, J.E.L., Scott, D.M., and Newbold, B.K. (2009) Transport mobility benefits and quality of life: A time-use perspective of elderly Canadians, *Transport Policy*, **16(1),** 1-11.

Taylor BD and Tripodes S. (2001) The effects of driving cessation on the elderly with dementia and their caregivers. *Accident Analysis Prevention*;**33**:519–528.

Webster, N., Gow, J., Gilhooly, M., Hamilton, K., O'Neill, M. & Edgerton, E. (2002) Transport barriers to activity in old age. Active Ageing: Myth or Reality? (In *Proceedings of the British Society of Gerontology 31st Annual Conference,* 12th-14th September 2002, University of Birmingham) pp117-121, ISBN: 0704423669.

Windsor, T., Anstey, K., Butterworth, P., Luszcz, M., and Andrews, G., (2007) Role of perceived control in explaining depressive symptoms associated with driving cessation in a longitudinal study. *Gerontologist*, 47(2), 215-23.