

**Rural car dependence: An emerging barrier to community activity
for older people**

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Community activity is a key contributor to quality of life for many older people. It also plays a role in the wellbeing of the communities they live in. Mobility, though, is central to such activity, and thus a conceptual link is proposed between ‘mobility capital’ and wider community sustainability. In developed nations older people comprise a growing share of rural populations and thus are of increasing importance to rural community sustainability, yet their mobility can be problematic. The paper contends that mobility is further compromised by an increasing focus on the car as the rural transport solution. To explore this hypothesis, the community interactions of a sample of rural elders living in Southwest England and Wales is examined, drawing on a survey and semi-structured interviews. Key findings were the localised nature of most journeys and the wide range of transport modes used. Although car availability was important, it was not a panacea. Given the importance of community activities to individuals and their communities it is concluded that more emphasis should be placed in rural transport policy on facilitating short-range travel for social purposes, including walking, cycling and the use of mobility scooters.

Keywords: older people; rural; community activity; social capital; mobility capital; wellbeing

1. Introduction

The continuing growth in both the number, and proportion, of older people in rural communities in developed nations (Oxford Consultants for Social Inclusion, 2009; UN, 2009) may have wider impacts on the sustainability or viability of those communities. This paper explores the issue through an examination of rural ‘community activity’ as a key driver of quality of life for both individuals and their communities. Older citizens are identified as being over-represented as actors in such community activity and engagement (DCLG 2010), which is perhaps a reflection of their greater capacity for involvement, yet they experience particular constraints on their physical mobility. At the same time, notwithstanding the rise of telecommunications and ‘virtual presence’, it is still the case that physical movement remains central to most of this activity. Thus the combination of older citizens’ importance to community engagement and the potential for a mobility shortfall presents an emerging concern in respect of impacts this may have on the sustainability of rural communities.

The intention of this article then is first to consider how older people’s involvement in community activities might contribute to their quality of life (their ‘happiness’, ‘life-satisfaction’ and ‘well-being’), and, through the notion of ‘social capital’, to the sustainability of their communities. Second, the article will investigate the role that mobility plays in community involvement, with a particular focus on the role of the private car, both as a facilitator and also potentially a barrier. To do this several specific issues will be considered, beginning with how important ‘transport’ (in particular the car) is to older people’s engagement. Consideration will then be given to whether older people have developed wider mobility strategies (diversifying their options beyond reliance on cars in their households) to facilitate their community

activity. Finally, the locations of community activity will be reviewed; with the intention of better understanding what this might mean for transport options and choices.

After developing a contextual and conceptual base, the article draws on research carried out in six rural areas in England and Wales to respond to the themes identified above. These findings are then brought together with the more conceptual elements in a discussion, providing an opportunity to offer policy suggestions for rural transport provision for older people, as well as conclusions on the themes.

2. Conceptual model

In this next section, arguments for the importance of community activity, both for the individual and for their communities will be set out and developed. These arguments will provide a basis on which to offer a new conceptual model founded on such individual and community interactions, and on the role of mobility (and potential mobility) in community sustainability.

For individuals then, there is evidence of a link between social engagement and ‘happiness’: those people who are very active in their communities reporting more satisfaction than those who never engage with or attend local groups (Donovan and Halpern 2002). For some, involvement in monthly (community) activity was seen to create happiness equivalent to a doubling of income (Putnam 2000). The positive influence of ‘volunteering’ and belonging to community organisations on factors such as health, depression, morale and self-esteem has also been identified (Godfrey et al 2005). Feeling ‘valued’ and being ‘respected’ in particular is seen to contribute to good mental health and wellbeing (Lee 2006). In addition, having a ‘role’ outside the home and family appears to protect against isolation, depression and dementia (McCormick, 2009).

Involvement in community activities has potential benefits for the wider community as well, as a mechanism for the creation of 'social capital'. Such capital is seen to be created out of "*repeated social interactions between individuals and groups*", which will "*develop trust, social norms and strengthen co-operation and reciprocity*" (Lee et al 2005, after Bordieu and Putnam). But importantly, it is suggested that it is only through wider relationships and networks that this capital can then be used. The creation of such capital is seen to provide many social (and economic) benefits for a community, particularly in greater social cohesion and reduced social exclusion. It may also help create a stronger sense of identity and 'place', which it is suggested can be stronger in rural locations (Moseley et al. 2007). There are benefits for 'marginalised communities' (Field 2003), and it provides individuals and their communities with capacity to 'overcome adversity' (Stanley et al. 2010). The role of social capital is also increasingly recognised by government(s), illustrated by the fact that successive rural policy statements in the UK have had rural community empowerment (one manifestation of social capital) at their core (Curry 2009).

Older people it could be argued are the ideal candidates to be involved in such community activity, having both the time, and potentially the capacity. In respect of one aspect of community activity, 'volunteering' (that is giving unpaid help to an individual, group or organisation), it is individuals in the 65-74 year old age band that have the highest levels of formal and informal volunteering in the UK when compared to other age groups (DCLG, 2010). Older people also spend more time volunteering, and those in rural areas are more likely to volunteer than those in urban areas. However, a key enabler for older people being able to participate in any community activity is of course the ability to access them. This access will rely in part on

personal mobility (i.e. capacity to walk), but also the various modes of transport available to them.

Following Kaufmann (2002) the extent of mobility options an individual has access to represent his or her 'motility capital': the sum of "*the factors that define a person's capacity to be mobile*" or "*potential to travel*". Thus not only the physical elements of transport and communications systems and their accessibility, but also (older) peoples aptitude, mobility aspirations, time constraints and importantly, their knowledge of how to use systems (ibid, p38). Kaufmann proposes that people will try to amass the greatest potential mobility through acquiring skills and access to the most systems. There is though contradictory evidence for habitual behaviour and monomodalism which suggests this view can be over-stated (e.g. Verplanken et al., 1994, 1997). It may even be that a minority of adults in developing countries avoid walking to the extent that they might lose the capacity in later life, and in many countries cycling levels are extremely low in older age, although much higher in certain states where there has been societal-level investment in this mode (see Pucher and Dijkstra, 2003). Indeed, it could be argued that levels of car dependence in some developed societies can lead to the rational judgement that investment in and maintenance of the skills to use any other mode is inefficient.

Kaufmann also introduces a link between motility and social capital, suggesting that motility is determined by the "*life course of those involved, and by their social, cultural and financial capital*" (Kaufmann 2002 p40). Thus their capacity and capability to be involved is in turn partly related to and derived from social capital. By focussing on social capital, and the connectivity this provides older people with within their communities, it is possible to both better understand the well-being of older people in rural areas and the contribution made by older people to well-being

within rural communities (Curry 2009). Figure 1 below further develops the conceptualisation of motility capital in presenting it at the societal level and as existing in a synergetic relationship with social capital, with older people’s capacity to be mobile (their motility capital) in particular potentially underpinning a self-reinforcing process of community sustainability. The model is supported by ‘social capital’, both as a facilitator, and a result of, that community activity and community connectivity.

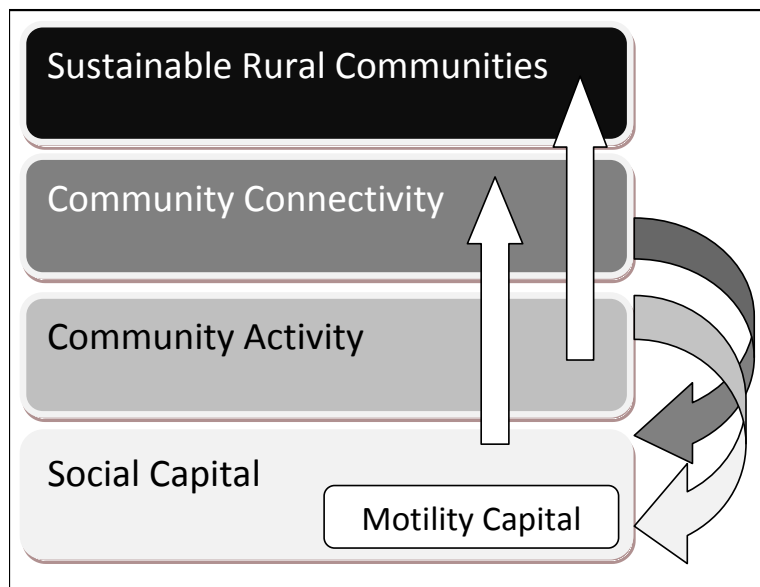


Figure1. The importance of Motility Capital to a Sustainable Rural Community

As a consequence then, motility capital (the potential to travel), and its practical manifestation in the form of mobility capital (actual travel) can be seen to be key factors in the sustainability of rural communities.

Mobility of older people in rural areas

Having proposed these conceptual linkages between motility capital, social capital and community activity, and reflected on the importance of rural elders to

‘community’, it is though also important to note that there are practical constraints on older people’s mobility. These constraints arise within the wider frame of physiological changes associated with ageing, coupled with the generally more dispersed nature of services found in rural settings to present a range of ‘mobility’ barriers for older people when accessing community activities.

Walking and cycling, as well as the use of mobility scooters for the less-able, could provide mobility options for older people in rural areas. There are though potential barriers such as being unable to walk or cycle for long periods of time, having difficulty in physically accessing vehicular transport (Schlag et al., 1996) or lack of confidence in walking ability associated with fear of falling (Avineri et al., in press). There may also be infrastructure problems such as a lack of pavements, or inadequate street lighting (Newton et al., 2010). In respect of public transport, the widespread introduction of free fares for older people in the UK has reduced financial barriers to bus use, but there must be a viable bus service available to use which is not often the case in rural areas (Shergold and Parkhurst, 2010). There are also psychological or perceived barriers to using the alternatives to cars, including a lack of confidence in knowing the “norms” surrounding bus use (Musselwhite and Haddad, 2010; Musselwhite 2010). Some modes may also attract a negative stigma or a deterrent feeling that certain modes of transport are not ‘meant’ for them (Musselwhite, 2010).

Although many older people continue to drive, ultimately many choose, or are compelled, to cease their driving careers. Thus there are households which have no vehicles or resident drivers (having perhaps relinquished licences or never having had them). Such households may be reliant on (costly) taxis or the availability of lifts from others for their car-based mobility. Even for those with cars, vehicle operating

costs represent a rising barrier, which some identify as of greater significance in rural areas (Root et al. 1996; Smith et al. 2010). In this context, those on lower incomes but with cars available may not be able to undertake all of the journeys they would like, with the implication that the more discretionary journeys, for community involvement, may be the ones that are sacrificed.

The role of new communications technologies (mobile phone, internet etc.) are of course also relevant in this context. They provide many opportunities to access travel information and services, which it might be supposed could help overcome some mobility constraints. This did not prove to be the case though in the data collected for this study, as usage of such technologies was much greater in the younger old cohort (those in their 60s and early 70s), the group who, overall, are least likely to experience insurmountable obstacles to physical mobility.

There is though evidence that volunteering and involvement rates are affected by the barriers described above, with ‘physical access’, ‘busy roads’ and ‘traffic’ identified specifically (Lee 2006). In addition, some organisations put an upper age limit on specific tasks such as driving. Therefore, mobility-related issues could be a critical part of disengagement, which suggests that some older people in rural areas may not be fulfilling their capabilities and aspirations. In addition, in a context of declining formal state involvement in service provision, as is found in many developed countries, it has important ramifications for community-based services: by implication, if such mobility barriers could be reduced, then engagement rates for this key group may be maintained, or even raised. Failure to do so not only affects the individuals concerned, but as identified above could also have impacts on community connectivity, the creation of social capital and of course the sustainability of rural communities.

3. Data collection methodology

To further explore the issues discussed above, data on older people and community activity was collected through a survey and interviews in six rural locations in South West England (within the counties of Cornwall, Dorset and Gloucestershire) and Wales (Dyfed, Powys and Monmouthshire). Each of the study areas was based on several local government electoral ‘wards’ (which are not identified by name here to protect participant anonymity). On average, a ward will have a population of around 5500, although this can be less in lower density rural areas. The study areas exhibit a gradient of rural and social characteristics, using a categorisation adopted by the UK Government Department for Food, Agriculture and Rural Affairs (Defra 2009). The Cornwall and Dyfed study areas are classified as ‘remote and deprived’, with low average incomes, difficult access to owner-occupied housing, and with a high dependency on agriculture. Those in Dorset and Powys were ‘less remote and deprived’, with average regional incomes, average reliance on agriculture and tourism, less problematic access to owner occupied housing, and quite a high proportion of people over 60. The study areas in Gloucestershire and Monmouthshire were seen to be ‘relatively affluent and accessible’ locations with low dependence on agriculture and tourism, a relatively young age profile and high levels of commuting. The ‘study’ communities ranged in size; the largest had a population of several thousand people.

Stratified random sampling was employed for the survey, and participants were contacted at home, face-to-face, with the interviewer-completed questionnaire lasting around 30 minutes. The resulting sample showed a slight bias towards the ‘younger old’, but was broadly in line with 2008 population projections for split of age-groups (60-100) from the Office for National Statistics (ONS) for England and

Wales. There was also a slight bias with respect to the gender split in the 2008 projections, the sample having slightly fewer men, and slightly more women. Overall, the survey provided 920 responses to questions encompassing community activity and involvement, health and welfare issues, as well as general demographic data. The survey contained a series of mobility-related questions which addressed travel patterns and behaviours, mode choice (including over time), and whether mobility played a role in either exclusion from, or engagement with, the local community. Approximately 150 older people completed the questionnaire in each of the six study locations.

Thirty-four semi-structured interviews were undertaken, from a pool of sixty candidates from the original survey who agreed to participate in follow up research. They exhibited a range of characteristics of interest from a transport and community involvement perspective: some were older people who were active cyclists or mobility scooter users, others had 'given up driving', or were users and non-users of public transport, or were people who had re-located in order to achieve better access to services and facilities. The majority had access to a car, reflecting the high overall level of access to cars amongst the elderly in both the rural population and the quantitative study sample. Age, gender and location were controlled for, with the intention being to recruit a similar group in each of the six areas.

As a consequence of the dominance of those with a car available in the sample, additional interviews with individuals outside of the original survey were undertaken to enrich the data. Thus six extra interviews with older ex-drivers have taken place in one of the Welsh study areas, using the same approach, and interview schedule as for the earlier candidates.

The interviews carried out for this study focussed on mobility issues, both at a personal level and for the wider community of older people. Questions were arranged around five themes; exploring the meaning and importance of current mobility, the benefits and dis-benefits of the most commonly used mode(s) of travel, the impacts of losing access to a car (when relevant), personal mobility biographies, and a forward-looking theme covering older people's mobility as well as sustainability issues related to travel. The interviews lasted on average around an hour. The data has since been analysed using a primarily 'content analysis' driven approach, with a coding framework driven by both practical and theoretical research questions.

4. Findings

This section explores the data collected in the study areas in order to respond to the issues raised in the introduction above. Namely, the importance of community involvement for older people, and of transport in this involvement, the potential of modes other than the car (to support involvement), and what the location of community activity might mean in terms of mobility choices. Across all of these areas the role of the car, as a facilitator or as a barrier to involvement, is also addressed.

To begin with then, what role does community activity play for older people in rural areas? It was evident from a number of the interviews that involvement in community activities of one sort or another was important to older people, and that it was contributing to their well-being.

“We're very active in our religion....it's nice to get together with a hundred like-minded people and sing hymns together and to pray together” (Male, Dyfed aged in 60s)

“...at the moment I’m playing a lot of bowls so I’ve got to be able to get round to matches and places...that is my social life.” (Female, Monmouthshire, aged in 80s)

What was also apparent was that ‘carlessness’ for this sample was now rare, with 87% of respondents having access to a car in their households: for comparison, the level across all rural households being 91%, and for all of England 75% (DfT 2009). There does though appear to be an age effect in relation to car access, with household availability for those over 80 in these data falling to around 60% (see Figure 2 below).

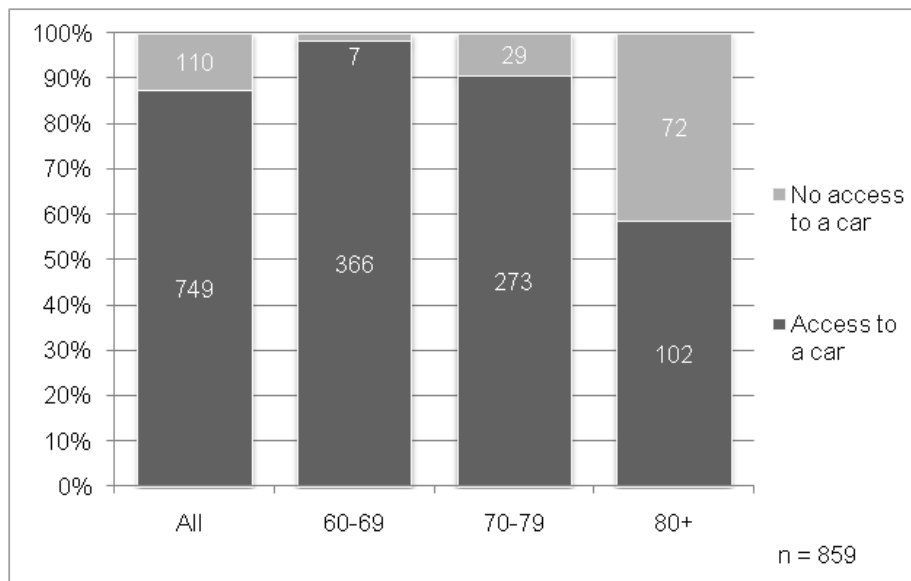


Figure 2. Access to a car in the household by age group

The ability to be involved in community activity was also explored. In the main, older people suggested they were as involved as they would like to be in their communities (83 % replying positively) - although it should be noted that it was not possible to assess from the responses whether the minority of dissatisfaction was due

to the lack of identified community to be active within, or difficulty in reaching activity that was known to exist. It was though possible to identify a statistically significant relationship between satisfaction with level of community involvement and car access (X^2 8.032 df = 1 p < 0.01).

Acceptable levels of access were also found in the interviews: people generally saying that they were able to get to what they wanted. Responses did though suggest that participation was contingent on car access: there was “*no other way of doing it*”, that they were “*entirely dependent on it*” or that it was “*essential to be able to participate*” and in its absence they would “*have to cancel social activities*”. Using a car was also seen by several interviewees as an important measure of their independence, another contribution to their well-being.

“My own car is really important. It’s my independence and although I go with my husband to most places and we then use his car, I really love having my own car... if I am on my own I am not stuck; so that is really important to me”.

(Female, Cornwall, aged in 70s)

Even where potential for the use of alternate modes was identified, mode choice criteria such as the desire to reduce journey time, to avoid the weather, or to counter poor health favoured the car: with one interviewee stating that the village was “*too big*”, and there wasn’t always time to walk. In other instances, there was perceived to be a lack of ‘local’ community activity, which necessitated car travel further afield. Lack of alternatives was also seen as important, with some people identifying specific mechanisms to explain why: one interviewee, a treasurer for a local organisation, saw the only theoretical alternative to reach meetings as being

taxis, which was not seen as acceptable because of the cost, and another noted that things happened in the next village, to which there were no buses.

Whilst many discussions emphasised ‘own needs’, some identified that the car was important for being able to help partners who were less mobile, or other people in the community, for example, through informal lift-giving to neighbours for accessing healthcare provision or through community services such as ‘meals on wheels’, (services delivering pre-cooked meals to older people who may no longer be able to prepare their own). Whilst this latter activity is not directly a ‘community activity’ as such, it could be argued that it is social-interaction, and is thus making a contribution to social capital in that community – particularly where it is delivered through volunteer organisations based in the same community, as was the case in the Gloucestershire study area.

Importance of transport

The study also investigated the importance of transport, and whether a lack of it was a barrier to participation in community activity, with 25% of respondents identifying ‘transport’ as a factor. Of those without car access, 67% suggested that they were experiencing some restriction on their participation – with over 25% reporting that they were prevented from getting involved in these sorts of activities at all (accepting of course that issues that restrict car access, such as declining health, may in some instances also restrict community activities). However, even those with car access were subject to constraints, with 15% of this group noting limits on their participation. In this respect, the interviews uncovered evidence of competing needs for access, as only having one car in a household meant that people relied on either pursuing the same interests as their partner, or on picking activities that would not clash, so that both could be involved.

“...my husband used the car to go to his meditation group on a Friday night, and it was the night there was a dance club that I really wanted to get to but couldn’t.” (Female, Cornwall, aged in 60s)

“I’ve recently taken up going to an exercise class but of course I checked it out with him first: if he’s going to be happy to drop me.” (Female, Dorset, aged in 70s)

Such issues might of course encourage some older people to maintain two cars in their household rather than one, so underlining the level of car dependence and making implicit assumptions about future health and economic status. This though could add extra expense to the household budget of older people, many of whom are already concerned by motoring costs.

“...the cost of the car is high because of the petrol prices at the moment. I mean motoring is expensive... we are limited in our income and so there’s a limit to how much we can get out and about and go places.” (Female, Dorset, aged in 70s)

“We’re on a grand total of about two hundred pounds a week of which the vehicles take the best part of a hundred and something.” (Male, Dyfed, aged in 60s)

Some interviewees had given up driving, mainly as a consequence of declining health, or involvement in an accident. Others referred to self-regulation: restricting their driving as a consequence of traffic speed, traffic levels, or parking problems. It was often the case that people would avoid busy times or motorways, or perhaps driving after dark, or they would visit specific shops because of parking availability.

“Well I know, I am a nervous... I don’t like driving far I’m afraid. I once had a panic attack on a motorway which has worried me ever since. I am happy on minor roads: that’s why we don’t go far to be honest... It does mean we do tend to cancel things you know, if I feel I can’t cope with it you see” (Female, Monmouthshire, aged in 80s)

It was also evidenced in the interviews that the use of lifts from friends and neighbours was often limited, as people might feel they were abusing a friendship to seek lifts, or there were limited people available to give a lift when it was needed. The exception to this seemed to be where family lived close by and would readily offer car-based transport – although sometimes again only at a time convenient to the lift-giver. There were also limits to the journey purposes for which lifts were seen as acceptable, with a focus on access to healthcare facilities as a ‘justifiable’ purpose, although this did raise potential privacy issues for some, particularly if the lift-giver was outside of the family.

Multimodality

Levels of access to different modes of travel was another theme considered. In the interviews, older people in the same community sometimes gave opposing answers when asked about alternatives to the car – some describing public or community

transport options for example, whilst others reporting there were none. In a number of instances interviewees had specifically collected information on public transport alternatives for the interview, although they had never themselves previously explored their use: illustrations in fact of how car-users were not looking beyond that mode. However, the survey did provide evidence of multi-modality in the study areas, with broadly similar numbers of older people recording that they had walked as did those who reported they had used a car in the last week. Over half of the respondents had used public transport and nearly 20% a bicycle over the preceding year. (See Figure 3 below)

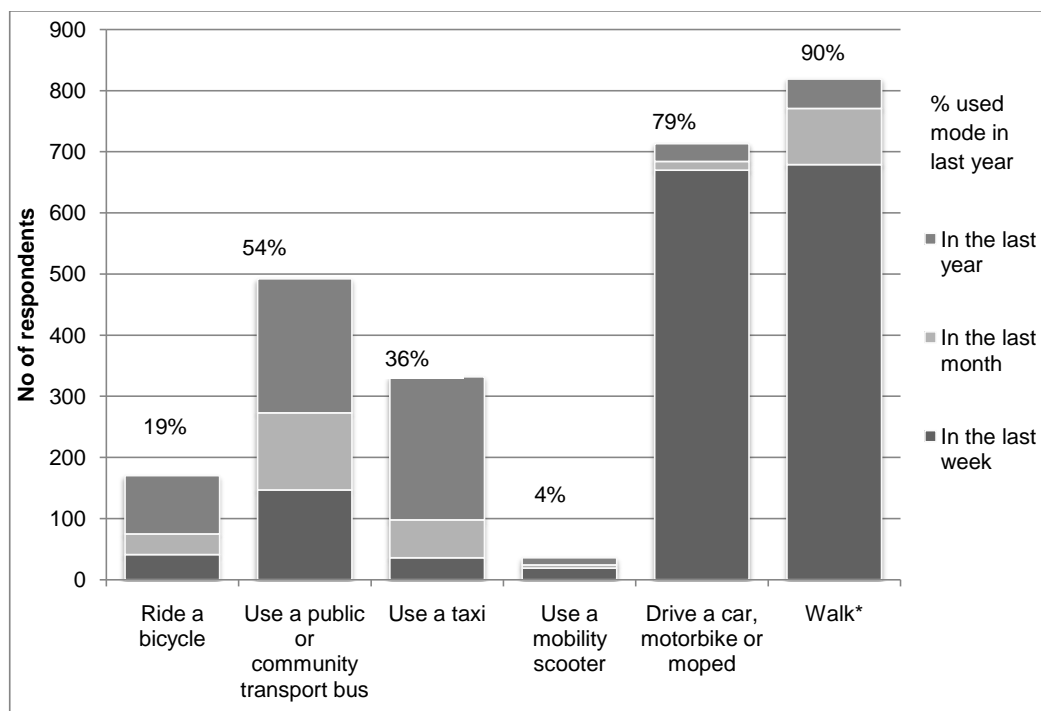


Figure 3. Last use of range of transport modes.

Note: 'Walk' was for 15 minutes or more for leisure, health or just to get somewhere.

In fact, over 90% of those people who used a bus in the last year had access to a car in the household, as did practically all of the people who had cycled. There is also a noticeable progression to multi-modality (see Figure 4 below) over the ‘last month’ and ‘last year’.

This could then be seen as a partial illustration of the ‘motility capital’ of the older people in the study communities. It does though only show the mobility options that respondents were using, as opposed to giving an indication of their ‘potential’ for mobility. Whilst there will of course be limits on who can walk and cycle and drive, or has a bus nearby, an argument can be made that if these levels are being expressed by some in the community then they could also be appropriate for many others.

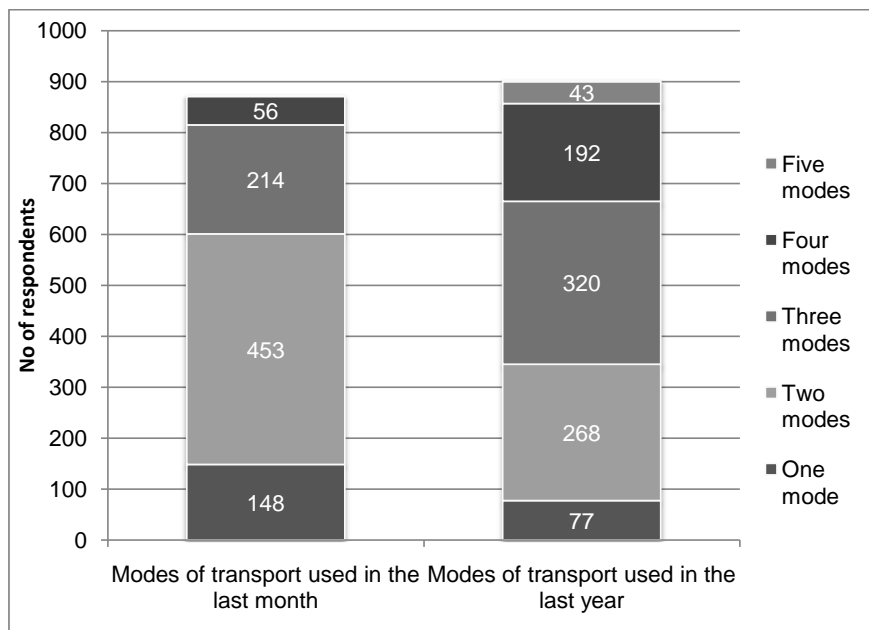


Figure 4. Number of modes used in previous year.

Adaptation to different modes also emerged in the interviews with those that had ceased driving. There were instances of older people who were now walking,

using public transport, or in one of the study areas ‘community transport’, that is a not-for-profit volunteer-based local transport initiative, as ways of continuing social and community activities. It was notable, though, that they might have altered the activities they chose to be involved with to reflect the change in travel mode.

Although some saw this as a broadly negative change, others found positives, such as the social aspects of using public transport or the fact that it saved them money.

“I enjoy being on the buses with other people, it’s a social thing... there’s always somebody I know on the buses...whereas driving is a little more enclosed personal thing.” (Female1 Powys, aged in 70s)

“I would say yes definitely you have got more money to handle because you haven’t got your insurance, your tax and your fuel and wear and tear; oh yes it makes a lot of difference” (Female2 Powys, aged in 70s)

Length of journeys for community activity

The final theme investigated was the range of community activity being undertaken by older people, and importantly how far they travelled to be involved. The responses are summarised in Figure 5 below. The most popular activities were those organised by churches or taking place in religious buildings, perhaps not surprising, bearing in mind that most communities still have a church of some form, followed by ‘community groups’ and then voluntary or charity based activities. It should be noted that respondents could answer more than once against each choice, for example people attending both a local and a more distant church could respond for ‘place of

worship’ in two distance categories, although this ‘double-counting’ was rare, only occurring in a few instances.

In a small number of cases the majority of the activities reported were being undertaken more than 16km from home: notably nature conservation, building conservation and activities related to professional associations which are all biased towards longer journeys, although most of these had relatively low participation rates. From the current research it is not clear whether this simply reflects the deterrent of ‘friction of distance’ or whether specific transport barriers were suppressing participation in those activities. What is notable, though, is that 83% of all reported journeys for social and voluntary activity were less than 8.1km in length, with 63% under 1.6km

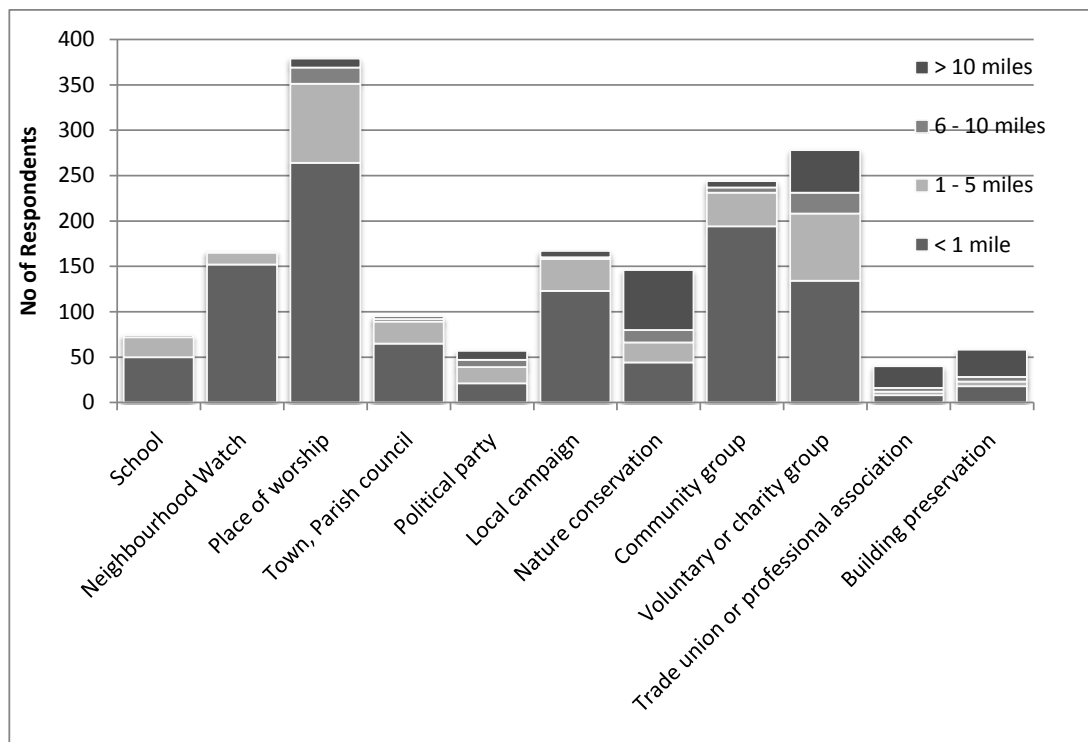


Figure 5. Reported Distance Travelled to Different Types of Community Activity by older people

Note: Interviewees were asked to estimate distances in miles, which is the way that most UK citizens conceptualise and express distance. The reported mileage is converted to the nearest kilometres equivalent in the text.

In fact, in some of the interviews there were strong responses that the car was not important for local involvement because there was so much going on in the village and people could walk to it. Although it should be noted that such responses were primarily from interviewees living in larger villages, with those in more remote, and smaller, communities more likely to report a paucity of such activity.

“We still have a very good centre here in the village for community life anyway, it's really very strong, there are so many organisations” (Female Gloucestershire, aged in 60s)

“....there are loads of clubs in the village ... I could walk to any of the ones that I wanted to go to” (Female Cornwall, aged in 60s)

One implication of this is that for these people many of these trips could be potentially undertaken by modes other than the car – for example by walking, cycling or if appropriate by using a mobility scooter. This might also suggest that the focus on mobility being delivered through the car or by bus is misplaced – for these activities and in these areas at least. However it is apparent from the qualitative interviews that there are other barriers to use of these “active modes”. These include the weather, personal safety concerns when walking or cycling (from traffic levels and particularly traffic speed), or the lack of pavements and lighting in some rural areas (although a number of interviewees preferred not to have streetlights to minimise light pollution).

“we’ve got a really nice pub, exactly a mile down the road but I can’t walk to it because it’s much too dangerous.... this pub up here is exactly half a mile... if we walk up there in the winter we wear one of those reflector jackets and carry a light because it is dangerous”. (Male Dorset, aged in 60s)

“You couldn’t walk; you have got to be very vigilant walking this road because they just come up the road as if they are on a motorway” (Female Monmouthshire, aged in 60s)

Across the study areas older people who cycled for some journeys also mentioned road safety as a barrier to their use of the mode.

“It’s a shame about the danger of cycling, really. These are narrow roads and they curve all over the place. We’ve still got two bicycles rusting away there” (Male Dorset, aged in 80s)

“More and more traffic in the lanes makes it less pleasant to cycle in the lanes. As traffic, as car traffic increases.” (Female Gloucestershire, aged in 80s)

For others though, the wide spatial range of what they perceived as their community was a factor that favoured car use, in some cases because there was not seen to be any local activity, but even interviewees who stated that they lived in communities with high levels of local activity expressed the view that the car was important for the things they wanted to be involved in outside of the village. In some instances, the concept of community did not relate to the ‘local’, a few interviewees

describing how they actually returned to communities they had previously lived in to be involved in activities (often facilitated by car).

Mobility scooters also offer an alternative for people with physical movement constraints (many of whom are elderly of course). They provide an opportunity to regain some spatial mobility and were observed in most of the study locations, but users face barriers in using them to access community activities, road safety being an important issue, particularly in those rural locations where there were no pavements. The type of scooter also seems to impact on their use, with those that are designed to be dismantled and carried in a car boot for use at a destination proving less of a benefit in the local community for very short local journeys.

“Yes it’s heavy. And it has to be assembled and disassembled.... To be quite truthful, with the battery on charge, it’s such a performance to go into the garage, get the battery out and put it on the little thing, get the [scooter] out, drive it there, come back, take the battery off. It’s easy to get in the car: turn the key and off you go” (Male Dorset, aged in 60s)

5. Discussion

The earlier parts of this paper outlined the importance of community activity to older people’s well-being (and by implication to their health), and how a link can be made from this individual benefit through to community benefit via the mechanism of social capital. The role that mobility, and potential mobility (motility), have to play in this has also been identified, leading to the presentation of a conceptual model which posits social capital as both the result and facilitator of such activities. The interactions and links between individual well-being and community well-being, or the social sustainability of a community, has also been set in the context of a globally

ageing population, where the rural elderly in developed nations such as the UK are seen to be on a growth trend above that of urban areas. It has also been illustrated how, as people age, they can become subject to a range of mobility constraints, across the range of modes available to them; not helped by the potentially more dispersed provision of services often experienced in rural environments. This latter issue is likely to be of even greater importance in other less densely populated countries with increasing numbers of older people, such as the US, Australia and Canada for example.

From the study data at least, there are high levels of access to a car across all older people, but particularly comprehensive (almost universal) amongst the younger-old. There is an age-related effect though, and the older-old exhibit lower levels of access – offering an interesting challenge for the future as to whether the current younger-old cohort, who have grown up with the car, will maintain such high-levels of access to it when they become the older-old. Nonetheless, the findings suggest that one of the mobility constraints on older people's ability to continue to contribute to community activity is in fact the increasing reliance in rural areas on the car. The almost total penetration of the car into rural households and across rural communities has perhaps had two particular effects on the rural old in respect of their motility capital. First, it may actually have led to what was earlier termed monomodalism; that is the focus purely on a single mode – in this case the car – for all mobility needs. As a consequence, older people do not look for alternatives to add to their motility capital. Second, the widespread use of the car is actually undermining alternatives, whether through promoting motor traffic levels which create unsafe conditions for other forms of travel or lack of patronage on public transport services which may then

result in them being unviable and withdrawn, increasing the reliance on scarcer services staffed by volunteers.

Hence although it does of course deliver many mobility benefits in rural areas, the car is not a panacea, and even those with access are subject to availability issues, such as the need to schedule activities with other users of a car in order to avoid conflicting demands, or indeed, to find shared interests. For some this issue is only overcome by having two cars in the household, but, whatever number, there are significant economic costs as a consequence of car dependence. Rising car use costs can actually mean that although older people have the potential for mobility using the car, they may actually be constrained in its use – particularly for those reliant on (state) pensions.

It could be seen then that there is a vicious circle of older people's reliance on the car. The dominance of this mode is a disincentive to the acquisition of motility capital related to other modes and directly undermines the alternatives. The effect is particularly strong in the younger-old age group, despite the irony that this group may be the most in need of the alternatives at a reasonably foreseeable future point, but in practice the linkages between current behaviour and future need are either not recognised or not accepted. In spite of this general reliance on the car though, there are those that have developed motility capital in relation to the alternatives and are indeed using them, and although they may report that they have had to adjust the activities they are involved in, they often find positives in the experience, for example the social aspects of community or public transport, or the health benefits of walking. It was also notable from the data that most community activities are taking place within a relatively short distance from older people's homes, and that this offers the potential for some of those journeys to be made by other modes, such as active travel.

It is also apparent that many older people are to some extent already multi-modal, using three, four or more modes over the year, although for most of the sample using the car and walking were the primary modes of travel.

One policy implication from the study is that more emphasis should be placed in rural transport policy on facilitating short-range travel for social and community purposes. Yet currently in many rural areas, in the UK at least, the main alternative solution to the car is seen as greater deployment of public transport – usually in the form of the bus. Some attempt had already been made to move beyond this in three of the study areas, with traditional buses supplemented or even replaced by more flexible services such as demand responsive transport (DRT). Whilst potentially an effective tool for delivering mobility, such solutions can be very expensive to deliver (Enoch et al. 2004). This is evidenced in the study areas, where the most recent introduction of a DRT service (in Dyfed) had followed funding of some £1 million – with a significant proportion of the money coming from EU social development funds and the Welsh Government. However, services such as these are often focussed on practical need, helping people to access shopping, or social and healthcare facilities, whereas access to community activities is often viewed as non essential and hence is not provided for (Musselwhite and Haddad, 2010). The findings presented here suggest it is a mistake to view such travel as non-essential as not only does older people's involvement in community activity help with individual well-being, it also aids a similar effect in the wider community. Community transport could potentially play a greater role, perhaps the sort of response envisaged by the current UK government's 'big society' initiative, aimed at giving citizens, communities and local government the power and information needed to solve problems, and build the society 'they want'. It is also manifest in recent guidance issued by the UK Department of Transport (DfT 2011) on

how to maximise benefits from this mode of travel. But community transport is currently subject to irregular, tenuous funding, and of course would be dependent on ‘volunteers’, perhaps less likely to be available at the times when community activities might be taking place.

‘Active travel’ options are also currently underrated; in the case of cycling due in part to the focus on promoting this mode to younger age groups. Many of the current barriers to local active travel could be addressed through basic, practical measures such as improved pavements and lighting, alongside some changes in the public realm (e.g. as suggested by Sugiyama et al. 2009). These changes would also benefit those people who use mobility scooters, which the research has confirmed are not solely an urban mode.

6. Conclusions

With a growing population of older people in rural areas in the UK and other developed nations, and these people making up a growing proportion of the rural population, it is (and will be) important that this segment of society is able to participate in community activities – both for their own individual well-being, and for the well-being and sustainability of their communities. Within this study, most older people reported that they could access the level of community activity that they wanted, although transport was perceived to be more of a barrier for those without access to a car in their households. It was though evident that transport modes other than the car were being, variously, occasionally and intensively used, with as many people walking in the week previous to the survey as had driven or been driven. Other options, such as public transport, or even cycling, were also used some of the time by many older people in the study. When added to the knowledge that the overwhelming majority of community activity for this sample was taking place within eight km of

their homes (60% of it within 1.5 km), then the opportunities and choices available to these older people to meet their transport needs in respect of community engagement becomes much richer. It is though evident that the widespread reliance on the car to deliver this mobility may in fact undermine some of these alternatives in such rural communities.

So although the car is increasingly seen as perhaps the *de facto* mode of transport in rural areas, it is the case that there are a range of modes of travel that are available, and which if properly supported would create both mobility and motility plurality for the rural elderly. If, as a society, we merely rely on the car as a solution in these circumstances it may be that we risk undermining the creation of social capital in rural communities, and thus their social sustainability.

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