
EXAMINING OLDER PEOPLE'S ATTITUDES TO ROAD CHARGING: HOW SPECIAL ARE THESE AND WHAT IS THE LESSON TO BE LEARNT?

Mr Alexandros Nikitas

PhD Student

Centre for Transport & Society, University of the West of England, Bristol

Abstract

Public acceptability is possibly the 'key factor' for the introduction of road charging. Understanding any special attitudes of older people to the policy may inform attempts to enhance acceptability by identifying some of the potential social dilemmas of road charging. In an ageing society, where older people have a growing influence in politics in general, and potentially on the acceptability of road charging in particular, their attitudes to road charging are of interest because they face specific types of risk of transport-related social exclusion. Moreover, there is evidence to suggest that older people favour, more than any other age group, what is positively valued for society – a process known as 'pro-social value orientation'. Hence in a transport context, older people may be more likely to express positive or negative attitudes to the acceptability of road charging depending on whether they believe it would be good or bad for others, or society in general. Family and friends may also affect older people's considerations about their intentions and choices - thus the importance of studying the influence of 'social norms' on older people's attitudes to road charging. The paper develops a theoretical and empirical understanding of these issues, based on a two-phase research scheme consisting of a quantitative survey and a series of focus groups that was conducted in Bristol a city that has been seriously discussing for a number of years the introduction of a road charging scheme. Robust evidence is provided for the view that the attitudes of older people towards road charging are different from those of younger people and that older people's particular pro-social value orientations and social norms do affect these attitudes. People aged 60 to 74 are the people most likely to be negatively oriented to road charging while people aged 75 and over are the people more likely to be positively oriented to road charging than any other age group.

1. Introduction

Even though road charging is a measure that has been proved to be effective and seems to be an inevitable solution in the future of managing road transport demand, it suffers from low public acceptability (Fujii et al. 2004; Ison and Rye 2005) as a result of the public resistance to 'taxing' a service that used to be offered for free (King et al. 2007). Since the political support of pricing measures is often adversely affected by the perceived lack of public acceptability, the implementation of road charging schemes cannot be easily realised. In order for road charging to become more acceptable and thus easier to implement, it must be introduced and communicated in such a way that the public and especially those groups in society that are the most vulnerable to social exclusion - like older people - won't feel that their freedoms will be threatened.

Worldwide the human population shows an increasingly ageing demographic structure. In 2000 approximately 600 million people were aged 60 and over and by 2050, that number is expected to be close to 2 billion. Moreover, older people are more interested in local democracy (Jordan and Avineri 2009) and more likely to vote than younger people (Goerres 2007), so their views can be particularly influential on social policy in general, and hence, it is argued here, on the acceptability of road charging.

On the other hand, older people often face the danger of transport-related social exclusion; more often than other age groups (Gaffron et al. 2001). An insufficient transport system that

cannot be easily accessed can create barriers in the fulfilment of older people's physical needs. Furthermore, transport provides an essential link to friends, family and the wider community - a vital lifeline to maintaining independence (DfT 2001a). Research has shown that a lack of mobility can prevent older people from participating in social activities and lead to low morale, depression and loneliness. It can also impact upon others, such as carers, social services and health agencies (DfT 2001a). On this note, the implementation of a demand management measure, which has a significant influence on the relative costs of using parts of the road network could be perceived by some older people as a threat to their social inclusion and the accessibility of their significant others or other members of the society in general; especially if this will not be implemented in an appropriate way.

Conventionally, the group of 'older people' has been defined by a chronological age of 60 or more years of age. The British Department for Transport's age eligibility criterion for concessionary fares for elderly also uses the age of 60 as its threshold (DfT 2008). This study has also adapted this chronological threshold to define older people. Older people are not an entirely homogeneous population they are a highly diverse group; there are different ages of growing older, different minority groups, different lifestyles, beliefs and attitudes (Gilleard and Higgs 2005).

Furthermore, older people are the individuals most likely to have complex mobility needs (DfT 2001a; Alsnih and Hensher 2003), physical vulnerability (DfT 2001b; Musselwhite 2006), lower incomes (DfT 2001a, 2001b), cognitive limitations in their ability to readily process complicated information (Kovalchick et al., 2004), less effective linkage with technology (DfT 2001a), progressive loss of feeling independent (Orimo et al. 2006) and greater reliance on others for lifts (DfT 2001a; Raje 2003). They could also enjoy greater time flexibility (ONS 2005), and be more cost-conscious cutting back or going without a car (Dominy and Kempson 2006) than younger people. In many countries older people have discount rates in public transport fares (e.g. the concessionary fares policy in UK). For these reasons, it has been hypothesised for the means of this work that older people may have different attitudes to road charging than those of younger people (Nikitas et al. unpublished). Nonetheless, it should be noted that these distinctive characteristics may not apply to the whole elderly population. Some of these factors are primarily age-related like health problems, physical vulnerability and cognitive limitations but others are more ambiguous - e.g. pro-social values, social norms, relationship with technology and cost-consciousness. These relationships may be age-related, life cycle events, cohort effects or a combination of those.

An important dimension in the process of shaping attitudes to road charging is the social one. Hence the present paper explores the connection between attitude development and two important elements of this social parameter - social norms and the pro-social value orientations. This connection has never been studied in depth in the context of road charging before this study. Older people favour, more than any other age group (Midlarsky 1991; Rushton 2004), what is positively valued for society and ascribe more importance to collective consequences - a process described as 'pro-social value orientation'. Hence in a transport context, older people may be more likely to express positive or negative attitudes to the acceptance of road charging, depending on whether they believe it would be good or bad for others or for society in general. Family, friends or more generally the people important to them may also have a particular influence on older people's evaluations about their intentions and choices - thus the importance of studying the influence of 'social norms' on older people's attitudes to road charging. Social norms are standards of behaviour that are based on widely shared beliefs about how individual group members ought to behave in a given situation (Horne 2001). Since there is evidence suggesting attitudinal dependence on social influence (Oliver and Bearden 1985), it is possible that some older people will build their attitudes based on social norms, and perhaps more specifically, based on what the people most important to them believe about road charging.

The present research does not aim to contribute towards justifying the case for or against road charging, but instead the importance of attitude and norm orientations in cases when policy does seek to introduce it. It concentrates on attitudes from the affective and cognitive perspective as a concept reflecting public acceptability, and does not focus as much on

attitudes as factors shaping intentional behaviours, which is a very different research field. Hereafter the paper provides a critical summary of the most important findings from a literature review and a secondary analysis (Nikitas et al, unpublished) regarding age-specific differences on public attitudes to road charging. More importantly, the paper develops an understanding of these attitude-related issues, based on the results of a primarily quantitatively-analysed survey and a follow-up qualitative study consisting of three focus groups. Finally the paper ends by presenting some propositions about the potential policy intervention that this study offers.

2. Literature Review and Secondary Analysis Regarding Attitudes to Road Charging

Even though older people have recently been the focus of much attention, no research effort has focused exclusively on the socio-psychological links between older age and road charging; all the existent surveys about attitudes to road charging so far treated this only as a peripheral issue. Notwithstanding some findings from UK national road charging attitude surveys and studies regarding specific local pricing applications no clear answer has been given as to whether older people's attitudes to road charging differ significantly from those of younger people.

In particular, the findings regarding London Congestion Charge and its Western Extension (Accent 2004, 2005) suggested that generally older people are more positively oriented to road charging than younger individuals, whilst other research studies suggested exactly the opposite (DfT 2004; Scottish Executive 2006) or that there are no distinctive differences between older and younger people's attitudes (DfT 2006). Moreover, attitudes to a relatively new and rather unproven idea, such as road charging, are not the outcome of a static process but of a dynamic one that changes through time, perhaps as people become more familiar with the concept of this policy (DfT 2007b). This can be clearly reflected by the changes in the mean level of support for road charging by different age groups for the then proposed London scheme extension observed from one year to the next in a repeated survey (Accent 2004; 2005). Moreover, no research findings have been reported regarding the way older people's attitudes are shaped; and specifically how older people's attitudes might be influenced by their social norms and their pro-social value orientations.

A three-piece secondary data analysis was also conducted as an earlier part of the study (see Nikitas et al. unpublished) providing some tentative indication that attitudes to road charging vary with age. Many of the results of this analysis cannot be really generalised into a wider context since these derived from data collected after the rejection of a very specific early local road charging application –the unrealised Edinburgh scheme. More specifically according to this secondary analysis, older people and specifically those aged 75 and over were the respondents most likely to be uncertain, neutrally oriented or answer 'don't know' to questions directly or indirectly regarding road charging. There were indications that people aged 65 and over were the ones most likely to oppose the principle of road charging.

Older people were the people least likely to believe that road charging would be unfair. Also older people's support was higher than that of younger people if 'there would be no overall increase in the amount of taxation paid by motorists' or 'as long as the money raised was spent on roads and transport'. This finding perhaps denoted in some degree that older people might have a substantial pro-social behaviour potential. It is not enough though, to confirm the hypothesis 'that older people are more likely to ascribe pro-social values to road charging' or the hypothesis that 'pro-social older people will be more likely to accept or support road charging'. For these to be tested, an approach considering pro-social value orientations in detail is required: something that the study outlined in this paper does. The research also provides evidence that social norms regarding road charging vary with age something that could not have been achieved through the secondary data analysis due to the unavailability of relevant data.

3. Research Methodology

The core part of the paper discusses a primarily quantitative survey examining age-specific differences in public attitudes to road charging and the findings of three focus groups that were structured to provide an understanding mechanism of the way attitudes can be affected by pro-social value orientations and social norms. The study area chosen for both the phases of data collection was Bristol; a city that has been among UK cities planning a road charging scheme. There were two main criteria that led to this particular case study choice. First of all the case study had to be conducted in a place with a demographic profile (age structure and car ownership characteristics for example) not dissimilar with that of many British cities, something that could allow the results of this work in some degree to be generalised to a wider context. The other major criterion for the choice of the case study area was that it had to be a city with a certain level of awareness about road charging. Attitudes (or social norms) towards an object cannot exist if the public is not aware of the attitude object (i.e. road charging). Bristol suited both these research criteria.

The questionnaire consisted of 21 questions, four of them having several sub-questions. Five levels of agreement varying from strongly agree to strongly disagree were used throughout the survey. The questionnaire contained six transport-related parts, referring to: the respondents' daily travel experiences; their views on congestion and road charging; their opinions about other people's attitudes about road charging (social norms); their pro-social values in the road charging context; the potential influence of social norms on their attitudes; and the roles that Government and the media play in the way society views road charging. A final section contained questions regarding the demographic characteristics of the respondents.

The questionnaires were distributed by post to 2025 homes randomly chosen from a de-personalised Bristol City Council list and to 275 members of Bristol's Older People's Forum. There were 491 useable responses: 184 from people aged 60 and over (48 aged 75 and over). Older people and pensioners were over-represented in the sample but this was an intentional feature of sampling to allow the results of age-specific comparisons to be statistically significant for the older age groups. The sample was split into four main age groups for the analysis purposes: young younger people (16 to 34), old younger people (35 to 59), young older people (60 to 74) and old older people (75 and over). The responses have been analysed predominantly to assess the influence of the age on the way respondents viewed road charging. As the variables were generally categorical, Pearson's chi square tests were used – reported before each figure. All the findings presented here are of statistical significance.

Focus groups were conducted for the follow-up qualitative research phase. The main reason for selecting focus groups was the opportunity to observe a large amount of interaction in a limited period of time (Kitzinger 1995; Morgan 1997) inexpensively, based on an agenda including a list of key issues to be discussed. In this way the respondents felt more involved and built on one another's responses communicating ideas that otherwise may have been unheard. Also the participants did act as checks and balances to each other –identifying factual errors or extreme views. Since road charging is not a well-known and broadly used measure this interaction did help people to talk more about it. Interviews were deemed unsuitable for this very reason.

A detailed focus group topic guide and a pilot focus group minimised potential procedural problems. The focus group topic guide guiding the research process consisted of eight parts: introduction; ice-breaker; background discussion items; introduction of scenario type approach; attitudes to road charging including discussion about age impacts, pro-social values and social norms; focused road charging questions discussing geo-spatial orientation, income, trust issues and media influence; and summing up.

The participants of the focus groups were respondents of the survey that volunteered for this through a recruitment question in the questionnaire offering a further financial incentive to attract and motivate some of the respondents to commit in the second data collection phase. 115 people volunteered to participate in the focus groups, 37 of them being aged 60 or over.

Six of these older volunteers were aged 75 and over. The sample size of the second research phase constituted of 30 participants (19 older people and 11 younger people) split into three focus groups consisting of 10 people each. Two of the focus groups consisted of a mix of generations; there were older and younger individuals participating. This was an intentional feature of the sampling in order to allow for intergenerational dialogue to take place and simulate the real life social influences and society's structure where interaction between different age groups is an everyday situation. A third focus group consisting solely from older and pre-older people (aged 55 and over) provided to this work a different angle allowing the researcher to look more closely older people's attitudinal dependence on older age related issues such as retirement, pensions, age-induced mobility/cognitive difficulties and free bus passes. All the focus groups were recorded since only transcription can capture a significant part of their richness (Bernard 2000).

A scenario-type approach was employed, in which people were presented with a specific hypothetical road charging scheme in Bristol's city centre that was based on an unfulfilled scheme that was proposed back in 2000. It was assumed that there would be a weekday morning road user charge during the peak period of approximately 7-10 am of £4. A list of the potential exemptions and discounts, exempting public transport and emergency vehicles all blue badge holders and providing reductions to people living inside the charge area and low paid workers (statutory minimum wage) was also discussed.

4. Survey Data Analysis Findings

People aged 60 to 74 were the individuals most likely to be negatively oriented to road charging; they were far more likely than any other age group to strongly disagree with the notion that road charging could be good, fair or effective in reducing road traffic. They were also the people least willing to accept road charging even if hypothetically better alternatives to the car were in place. Nonetheless, comparing to the other age groups people aged 60 to 74 were also the respondents most likely to strongly agree with the perceived goodness and fairness of the idea of road charging. On the whole, people aged 60 to 74 expressed more polarised views from the other age groups choosing more often the options indicating a 'strong' opinion. People aged 60 to 74 were also the people most likely to be annoyed by traffic congestion so much that they would try to avoid it. Figure 1 illustrates the five levels of agreement of the four age groups with the notion that road charging is a good idea.

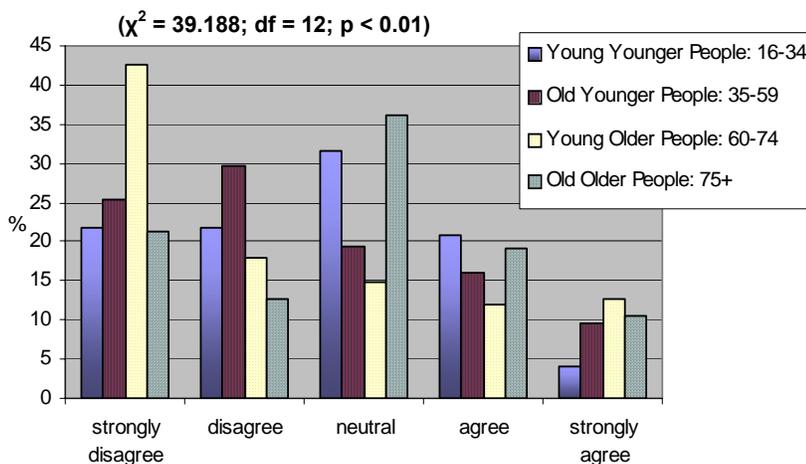


Figure 1: "Road charging is a good idea"

People aged 75 and over expressed significantly different attitudes overall to road charging to the ones of people aged 60 to 74; specifically more positive. People aged 75 and over were the people most likely to express neutrality to any question regarding road charging, something entirely compatible with the findings of the literature and the secondary analysis. More importantly though, these people constituted also the age group most sympathetic

towards this measure when referring to its potential goodness or fairness. They were also very likely to be troubled by road congestion; more likely at least than people aged 16 to 34. Older people, on the whole, tended to believe more often than younger people that they would not be affected by road charging; both financially and time-wise. These findings need to be reported taking into account that the people comprising the two oldest age groups self-reported **that were less likely to drive or face traffic congestion in a daily basis** than younger people did; especially the group of people aged 75 and over.

There were four statements set to measure pro-social value orientations in the survey. These examined whether the respondents would accept road charging if this was a measure that would “help future generations” (see Figure 2), “improving local transport alternatives”, “making people’s journeys quicker” (see Figure 3), and “reducing the environmental damage”. People aged 60 to 74 were the people most likely to express some form of disagreement with these statements. This result may look controversial considering that older people, according to the literature review, are more pro-social than younger people (Midlarsky, 1991; Pushkar et al., 2003) and the individuals most likely to show support of road pricing if this was to be introduced incorporating some pro-social features (e.g. ‘no overall increase in the amount of taxation paid by motorists’ or ‘money raised would be re-invested in transport’) (DfT, 2006; Nikitas et al., unpublished). A possible explanation to this is that individuals aged 60 to 74 failed to believe that road pricing would help future generations, make people’s journeys quicker, improve local transport alternatives or reduce the environmental damage. This means that people aged 60 to 74 did not prioritise the pro-social potential of road pricing. Trust, therefore, could be an underlying driver of opposition – trust in that road pricing could be delivering some benefits for society. Trust has also emerged in the literature (Scottish Executive 2006) as a key underlying driver of opposition for older people – trust in both the reasons for introducing this scheme and confidence that the generated revenue would support improvements in public transport.

This finding about trust issues that was confirmed from the second research phase could explain in some degree why people aged 60 to 74 were the ones most likely to disagree with road charging; because they could not see it as a pro-social measure. People aged 75 and over were the individuals most likely to ascribe pro-social values to road pricing together with those of individuals aged 16 to 34. It could be suggested that people aged 75 and over, seeing the pro-social potential of road pricing were more sympathetic to it. On the whole, the people that were in disagreement with the pro-social related statements were mostly the ones disagreeing that road charging could be a good or a fair project.

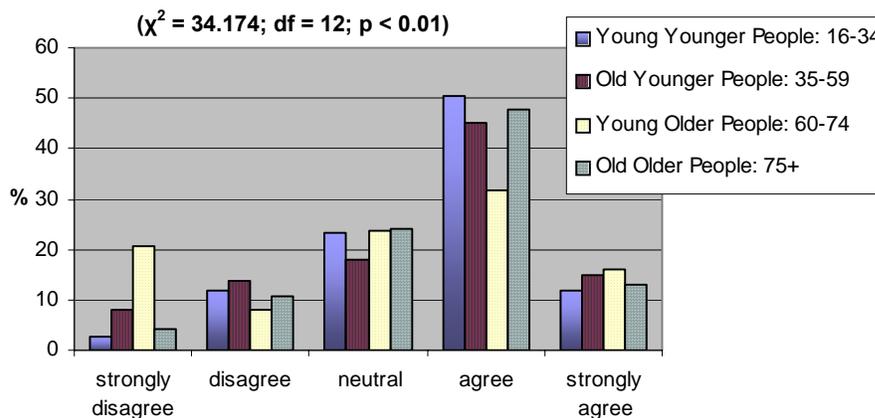


Figure 2: "I would accept road charging if this would help future generations"

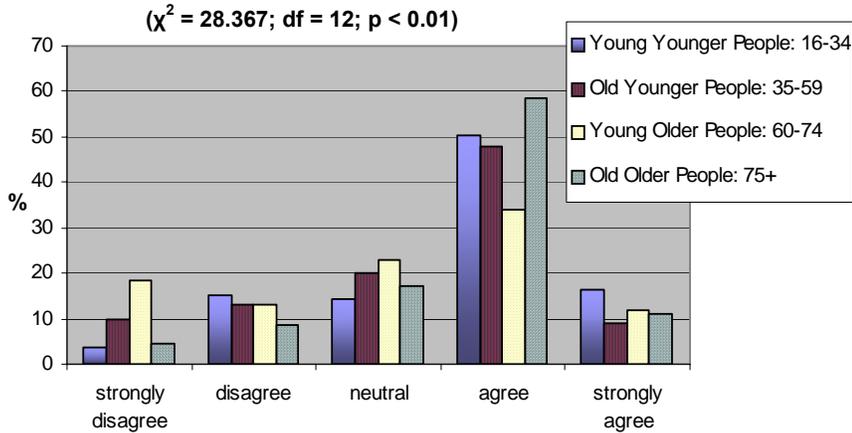


Figure 3: "I would accept road charging if this would make most people's journeys quicker"

People aged 60 to 74 were the people most likely to strongly disagree that those people important to them would consider road charging an effective, fair or good measure (see Figure 4). Older people aged 75 and over were not that likely to so do. Older people, and especially those aged 60 to 74, were more likely than younger people to consider that their significant others would not accept the concept of road pricing even if it could help improving the local provision of alternatives to the car. This finding should be communicated under the remark that people aged 60 to 74 were the ones most likely to believe that people important to them would not be affected by road charging, followed by people aged 75 and over.

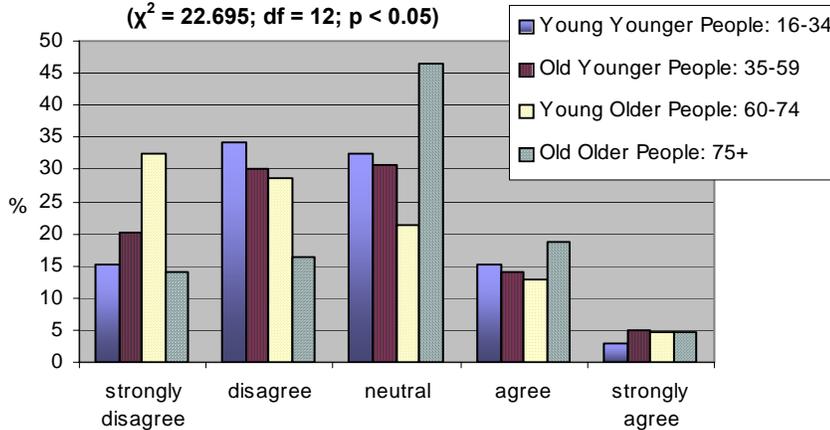


Figure 4: "I believe that my significant others consider road charging a good idea"

Older respondents and especially the ones aged 75 and over considered their significant others' agreement with road charging more important to them as a criterion for accepting this measure than younger people did (see Figure 5). This indicates that perhaps social norms influence the attitudes of older people more than the attitudes of younger people.

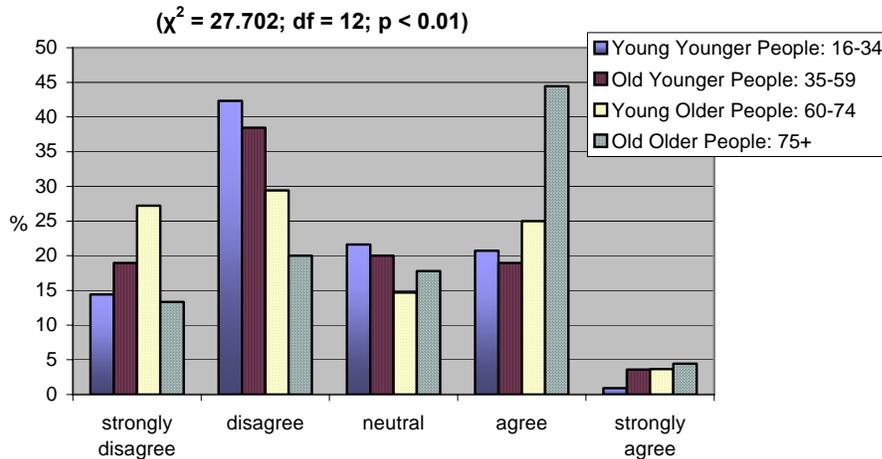


Figure 5: “I would accept road pricing if significant others agreed that it was a good idea”

The latter findings suggest that older people’s social norms around road pricing are different to the ones of younger people and could influence their attitudes to road pricing more than those of younger people.

5. Focus Groups Analysis Findings

Theory-driven thematic analysis (as framed in Braun and Clark 2006) was selected for analysing the rich data collected from the qualitative part of the study. This qualitative follow-up research attempted to fill up the research gaps that the predominantly quantitative survey could not fully fill. In particular, this qualitative study enhanced the researcher’s understanding about the role of age on people’s attitudes to road pricing and whether the age factor is among the reasons that older people’s attitudes differ from the ones of younger people. It has also clarified the extent to which attitudes regarding road pricing are influenced by pro-social value orientations and social norms and examined this particular influence especially on older participants. A systematic process of carefully coding the material to fit into a pre-conceived conceptual framework deductively informed by the literature review and based on the project’s specific research questions was the starting point of this work. The identification and close examination of the core themes and related sub-themes that emerged from this theory-driven analysis allowed the researcher to improve the understanding of the attitudes of older people to road pricing in comparison to those of younger people. There were four core themes that emerged from the data analysis guided nonetheless from the researcher’s specific analytical interest on attitudes, pro-social values and social norms and their interrelationships.

The first theme referred to pro-social value orientations and their three distinctive expressions; pro-equity value orientations, pro-environmental value orientations and generativity (i.e. concerns about children and future generations). Each of these pro-social value forms influenced differently the attitudes to road charging. People having high pro-environmental values were the people most likely to be positively oriented to road charging. People who have high pro-equity value orientation were more likely to think the monetary cost of the implementation of road charging to other people and disagree with the policy. Nonetheless there were pro-equity value oriented people who thought costs time-wise and effort-wise. These individuals considered that a ‘fairer’ reallocation of the road space is a matter of equity. There were individuals who had a different perspective of equity issues altogether considering that all people deserve a better public transport system, a more liveable city centre, career prosperity and a blooming economy, things on which road charging could have a positive impact. This means that pro-equity oriented people were not automatically more likely to be more negative to road charging- they could also be positively

oriented if they primarily consider costs as the time and effort lost in traffic. People that expressed intensively some concerns about the future of children and the forthcoming generations were very likely to have a positive attitude to road charging. Nonetheless there were participants negatively oriented to road charging who expressed these concerns but still failed to see how the proposed measure could help succeeding generations. Each of these pro-social value forms applied to a different extent to different age groups. Older people were more likely than younger people to express pro-equity concerns (especially monetary related) and discuss the impact of a bad transport system on future generations. Nonetheless, they were less likely than younger people to spontaneously refer to environmental issues although when prompted they did show a genuine interest about the environment and road charging's potential pro-environmental character.

Social norms emerged as another very important parameter that could influence attitudes to road charging. These refer to subjective norms (as defined by Ajzen, 1991) and the norms of others and the society in general. Many of the focus group participants when asked directly, declared that they believe that their attitudes are not influenced by others – 'they can decide for themselves'. Nonetheless, from other answers in a different context they did seem to take under serious consideration other people and what these other people were thinking about the measure or how road charging would impact on those people. Older people and especially those individuals aged 75 and over were the ones most likely to be influenced by social norms although at the same time they were the people most likely to point out that they were independent thinkers. This confirms the findings of the survey about the potential for social influence on older age groups; older people are more likely to be influenced by social norms than younger people.

The third core theme that emerged from the analysis referred to issues regarding trust or perhaps more accurately 'mistrust' about the motives behind the introduction of road charging, the use of the revenue generated, the measure's potential efficiency and administration. Trust was a particularly important driver of opposition towards the implementation of the proposed scheme – a factor that had a clearly negative effect to the attitudes, pro-social value orientations and social norms of the focus groups participants. The older people negative to road charging, all fail to believe that a scheme like that could actually work. They currently see it as another way of taxing the motorists, a scheme that is not designed to provide transport investments and therefore societal benefits but could well produce equity imbalance and distributional impacts. Nonetheless, if trust to local and National authorities was not an underlying issue, older people and especially young older people would have been much more positive to a potential scheme. Upfront investment of the revenue generated to transport improvements with an emphasis on the enhancement of public transport services, transparent fund-raising and expenditure, and better and more effective administrative procedures could re-establish their 'trust'.

The fourth core theme was age. Age is a parameter that had an impact on the attitudes, pro-social value orientations and social norms of individuals but still was not per se acknowledged –especially by some older people- as a factor that could shape their and other people's views about road charging. Nonetheless it was linked with a number of other factors that in many participants' beliefs did develop to a certain extent their attitudes to road charging. For instance many individuals – in particular older people- argued that age is not of the same importance as disabilities and kinetic problems, the state of health, the financial status, and the employment stage (retirement or working activity) when they, their significant others or others in general evaluate road charging. However because age influences each of these factors massively, it actually plays an indirect but nonetheless critical role in the developing of norms around road charging.

On the whole, this part of the work argued that older people's attitudes to road charging are influenced in some extent from their pro-social value orientations and social norms although these may not be the most crucial factors in their attitude development process. Older people are more likely than younger people in general to be influenced by this twin social context parameter while trust is an important underlying driver of opposition for them. Age was recognised especially from older people as a factor which could impact indirectly (by influencing a number of other important factors) to their attitudes regarding road charging.

6. Conclusions and Policy Intervention

On the whole, this research provides robust evidence that attitudes to road charging do vary with age. Moreover, a thorough understanding of the issues behind these age-specific differences and more importantly the way the attitudes to road charging can be affected by pro-social value orientations and social norms has been developed. Some of the key findings reported in this paper are:

- The attitudes of older people to road charging regarding its likely fairness and goodness are different than the attitudes of younger people. Older people are not a homogenous group when expressing attitudes to roads pricing; there are distinctive age-specific differences even between them.
- People aged 60 to 74 are the people with the most negative attitudes to road charging over all, while people aged 75 and over are the people most likely to be sympathetic or neutral to this measure.
- People aged 60 to 74 comprise the group of people least likely to appreciate the pro-social character of road charging, whilst people aged 75 and over, together with the people aged 16 to 34, are the people most likely to ascribe pro-social values to road charging.
- People aged 60 to 74 are the people most likely to consider that their significant others have negative attitudes to road charging. People aged 75 and over are the people most likely to consider that their significant others have positive attitudes to road charging.
- Older respondents considered the agreement of their significant others with road charging to be more significant as an acceptance criterion than younger people did. This was particularly the case for older people aged 75 and over. This finding indicates that the social norms' influence is stronger on the attitudes of older people to road charging than on those of younger people.
- Pro-social value orientations do play a role in the way attitudes to road charging develop. Pro-social value orientations can be expressed in three different forms; pro-environmental values and generativity which are mainly drivers of support for road charging and pro-equity values which are mainly drivers of opposition. Younger people tend to be more likely to express pro-environmental values than older people while older people are far more likely to express generativity and pro-equity concerns when thinking about road charging. This clearly came up as one of the reasons why older people's attitudes do differ from the attitudes of younger people.
- Social norms regarding road charging could be split into subjective norms and what do people think about other people's views and society norms in general. Older people were more likely than younger people to be influenced in some degree by social norms (of both these forms) but very unlikely to immediately recognise the influence of family, friends or norms on their decision making process in general.
- Trust about the motives behind its introduction, about its efficiency, about the way that the collected revenue could be spent and about its potential for benefiting the society consisted a major driver of opposition to the idea of road charging. People aged 60 to 74 fail more than any other age group to trust that road charging could be genially a good measure and not another form of taxation. They were more likely to see it as potentially ineffective measure that could not really have any significant societal or environmental benefit that could positively impact their and other people's lives.
- Age in many cases is not per se a most significant reason for the different attitudes of older people towards road charging but a generator of factors that could shape and differentiate attitudes. As a matter of fact some individuals and especially the older individuals suggested that age is not as important as mobility difficulties, the state of health, the state of employment or the financial capability on their own decision making process and on to other people's ones. Nonetheless they did recognise that generally age affects very much these other attitude development parameters.

In terms of potential for policy intervention, revealing the special attitudinal issues of older people may help in understanding and responding to some of the potential social dilemmas

of road charging. In particular, older people aged 60 to 74, despite being the individuals least likely to support road charging, have a considerable potential - bigger than that of younger people - to view favourably a policy that could potentially benefit the people most important to them and/or society as a whole. For the time being, these people are less likely to ascribe pro-social values to road charging than any other age group, therefore their pro-social value orientations do not affect in a favourable manner their attitudes towards road charging. This tendency not to appreciate the potential pro-social benefits of road charging despite being the least pro-self individuals (Midlarsy 1991; Rushton 2004) is due to their lack of trust in the measure and the motives behind its potential introduction. Lack of trust could partly be an issue of limited information or a one-sided exposure to the bad publicity that road charging has received so far.

Authorities with serious plans to implement road charging need to promote the pro-social nature of road charging, especially when targeting older people. Possible beneficial outcomes like the potential of making people's journeys quicker, helping the improvement of the local transport system, reducing environmental damage and allowing future generations to enjoy a better life, might be the topics of such communications. This strategy may help older people and especially those aged 60 to 74 to re-assess the potential pro-social character of road charging and become more positive towards it. On the other hand, since pro-social values and social norms are interrelated, an effective pro-socially oriented campaign could also help to reshape to some extent the social norms regarding road charging, making them more favourable to this measure: something that could eventually influence attitudes to road charging. The actual involvement of older people and especially of those aged 60 to 74 with the proposed plans regarding the introduction of road charging schemes, through the means of consultation is a most decisive step towards this direction. A consultation procedure that will emphasise the pro-social potential of road charging could have similar or even better results to that of a promotional campaign.

More important than suggesting any specific consultation process or promotional campaign though, is the knowledge generated for policy-makers that many older people see road charging currently as a non pro-social measure that most people view unfavourably (negative social norms). The implication for professionals is the need for them to design pro-social - and thus more acceptable - road charging schemes. An example of such a practice could be the provision of more exemptions and discounts than the ones that have been used so far in other schemes. More specifically, groups of people more sensitive to social exclusion such as older people, people with mobility disabilities, and the unemployed require special care. Also people like doctors, carers and other categories of essential workers need to be excluded from the measure while they are on duty. Discounts need to be provided for people on lower incomes for any eventual road charging fare but also for public transport services to promote modal shift. Hypothecation of the revenue and expenditure on transport alternatives is also a key for proving the scheme's potential to be pro-social. The pro-environmental value of any eventual scheme must also be enhanced with the use of ecologically friendly technology. The potential for providing benefits for future generations and children must be also clearly indicated by using the revenue collected for projects that could ensure a more prosperous future such as greener transport schemes. Nonetheless, before any further policy implications can be proposed, these research results need to be generalised into and validated in a wider context.

Acknowledgments

The author is grateful for the funding support of the UK Government Department for Transport and Bristol City Council, however the views expressed in the paper should be assumed to be entirely his own.

References

- Ajzen, I.** (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- Alsnihi, R. and Hensher, D.,** 2003. The mobility and accessibility expectations of seniors in an aging population. *Transportation Research A*, 37, 903-917.

- Bernard, H. R.** 2000. Social research methods qualitative and quantitative approaches. Thousand Oaks, Calif. London: Sage.
- Braun, V. and Clark, V.** 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.
- DfT**, 2001a. Older people: Their transport needs and requirements - Summary report, Department for Transport, London.
- DfT**, 2001b. Older drivers: A literature review. Department for Transport, London.
- DfT**, 2004. Attitudes to road pricing. Department for Transport, London.
- DfT**, 2006. Experiences of congestion and attitudes to road pricing. Department for Transport, London.
- DfT**, 2007. Public acceptability of road pricing. Department for Transport, London.
- DfT**, 2008. Concessionary bus travel: frequently asked questions. Department for Transport, London.
- Dominy, N. and Kempson, E.**, 2006. Understanding older people's experiences of poverty and material deprivation. Research Report No 363. Department for Work and Pensions. Leeds.
- Fujii, S., Garling, T., Jakobsson, C. and Jou, R. J.**, 2004. A cross-country study of fairness and infringement on freedoms as determinants of car owners' acceptance of road pricing. *Transportation*, 31, 285–295.
- Gaffron, P., Hine, J. P. and Mitchell, F.**, 2001. The role of transport in social exclusion in urban Scotland: Literature review. Scottish Executive, Edinburgh.
- Gilleard, C. and Higgs, P.**, 2005. Contexts of ageing: class, cohort and community. Polity Press. Cambridge.
- Goerres, A. A.**, 2007. Why are older people more likely to vote? The impact of ageing on electoral turnout in Europe. *British Journal of Politics and International Relations*, 9 1, 90-121.
- Horne, C.**, 2001 Sociological perspectives on the emergence of norms. In Social In Hechter, M. and Opp K. D. (Eds.), *Social norms*. 3–34, Russell Sage Foundation.
- Ison, S. and Rye, T.**, 2005. Implementing road user pricing: the lessons learnt from Hong Kong, Cambridge and Central London. *Transport Reviews*, 25, 1-15.
- Jordan, K. and Avineri, E.**, 2009. Transport consultations: Exploring the age bias. Forthcoming in *Proceedings of ICE, Urban Design and Planning*.
- King, D., Manville, M. and Shoup, D.**, 2007. The political calculus of congestion pricing. *Transport Policy*, 14, 111-123.
- Kitzinger J.** (1995). Introducing focus groups. *British Medical Journal*, 311, 299-302
- Kovalchick, S., Camerer, C., Grether, D., Plott, C. and Allman J.**, 2004. Aging and decision making: a comparison between neurologically healthy elderly and young individuals. *Journal of Economic Behavior and Organization*, 58, 79-94.
- Midlarsky, E.**, 1991. Helping as coping. In M. S. Clark Ed., *Prosocial behavior*, 238-264. Newbury Park, CA: Sage.
- Morgan, D. L.**, 1997. Focus groups as qualitative research. *Qualitative Research Methods Series*, 16, 2nd ed. London : A Sage University Paper.
- Musselwhite, C. B. A.**, 2006. Prolonging safe driving behaviour through technology: attitudes of older drivers. 26th International Congress of Applied Psychology, Athens, Greece. 16th – 21st July 2006.
- Nikitas, A., Avineri, E. and Parkhurst, G.**, (unpublished) Reviewing the attitudes of older people to road pricing: how distinctive are these and why are they so important?
- Oliver, R. L. and Bearden, W. O.**, 1985. Crossover effects in the theory of reasoned action: a moderating influence attempt, *Journal of Consumer Research*, 123, 324–340.
- ONS**, 2005b. The United Kingdom time use survey. British Office for British National Statistics. London.
- Orimo, H., Ito, H., Suzuki, T., Araki, A., Hosoi, T. and Sawabe, M.**, 2006. Review paper: reviewing the definition of “elderly”, *International Journal of Geriatrics Gerontology*, 6, 149-158.
- Raje, F.**, 2003. The impact of transport on social exclusion processes with specific emphasis on road user pricing. *Transport Policy*, 10, 321–338.
- Rushton, J. P.**, 2004. Genetic and environmental contributions to pro-social attitudes: a twin study of social responsibility. *Proceedings of the Royal Society*, 271, 2583–2585. London.
- Scottish Executive**, 2006. Evaluation of Edinburgh residents' attitudes to the proposed road user pricing scheme. *Transport Research Series*. Edinburgh.