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The Future of Social Transport: 'a good idea, but…'

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ABSTRACT

The current emphasis on congestion, pollution, quality of the transport experience and the spiralling costs of energy has led to a growth of interest in social transport, such as those offered by car and lift share schemes. Together with greener fuel and the use of technology, it is possible to widen the transport choices available to consumers. However, there has been a reported reluctance on the part of users in the UK to join up to local and national car and lift share schemes, even those that would seem to offer benefits in terms of lower costs, congestion and carbon reduction. This paper reports on qualitative research carried out by Coventry University into perceptions of social transport.

Keywords: Social Transport, Pollution, Car sharing, Lift sharing

INTRODUCTION

The provision of efficient integrated transport in the UK has been a long-term aim, evidenced by the setting up of the British Transport Commission (BTC) in 1947. The BTC's objective was to 'secure the provision of an efficient, adequate, economical and properly integrated system of public inland transport and port facilities' (Button 1993:249 quoted in Preston 2012). However, until 1996, this objective was subject to the decisions of changing political regimes, and only re-emerged in concrete form with the introduction of the Green Paper: The Way Forward in 1996. This Green Paper contained over 20 key measures based on five objectives – the better planning of transport infrastructure, making better use of existing transport systems, reducing car dependence (especially in towns), switching emphasis from roads to public transport and reducing the impact of road freight (LGC 1996). This Green Paper can be seen as the pre-curser to a number of subsequent measures introduced since then (see Preston 2012).

Despite a renewed focus on integrated transport, the importance of car ownership to personal transportation in the UK has reached new heights in recent years. The UK 2010 National Travel Survey underlines this by reporting that 64% of respondents stated that their main mode of transport was either car or van as a passenger or driver. More importantly, access to personal motorised transportation has increasingly become a gateway to critical services and social interaction for the average household, with those in ownership of a car or van typically travelling nearly twice as much and twice as far as those in non-car owning households. Furthermore, over a number of decades a culture of single driver occupancy has developed domestically. In the UK vehicle occupancy rates have remained largely static since the early 1990s at approximately 1.6 occupants per car per stage of each trip. In 2010, 61% of each stage of a car trip was undertaken by a single occupant of a vehicle.

Although private car availability can bring numerous benefits - such as mobility, freedom and convenience - the rapid growth of private transport is at odds with an recent emphasis on sustainability. With the noise and air pollution, congestion and effects on land-use caused by provision of road networks, parking spaces and other service facilities, the current use of cars is becoming unsustainable

This being the case, car/lift sharing (or social transport) offers opportunities to reduce car ownership, which could lead to fewer kilometres or miles travelled and thus result in reduced traffic and increased environmental benefits (such as reduced emissions and decreased demand for parking spaces). Furthermore, changes in travel behaviour may occur, leading to a modal split, moving more towards the use of alternative modes of transport, such as public transport, cycling and walking (Shaheen et al, 2006).

For individuals, motivators for using social transport include financial savings, environmental concerns, poor public transport, low car ownership - especially in rural areas (Bonsall (2002), parking problems, mobility issues and availability of locational stands. (Steininger et al, 1996; Meijkamp, 2000; Katzev, 2003).

Conversely, barriers include unavailability of cars, difficult booking systems, distance to closest stands, membership requirements, car ownership seen as lifestyle choice/identity, lack of awareness of schemes, fear of sharing with strangers, personal safety and security issues; poor driving/speeding; problems with sharing costs; gender of car sharing partner and interaction within the car. DfT (2005: 18)

Individuals most likely to engage are those that are not dependent on the identity of car owner. They are likely to be educated young/middle aged women, environmentally conscious with higher than average incomes. Loose et al (2006) found that populations more likely to engage in organised lift sharing share characteristics such as living in close-knit communities, where car ownership is low and public transport is poor.

Using a literature search and a market report as a baseline, this 2012-13 study aimed to identify people's perceptions of social transport, including any barriers and enablers.

THE STUDY

Methodology

The findings from the literature search and market report were used to construct an online survey. Of 243 survey responses received, 86% (209) were fully completed and analysed. Of these, the largest proportion (36%) of responses came from Coventry University, followed by 27% of respondents via email contact. Facebook attracted 9% of responses, followed by 'recommended by a friend' (7%). Linkedin garnered 4% of responses.

The survey offered potential respondents four options:

- An individual who <u>does</u> car or lift share
- An individual who <u>does not</u> car or lift share
- An organisation that offers a car or lift share scheme
- An organisation that provides the technology to facilitate a car or lift share scheme

Those who stated that they did car/lift share were offered the option to choose whether their scheme was a car sharing scheme (car club accessing a range of vehicles), a regular lift sharing (lift sharing with friends, neighbours, or work colleagues) or an 'ad-hoc' arrangement (sharing a car or accessing/giving lifts on a random basis).

The overwhelming majority of the responses (86%) were from those who did not car or lift share. A total of four organisations responded, three of which offered platform technology for car/lift sharing schemes and one which was a car/lift share organisation.

From the survey respondents, twenty-three interviews were carried out in December 2012, which included eleven interviewees who did car/lift share, ten interviewees who did not, one technology platform provider and one car/lift sharing organisation.

Results: Survey

Those who did not participate in car/lift sharing
For the respondents in this group, the male/female gender split was relatively even with the majority aged 36-45. In terms of ethnicity, the respondents were overwhelmingly white British and did not declare any disability. The majority lived in urban areas.

Just over 40% worked for an organisation that provided a car/lift share scheme, but 21% were unsure - of these 43% worked for Coventry University, indicating that the CU Car Share scheme was not well publicised.

Unsurprisingly, most (93%) stated they could drive, with the majority driving for 10 years or more. A further 83% of these owned a private vehicle, stating that the main advantage was freedom, independence and convenience; the

main disadvantage was cost of car ownership.

For the non-drivers, cost – purchase of a vehicle, insurance and driving lessons - were overriding factors as to why they did not drive. They also rated access to family and friends who could give them lifts, or other forms of transport, as important. Benefits of not driving were felt to be increased exercise, lack of stress, environmental benefits, low costs and productivity in work terms (for example, working on train or bus). The drawbacks included bad weather, delays, high prices, safety issues (public transport ceasing at midnight/deserted train stations), lack of public transport to some destinations and the length of time needed to get somewhere when using different forms of transport during the same journey.

For drivers and non-drivers alike, the main reason given for not participating in car/lift sharing schemes was the lack of spontaneity and problems with matching work patterns with colleagues: 'Freedom to come and go when I please'; 'Would have to agree to specific travel times'; 'I feel car sharing would lose my independence'.

Another reason was lack of awareness: although these respondents had heard of car/lift share schemes, there was no evidence to suggest that they knew how they worked in any great detail: 'I have low exposure to these schemes. They feel very separate to real-life mobility'; 'The fact that schemes exist mainly online means I cannot relate them to real journeys'; 'If there was a greater physical presence of these schemes I think I would be a lot more likely to get involved.'

Some were concerned about privacy, seeing their drive to work as their own private space, and some were worried about other people's driving habits: 'I don't want to share my car with somebody else (it is a private, quiet space both before and after the working day)'; 'I do not want to be subject to somebody else's driving as a car share passenger'.

Others felt that getting to a pick up point could be problematic and those who lived in rural areas felt that there would be a lack of potential partners.

There were also concerns about lack of flexibility in terms of the school run and the need to leave work if there was an emergency concerning children: 'I have school age children who I drop off: also in an emergency if I need to pick one of them up from school due to an accident I am able to.'

Further, the respondents were asked how much they would pay for a car/lift sharing scheme and some stated between £0-£10 per month. This question was not clarified and so the assumption is that these respondents understood it to relate to a fee for joining a scheme. However, those who responded to this in more detail were focused on sharing the cost of fuel, rather than paying a fee for a service. One respondent possibly speaks for all with this comment: 'I'm not sure what the above amount includes. If it is the cost of arranging the service, then £10 or less. But if it includes the cost of the transportation then the highest amount - I currently pay over £160 for fuel'.

Although this group did not car/lift share, they could see that there may be benefits to such a scheme – the majority cited cost savings, and some thought schemes would be good for the environment. But, when asked about the disadvantage, themes of inflexibility (45%), reliance on others (26%) and lack of privacy (17%) were again mentioned.

Finally, the respondents were asked for any other comments and surprisingly, 71% fell into the 'it is a good idea, but…', perhaps indicating that if a car/lift share scheme was practical, then it would be a possibility. But, as reflected above, the lack of practicality – in terms of less flexibility/independence, living in rural areas, problematic work patterns, child-care routines - precluded use of such a scheme. And, perhaps the lack of awareness of how such schemes work stop people even beginning to investigate them: 'Although I am vaguely aware of [a] scheme it has not been well advertised and I don't know how to investigate using it.'; 'Any kind of car share system has to have minimal task loading to make arrangements - no 'systems' you log onto to ask for lifts, no apps, no ambiguity on payment rates.'; 'Segregate the car parks by destination like a bus terminal and people can ask for lifts or informally approach people that are going to the same place they live.'

Those who did participate in car/lift sharing scheme
Of the 31 respondents in this category, none selected 'car sharing scheme' with majority 58% selecting 'lift sharing scheme' and the rest selecting an 'ad-hoc' arrangement. This indicates that despite the explanations given for each option, there is still some confusion about precise definitions of such schemes.

In common with those who did not participate, again the respondents were mainly white British, did not have a disability and lived in an urban area. In contrast to those who did not participate, these respondents were mainly female, aged between 45-55.

Also in common with those who did not participate, 90% were drivers, and the majority had been driving for 10 years or more, with 86% owning a private vehicle. The most cited advantage of owning a private vehicle was freedom and convenience, followed by 'better/cheaper than public transport'. The most cited disadvantage was cost (76%).

For the non-drivers in this group the cost of buying a car and insurance were cited as being important to not driving. Further, two out of three felt that the cost of driving lessons, access to other forms of transport and 'family/friends drive me when necessary' were important factors. Of equal importance were 'busy/congested roads' and 'environmental reasons'. Only one out of three was 'not interested in driving' or 'too busy to learn'. These respondents used a mixture of bus, bicycle, car or train as their typical model of transport.

Of those who participated in a regular scheme, 50% worked for an organisation that provided a car/lift sharing scheme. When asked how their scheme worked, many were vague about the details. The rest of the answers concerned the actual arrangements for lift-sharing, for example: 'My colleague and I finish at the same time 3 days a week and I drop her off and she pays for the car park ticket on these days.' Some had a regular arrangement, and others planned at the 'beginning of the week'. They communicated with each other via texting, phoning, email, and face-to-face discussion.

The majority were both drivers and passengers, and over half travelled to a pick up point. The average cost of a journey was under £5.00, and a third used the scheme every day or regularly: only 22% used the scheme less than once a week.

The advantages of their schemes were overwhelmingly felt to be the cost savings in terms of sharing fuel and parking costs. Five of the respondents mentioned flexibility and freedom – of these, three were passengers: 'I can get to places that I can't usually get to easily by public transport'; one was a driver: 'can be flexible: make several drop offs and collections on way to work'; and another was both: 'I drive to my daughter's house and we then use either her or my car for onward travel to work'.

Further, four respondents mentioned the social aspect as being an advantage. For example, one felt that he could 'discuss work issues, solve problems at work', and another felt that conversation was important, typified by this quote: 'There are more people to socialise with and also you get to know more about the passengers.'

Three mentioned environmental benefits in terms of less congestion on the roads.

For these respondents, the disadvantages included being tied to another person's schedule (either through having to work the same hours, or having to wait for someone): 'If one of us has a late meeting the other has to stay behind until it is finished, or if an early meeting is arranged then the other has to be in work early'.

Three found that being part of such a scheme meant that they had a longer journey: 'I have to drive 8 extra miles to a pick up point. Would be quicker in time if I went from home.'

One who lived in a rural area had a problem with 'too few suitable candidates because of my home location' and another felt the lack of a 'dedicated parking or discounted parking for car sharers'.

Primary motivation for car/lift sharing was to get to work (67%), and a secondary motivation was to get to an educational institution or go shopping. In terms of the potential provision of a cost/pollution measurement tool, 56% said they would not find this useful and reasons ranged from 'this was already available' to 'don't see the benefit'. Some had already had worked out the cost/benefit and so felt this would be unnecessary, but others felt that it could be beneficial with one stating: 'It would help promote the scheme to colleagues and friends, as an indication of the benefits would make people think twice.'

Further comments related to how any scheme has to be 'reliable' and the difficulties of trying to synchronise schedules.

For the ad-hoc sharers, five specified that they were part of a 'formal' scheme, for example, an 'online booking sys-

tem where you register and enter journeys. The system then attempts to match you with colleagues'.

One used a scheme to 'arrange lifts to specific events' and others were part of informal arrangements, for example, a school lift/parent scheme where 'we all take turns' or 'driving my partner to work'.

In terms of arrangements, some checked their scheme's website, others planned for the 'coming week', and all communicated with each other via texting, phoning, email, and face-to-face discussions.

Over a third were drivers, 23% were passengers and 15% were both. Just over half travelled to a pick up point, such as driving an 'additional 3 miles to collect my colleague'. In terms of costs, these varied, with the majority under £5.00 per journey usually relating to fuel and parking. Over half (54%) used their arrangement occasionally (less than once per week) and the rest regularly.

The benefits of the schemes included company, cost savings, and, for a festival-goer, a scheme that 'makes it really clear where there are passengers or drivers travelling to a specific event'. Drawbacks included less flexibility in terms of departure and arrival times, additional journey length, and lack of a car 'going the way I want to go'. For one respondent who was part of a formal scheme, the system itself was 'clunky to use, passwords and log-ins do not work smoothly, lots of people can't be bothered to join'.

Primary motivations were to get to work, to go on holiday or to get to an educational institution. Secondary reasons were also to get to work, going shopping, attending clubs/activities, or to catch up with a colleague.

In terms of a potential cost pollution tool, 85% felt this would not be useful, because their journeys were quite short, and they 'would liftshare anyway' or the 'scheme already does this'.

Further comments included the benefit of conversations during travel, a suggestion that taking freight off the roads would make car travel safer, the problem of unreliable sharing partners, a lack of enthusiasm for sharing with strangers, the need for better promotion of schemes and less clunky interface systems.

Technology platforms
Three technology providers filled out the questionnaire, one operating in Europe, one on a world-wide basis and one in the UK only.

Both the European and worldwide providers took a commission from every ride booked; also both made money from selling their platform to organisations. There was a slight difference between the two in terms of demographics, with the European company seeing slightly more men (54%) than the worldwide company (47%). The latter also provided information that its users tended to be highly educated, and single. However, both companies served an under-40 demographic. In terms of how the services work, both companies employed a web site, Facebook page and mobile app.

The third company did not provide very much information beyond that it is based in the UK, and is run on a not-for-profit basis.

In terms of barriers to using such a service, insurance worries were mentioned, lack of awareness of schemes (how they work/cost savings/environmental benefits), lack of national and local government support, lack of incentives, such as sharing lanes or priority parking. But the most basic barrier was felt to be the lack of an internet connection.

The car rental market, which could have been seen as a competitor, was actually seen as a positive, as 'most people will try and fill a rental car with other passengers to alleviate the cost'.

None of the companies offered incentives to their customers, and all confirmed that there had been a rise in uptake in recent years due to the cost of fuel. Also mentioned was the desirability of linking to Facebook, which made it easier for people to book a journey and also rate participants so they could find out 'who they might be sharing with'.

Car Share Company
One English car share company filled in the questionnaire, and confirmed that its customers tended to be students, generation Y, university staff and festival-goers. Run on a for-profit basis, the service worked by matching passengers and drivers through creating a trusted community via Facebook. It also offered a rating service, helping users

build up credibility on the site. The service also integrated with software for public transport.

Reasons for using the service include cost saving, ease of use, trust, meeting new people and to reduce carbon emissions.

Barriers included inertia, lack of awareness, lack of trust about strangers (but that integration with social networks can improve this). An incentive was access to case studies from people their customers respect, e.g. friends using the service and stating why they enjoy it. This service had also seen a rise in uptake in the last two years due to rising fuel costs. As with the technology providers, rental cars were not seen as a problem, as customers were more likely to share the ride and associated costs.

Results: Interviews

Twenty-three interviews were carried out in December 2012, which included eleven participants who did car/lift share, ten who did not, one technology platform provider and one car/lift sharing organisation.

When comparing the themes that emerged between those who did car/lift share and those who did not, again common issues emerged.

These included a wariness of sharing with strangers – both sets of respondents were not keen on this, and this was underpinned with comments from the technology provider and the car/lift sharing company interviewed. The issues expressed included worries about sharing with the opposite gender, lack of agreement about the internal environment of the car (e.g. radio on/off), and worries about poor driving skills.

Work schedules were also problematic, with both those who did car/lift share and those who did not expressing worries about a sharing partner's reliability in starting and finishing at an agreed time. This was also a larger issue for those who did not car/lift share – this group felt that the lack of flexibility involved in trying to co-ordinate their schedules precluded any involvement.

Both sets of driving respondents were also loath to give up ownership of their vehicles, even when asked if an alternative method of transport proved to be cheaper. This culture of car ownership, and its attendant benefits of flexibility, convenience, control and privacy, was echoed by both the technology and car sharing organisations in that they spoke about a UK culture of disinclination to share which is not as prevalent in other parts of Europe. Germany and France were mentioned as examples of how car/lift sharing was much more popular.

There were also some commonalities in terms of the environmental benefits with both sets of respondents, in that most were aware that car/lift sharing would be beneficial to the environment. Having said this, those that did car/lift share displayed a stronger affinity to this, and it played a bigger part in their decisions to car/lift share. Those that didn't car/lift share displayed agreement that this would be a beneficial effect in principal but it did not override their need to maintain their autonomy of travel.

The need for incentives to use car/lift sharing schemes were mentioned by both sets of respondents, including guaranteed and cheaper/free car parking, government sponsored car lanes, schemes which targeted those who do not have access to computers/smart phones, flyers/posters in workplaces, and online maps integrated with public transport.

This theme of the promotion of car/lift sharing schemes is linked to the biggest finding from the interviews, in that a lack of awareness of how such schemes work was displayed by both those who did car/lift share and those who did not car/share. Also, some of the technology used by the existing car/lift sharing schemes was problematic - overly complicated and also lacking in information about how the schemes worked before sign up.

SUMMARY AND CONCLUSION

The overall profile of both those who did participate in car/lift sharing and those who did not was white British, aged over 26, with no disabilities and living in urban areas. The majority of both groups were drivers and tended to own or have access to a vehicle (reflected by the UK 2010 National Travel Survey), but there were some indications that the rising cost of fuel could prove a future trigger for those who currently do not car/lift share.

Meanwhile, for those who did participate in schemes and who owned a vehicle, it seemed to be environmental issues that pushed them into car/lift sharing - for this group, there seemed to be a feeling of well-being fostered by minimising their carbon footprint, and there was also evidence that the social aspect of car/lift sharing was particularly welcomed.

There was a difference between those who did participate in car/lift sharing and those who did not in terms of gender – for the former the gender split was relatively even, for the latter the gender split was mainly female, possibly due to the high cost of having a second car in the family, which could prove to be another trigger.

For non-participants, the main reasons for not car/lift sharing were a perceived lack of spontaneity, mismatch of work patterns, lack of privacy, worry about other people's driving ability, distant pick up points, a lack of options in rural areas, and childcare responsibilities. Further, most of these reasons were reflected by participants who did car/lift share, in that they did experience a lack of flexibility, had longer journeys; found too few suitable candidates in rural areas and experienced a lack of privacy.

These findings were reflected in more detail during the interviews, with disadvantages from both those who did and those who didn't participate cited as lack of privacy and mismatched work schedules.

The advantages of car/lift sharing were recognised by both groups, such as possible cost-effectiveness and benefits to the environment, but these were outweighed for those who did not participate by the disadvantages, particularly lack of privacy, flexibility and independence. There were also specific problems for those in rural areas in trying to identify partners.

However, the most common theme that emerged from this study is a lack of knowledge about how schemes work and a lack of user-friendly systems. Both groups were somewhat vague about how schemes worked, would like to see a much clearer promotional strategy for schemes and also incentives offered, such as free/subsidised car parking and specific road lanes.

Consequently, the perception of social transport in the UK can currently be characterised as 'a good idea, but…'

Therefore, the overall recommendation is that schemes must produce clear and simple information on benefits, incentives and practicalities, underpinned by a user-friendly technology platform. In addition, a scheme should offer a cost and environmental impact calculator - cost was mentioned as a possible trigger point for those who did not car/lift share to consider a different mode of transport, and environmental awareness was a driving factor for those who did participate in existing schemes.

Finally, in the absence of a government-funded social transport system, there is a need for a concentrated, funded effort from policy-makers to encourage organisations to enter into and expand the market for future social transport schemes in the UK.

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