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# INTERNET: Investigating New Technology's Evolving Role, Nature and Effects for Transport

INTERNET was a three-year study into the impact of Internet use upon personal travel and participation in activities, funded by the EPSRC and DfT within the FIT programme. The project received a peer assessment rating of 'tending to outstanding'.



The study had the following aims:

- 1. <u>To develop recommendations concerning</u> <u>the role of the Internet in an integrated</u> <u>transport policy</u>, specifically: to identify relationships between personal travel and Internet use; to assess the extent to which Internet use can substitute for and supplement both existing and future travel demand; and to assess the role of an increase in virtual accessibility in developing a more inclusive society.
- 2. <u>To produce and make available for wider</u> <u>consultation a data set regarding travel</u> <u>and Internet use</u>, containing longitudinal survey and diary data.
- 3. <u>To enhance current methodologies to</u> <u>enable more effective monitoring of</u> <u>travel/Internet interactions</u>, including the integration of quantitative and qualitative approaches and the incorporation of telecommunications into activity diaries.

## Background

At the outset of this research, two fields of transport research were in the ascendant. The first reflected technological change, considering the growth of new information and communications technologies and their impacts for transport systems and travel behaviour. The second reflected social change, considering the growth in inequality and disadvantage and the contribution of transport systems and travel behaviour to the same.

This project explored a potential link between the two, exploring the hypothesis that virtual mobility, via the Internet, could provide a viable alternative to physical mobility in reducing mobility-related social exclusion, without the negative effects that some authors have associated with an increase in Internet use: namely, increasing physical mobility and decreasing sociability.

Considering the mobility effects of Internet use, existing research was largely polarised, with some studies supporting the suggestion that Internet use can *substitute* for travel, yet others finding that Internet use *enhances* physical mobility. Research into the social effects of Internet were similarly divided into 'Internet good' (increasing social participation) and 'Internet bad' (decreasing 'meaningful' social contact, decline in trust and the destruction of community).

Examination of the literature revealed a 'data gap', which hindered theoretical progress in the field, the root of which was a 'methodological gap' – the inability of current research methods to fully capture the complexity of interactions between Internet use, participation in (social) activities and travel. This research aimed to address these issues, to enable conclusions to be drawn regarding appropriate social and transport policy responses to increasing Internet use in UK society.



#### **Methodology**

A number of methods were employed in this study.

- Two national surveys were conducted, three years apart, in 2003 and 2006, to gain a snapshot of people's Internet and travel behaviours and attitudes. The surveys were distributed to over 1,000 people, representative of Internet users in Great Britain, in each wave. Around 200 of these participants completed the survey in both waves.
- Self-administered diaries, completed by around 100 participants, three times, at six-monthly intervals, were the principal method of data collection. Taking aspects of four different diary traditions - activity, communications, time use and travel the `accessibility diary' provided considerable methodological advance, representing the first diary to record not only travel but all online and offline, primary and secondary activities.
- Focus groups and gualitative surveys were also conducted, to allow depth exploration of key issues raised in the diary study.

## **Key findings**

- Internet use is not associated with physical mobility. There is no evidence to suggest that virtual mobility leads to an increase in physical mobility. Therefore, concerns regarding an increase in mobility-related exclusion, stemming from an increase in physical mobility as a result of virtual mobility, are not supported by this study.
- Equally, however, in the main, there is no evidence to suggest a decrease in physical mobility through substitution. Therefore, the contribution of virtual mobility to decreasing mobility-related exclusion may be limited to its function in alleviating problems of too little mobility, not of too much.
- Concerns regarding a decrease in sociability are not proven in this research. Internet use is not associated with a decline in sociability. Rather, online social networks activities supplement offline social networks activities, increasing total sociability.

- For many activities, virtual mobility is providing additional access to activity participation. That there is a clear association between Internet use and an increase in activity participation, for the majority of activities considered, suggests a clear role for virtual mobility in social and transport policy, facilitating greater activity participation by supplementing existing participation and fulfilling latent demand.
- Multitasking was shown to be both It is not prevalent and important. randomly distributed. Rather, certain activities are more likely to have activities appended; and certain activities are more likely to *be* appended. Whilst there are some activities, for example paid work, for which the inclusion of secondary activities is not important in our understanding of the true extent of activity participation, for others, most notably (for this paper) Internet use, the extent of and, therefore, reasons for, changes in time use and activity participation, including travel, will not be fully understood without consideration of multitasking.

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