

Summary:

On the move – in the car – with the mobile phone

A study of communication and mobility in the daily life of families with children

Families with children, mobility and use of ICT – a project in two parts

How do different families with children use the car and the mobile telephone in organizing daily activities? This question was the point of departure for our research project. We divided the project in a qualitative, in depth study and a quantitative national survey as there has been little previous research on the interaction between the mobile telephone and the car in organizing everyday life. The first part of the project presented results from interviews with 25 parents of children in different age groups and marital status. This study was documented in 2005 in the report "Mobility in everyday life: A qualitative study of the use of car in families with children." (Hjorthol et al 2005).

In the current report we present results from the national survey carried out in the beginning of 2005. More than 2000 parents gave their responses to the questionnaire (appendix 1). The questionnaire covered topics like the respondents 1) organization of everyday life, 2) their degree of planning activities, 3) the use of and attitude towards the mobile telephone and car and 4) their perception of different aspects of daily life. The questionnaire was developed using results from the qualitative part of the study, and these results are the basis for questions addressed in this report:

- How do parents in various family situations perceive time, e.g. to which degree do they accept different time norms in contemporary society (in relation to everyday life in families with children?) Is there any relation between the perception of these time related issues and use of the mobile telephone and car in everyday life?
- How do different families plan and organize their various activities, what is the planning horizon, which media are used in planning and what are the relations between type of planning, use of media and mode of transport (car-use)?
- What activities are co-ordinated via ICT, and which media are used for different tasks such as making appointments, entertainment, informal coordination, etc.?

- Does mediated communication substitute for physical contact between parents and children? For which purposes is the mobile phone used in the communication between parents and children?
- Is ICT more important in divorced families than in intact families in relation to coordination, emotional contact and security/control?

A national survey

For the national survey a questionnaire has been designed by the project group based on the results from the in-depth study. The respondents comprise a random sample of parents in Norwegian households who also live with children up to 18 years of age. Both single parents and co-habiting parents living together are included.

The sample was recruited from a basic panel of Norwegian households on the register of the market research agency responsible for the fieldwork (MMI Univero). It is a randomly selected sample of persons from families with children in the defined group. The majority (80 percent) responded on the Internet, while 20 percent responded by mail. The total number of respondents was 2030 and the response rate was 60 percent. There was very little difference in response rate between the two modes of answering. The response rate is satisfactory compared to what is generally obtained for surveys.

The questionnaire contains questions about the respondent (age, gender, education, driving licence, mobile telephone, etc.), the household (car(s), number and age of children and their ownership of a mobile telephone, place of abode), different everyday activities and their planning, the media used for planning, attitudes to time, use of the mobile telephone and of the car in everyday activities.

Time norms and time pressure as a basis for use of the mobile phone and the car

In the first part of the project a majority of the respondents said that time pressure and lack of time was the reason for using the car for daily purposes. A substantial number also expressed that the car use had become a habit and therefore they did not reflect about alternative modes of transport. In the survey the acceptance of time norms among parents was examined. We were interested to learn whether these norms are related to the attitudes regarding the use of car and mobile telephone.

The social perception of time changes with material and cultural transformations in society. Some claim that shortage of time is a sign of success. It is seen as positive that the time is filled with (meaningful) activities. To be busy is therefore normal and desirable. When time pressure is claimed to be the reason for using the car, it is not necessarily related to the actual time use, but also to the social perception of time shortage as a status symbol. Time pressure is the “normal” framework for the social life.

The majority of the respondents agree with the statements - *I think it is important not to waste time*, and *I like to have many irons in the fire*. These comments

reflect another aspect of not wasting time in that they point to the ideal that the day should be filled with meaningful activities.

More than half of the sample (55 percent) either totally or partly agree with the statement about not wasting time, indicating that this norm is deeply rooted in about half of this sample (there is a preponderance of relative young people who give this response). More men (62 percent) than women (50 percent) agree with this statement which could be explained by the fact that men are more often employed and have longer working hours.

Even a greater share of the respondents agree with the statement – *I like to have many irons in the fire* – 17 percent totally agreed and an additional 42 percent partially agreed. There is a higher prevalence of total agreement among high-income earners (29 percent) and those with high education (20 percent) than among those with low income and low education (12 percent on both). Filling the hours with meaningful activities seems to be a stronger temporal norm among people with high social status than among those with lower status. To be perceived as successful and belonging to the “busy people” with a high activity level underlined by the agreement to this statement.

The analysis indicates a connection between societal temporal norms, degree of planning everyday activities and use of the car. To be very active can in some ways be seen as a more “modern” time norm, as is belonging to the “busy people.” In the latter case there is a sense that there is not the need to carefully plan activities and this ad hoc form of living may lead to greater mobile phone and car use. As far as use and expressed dependency on the mobile telephone are concerned, there are positive relations with both time norms.

Planning, use of media and transport

The analysis shows that the number of activities in families with children is considerable and that the degree of planning varies according to both type of activity and characteristics of the respondents. The arrangements made and the media used depend on the person the arrangement is being made with.

Arrangements with the nearest family are often made face to face. Nonetheless we also see that the mobile telephone has taken over from the landline telephone. The mobile telephone is more important in everyday communication among family members concerning the practical micro-coordination of daily activities. The way arrangements are made also varies with planning horizon. Short planning time and use of the mobile telephone go together. The mobile telephone brings the possibility of “instant action”.

The general level of car-use also varies with the planning horizon and the choice of medium used for arranging and rearranging appointments. There is a relation between high frequency of car-use, short planning horizon (planning during the day) and use of the mobile telephone, both text and voice. Shopping for food and accompanying children to or from friends and other non-organized leisure activities are the tasks least planned for. Meanwhile transport related to taking children to or bringing them from daycare and school is more often arranged in advance and is more routinized.

For most of these activities there is a significant correlation between how much time in advance the activity is planned and general frequency of car-use. Those who plan in advance generally have a lower level of car-use than those who have a short planning horizon or make arrangements on the day. A caveat is that this study is cross-sectional and does not tell us about causal effects, so we have to be careful with our conclusions. What we observe is covariations between use of the car and mobile telephone in such a complex context as everyday life in families with children.

Stress and time pressure

To handle stress and time pressure in daily life parents claim that both the car and the mobile telephone are important tools. The complexity of everyday life – driving children to different activities, necessary shopping, work trips etc – is a puzzle that has to be assembled.

The general social context of the family is that while the distances between the different activities have increased; the ability to coordinate the transport has not developed correspondingly. Until a few years ago the telephone was a geographically bounded device belonging to the household. It has been location based. The adoption of the mobile telephone has changed this. Instead of calling to a location, regardless of who is there, we now call to a person regardless of where they happen to be. This has been described as the completion of the automobile revolution in the sense that it adds real-time coordination to a transportation system that has been in existence for some time.

The question here is the impact of these developments on the sense of stress and time-pressure. Our results show that those who have long working hours, and especially women, have a high feeling of stress and time pressure. It is these individuals who have a sense of dependency on the car and the mobile phone. They claim that these are important tools to manage organizing the everyday activities. A bit surprisingly we find that people who attend different types of organized adult leisure activities say that they experience less stress and time pressure than those who have a lower level of such activities. What we find, however, is that people who have a high use of the mobile phone are also more stressed and experience more time pressure than people who use the mobile phone less. Thus while there is a positive covariance between use and stress/time pressure, there is a negative covariance between stress/time press and the feeling that the car and mobile phone are necessary items.

Looking at this a little more carefully, to manage all the different activities –work, leisure activities, escorting children to day care or school, etc. – often demands use of car to make the temporal ends meet. While some feel that car driving is stressful, we were also met with the attitude that the car also gives the possibility of relaxing. It provides the space in which we can have the time to talk with friends via the mobile phone etc. In short, a long work trip can provide us with time to nurture ourself. Thus, even though the car is the incarnation of social complexity for many persons, it is also that refuge where we can regain a sense of our self.

Bringing these two technologies, the car and the mobile phone together, in a very short time they have developed a symbiotic interaction. Where the automobile expands the geographical horizon, the mobile telephone allows for the coordination of interaction in that sphere. Where the automobile has meant that our activities have been dispersed, the mobile telephone lets us rationalize our movements. Where the mobile telephone means that we are never out of reach and perpetually have the potential to be called into action or into movement, the automobile provides us with that mobility. These developments are not necessarily environmentally responsible, but they result a harried life style and at the same time they provide us with the resources we need to deal with that situation. It is in this context that we can understand the ready adoption of mobile communication.

The mobile phone as a solver and a creator of conflict

Communication by SMS, e-mail or mobile phone (voice) is different because each communication media has its special characteristics and qualities. SMS can be described as a media which gives little or poor information, this because it is text based and asynchronous. Following the notions of media richness theory, so-called information poor media will more easily create misunderstandings than rich media since poor media limit the information and do not provide the context for interpreting the intentions of the sender. Our results reveal that one third of the respondents think that communicating by SMS can cause misunderstandings. Parents who are either separated or divorced express this opinion more often than parents who live together.

About half of the sample find it difficult to communicate emotions via SMS, while one quarter of them think these medias are suitable for emotional communication. The difference between genders is significant. While 30 percent of women find it easy to use SMS for these expressive purposes, only 18 percent of the men use SMS for communication emotions.

Media can also be used as a filter. In this way it can be employed to moderate disagreements in conflict filled situations. Many of the divorced couples work hard to find a reasonable way to communicate after they have left each other. Indeed, about 20 percent say that they use SMS to avoid speaking to each other. One in four think the cooperation between the parents is made easier due to SMS.

Mediated communication between parents and children

It is not only the parents who are frequent users of the mobile phone. The mobile phone has also become an everyday technology for children. In this survey about 90 percent of children who are aged of 12 have their own mobile phone. The study also shows that children with parents living apart get a mobile phone earlier than children living with both parents. When thinking of divorced parents' contact with their non-resident children, the mobile telephone provides them with a conduit through which they can maintain contact. In spite of the fact that many children under the age of 10 years have their own mobile phone, more than 80 percent of the parents say that children ought to be 10 years before they get one.

The mobile phone seems to be an important device for maintaining contact between children and parents. Almost half of the parents say that they often use the mobile phone to find out where the children are or to monitor their situation. On the other hand, one third of the parents report that their children turn off/forget their mobile phone so they cannot be reached when they are out. This underscores the conflict of interest between the parents who want to have information and the children who want to be independent.

Women, more than men, use the mobile phone to find out about where the children are, and they also send SMS to the children more often. The parents' attitude towards communication with their children via electronic devices is dual. On the one hand, parents think it is positive to have the possibility to be present in the life of their children also in the period of physical absence. There is also an element of safety here. On the other hand the mobile phone is no substitute for physical presence. The results show that the majority of the respondents feel that it is difficult to achieve good emotional contact via mobile telephone or e-mail.