The demands of families in regard to car-sharing concepts and integrated mobility services

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... make more trips than households without children (infas und DLR 2010), especially mothers make trip chains.

... own more cars on average, use car more often (Ahrend und Herget 2012); at the same time: use public transport rarely (Heine & Mautz 2000; Nobis & Lenz 2005)

... show positive attitudes towards using and / or owning a car, e.g. children’s development (Heine und Mautz 1999), reconciliation of work and family (Schwanen 2011), quick reaction in the case of an emergency (Heine et al. 2001)

... influence mobility socialisation (Tully und Schulz 1999).

Do new mobility concepts, like carsharing or integrated mobility services, fit the mobility requirements of families?
1. In how far are urban families aware of new mobility concepts?
2. How do families perceive new mobility concepts? What are perceived advantages and disadvantages?
3. Do urban families already use new mobility concepts or are they intending to use them in the future?
Methodological approach: Interview study with urban families

Study area: German cities Karlsruhe, Freiburg and Stuttgart (<100,000 inhabitants)

Study group: families with at least one child under the age of 18 years

Sample: 42 parents in 22 families

Mobility resources and mobility behaviour: 6 families without car in household, 5 of them are carsharing members; rather low car use in the sample

Methods of data collection:

- Mobility diaries
- Guideline-based in-depth interviews
Selected results: Awareness and knowledge

Carsharing
- All families are aware of the concept of carsharing
  - Non-users also are well informed on carsharing providers /stations in neighbourhood
  - However, only a few families collected information on terms and conditions.
- In general, the majority of families is in favour of the concept carsharing.

Integrated mobility services
- Less than half of the families is aware of integrated mobility services
  - Some of the families have heard of this concept in other cities
  - Others associated Deutsche Bahn, travel information apps or fee integration between Car-Sharing providers and public transport companies
- Again, the majority of families is in favour of the concept and appreciates the idea, especially the facilitation of the use of public transport.
Selected results: Evaluation of carsharing

Perceived advantages

- Less effort in terms of maintenance
- Choose car model depending on trip purpose

Perceived disadvantages

- Logistics with children
- Mobility behaviour (e.g. commuting) and/or resources
- Planning of trips in advance: inflexible, time-consuming
- Reaching the carsharing-stations: time-consuming

[...] basically, I am as flexible as I am with an own car. But this is also because there is a garage nearby with ten cars; the same garage where we parked our own car before.

[...] half of his items are always in the car, like his small bottles or something to eat; so you'll have to tidy it up every time.
Selected results: Intention to use new mobility concepts

Carsharing:
- Some non-users can imagine using the service in the future:
  - Developing need for car usage, e.g. when the child will get older
  - Substitution of second car in household, e.g. when children will be grown up
- Others express conditions under which they might use carsharing
  - A carsharing-station very close to apartment
  - Enough vehicles always at ones disposal, even when booked very short-term

Integrated mobility services:
- A few families can imagine using the services in the future, e.g. for business trips, ...
- …however, the majority does not intend to use integrated mobility services. Most cited reasons:
  - Means of transport as part of the service are not used, e.g. public transport or carsharing; or no multimodal trips are made
  - No need for improvement of the mobility: e.g. mainly local trips, daily trips are made routinely

[...] or also in the case of an emergency, when a child gets sick, I can be sure, there are three, four cars nearby.
Conclusions

- Rather **high level of awareness and knowledge** with regard to new mobility services, …
  - in part due to good mobility infrastructure in the cities: High visibility
  - in general new concepts of mobility are appreciated
- … but only **low intention to use**
  - using carsharing perceived as too complicated with children and as not flexible enough
  - low use of public transport as barrier to using integrated mobility services

Discussion

- Are families with children not yet ready for new mobility concepts?
Thank you for listening

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