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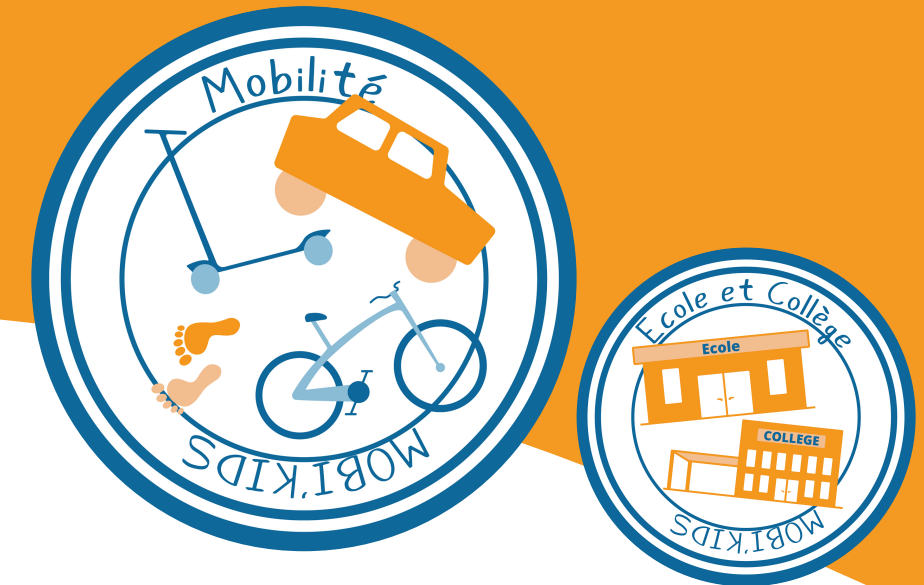
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# Children's daily mobility changes and outdoor parenting profiles: From travel and place patterns to educational requirements



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## Context

Children's mobility is an important issue to understand brakes and levers of the change of travel behavior inside the family. For the past 30 years, a decline in children's independent and active travels has been observed and explained by many factors (spatial, social, psychological). Among them, we can advance the parenting role in children-urban environment relationships that operates in children's mobility socialization.

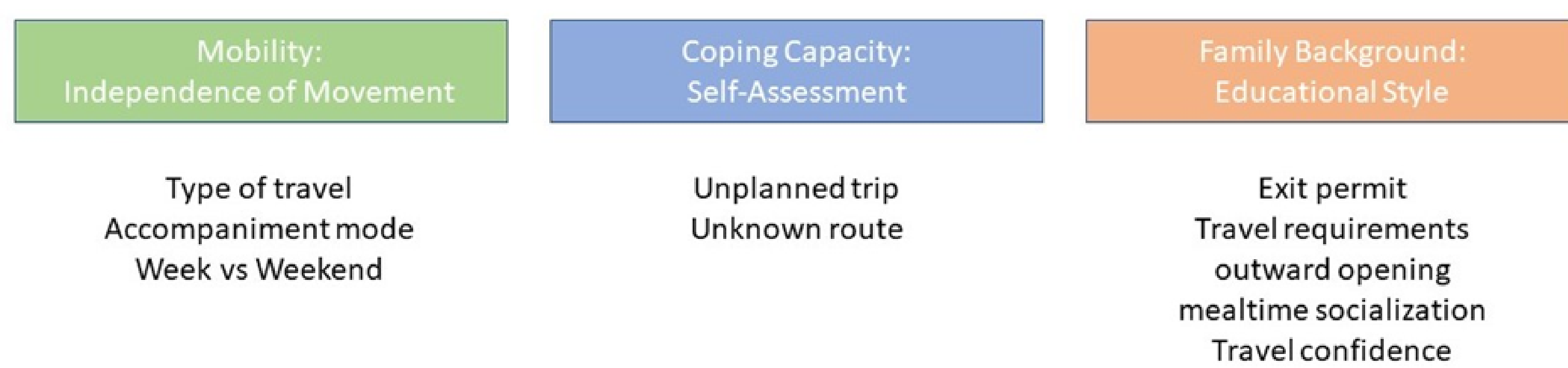
## Aims & main questions

- 1/ Development of children's daily travel behaviors during the transition from primary to secondary school;
- 2/ Children's mobility profiles for each school level;
- 3/ How these children's mobility profiles are part of parenting style related to mobility.

## Methods and process

Data were collected longitudinally (2018-2019) using an integrated device (MK MOBIBACK) mixing GPS data loggers (tracking over five days) and a complementary survey on tablets allowing : 1/ to enrich GPS data (mainly places and trips), 2/ to question children's socialization, autonomy, free-times and family attitudes about their child's independence.

**Analysis:** MCA and a HAC with selected variables in primary and secondary school.



## Field & participants

Families (n=86) interviewed in Rennes (n= 42) and in south urban periphery (n=44). Children and one of their parents were surveyed in both the 5th (n children= 90) and 6th grades (n children = 59). Between an important transition for families that often involves a change in the mobility habits of children.

### Contacts, declaration, authorization

Canvassing & seeking cooperation with schools, requesting authorization and making contact, validation of the protocol (respecting RGPD) by the CNIL

### Wearing the GPS device

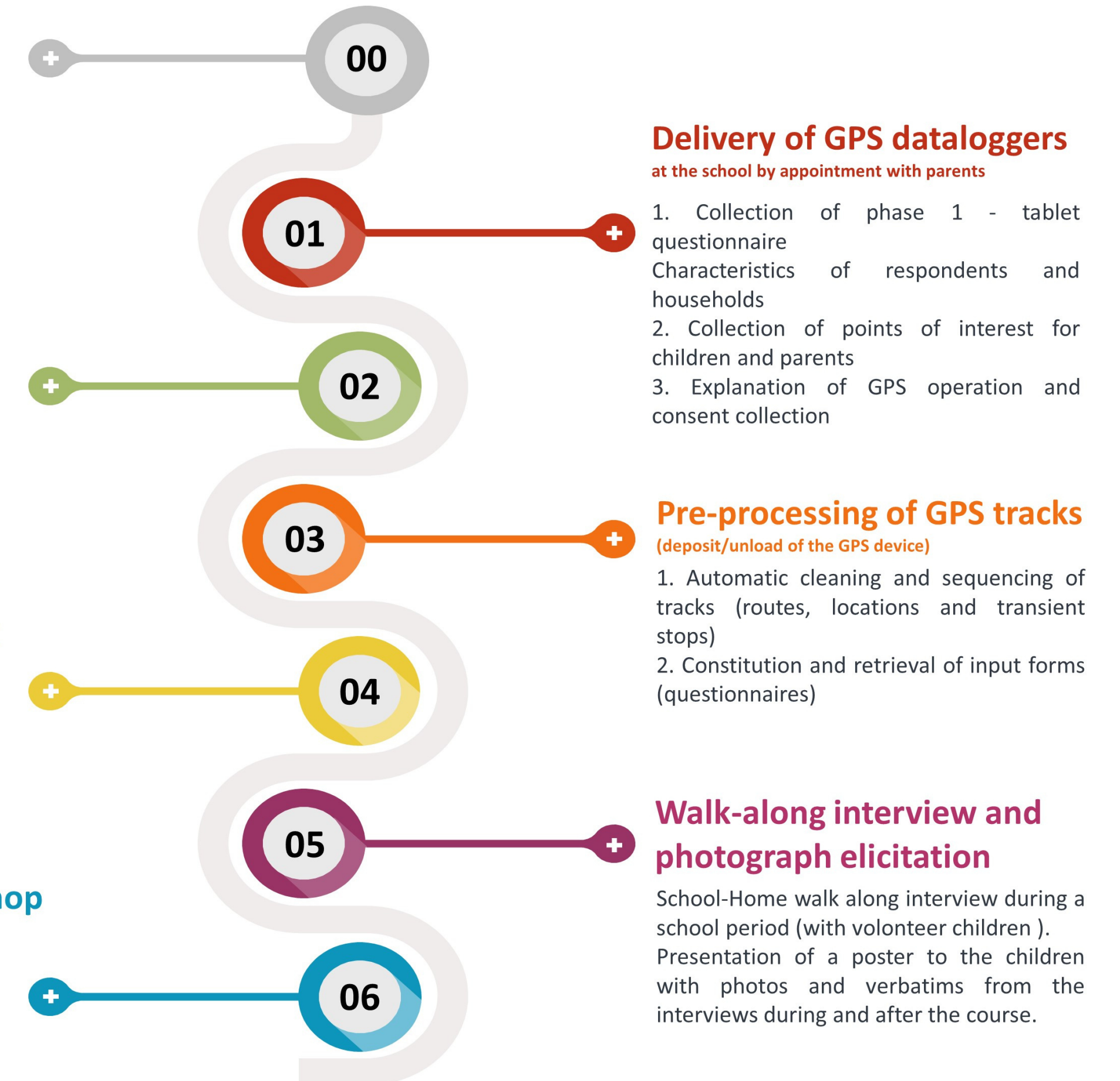
Continuous, in-situ collection of individual travel/activity data. Collection respecting the instructions of the CNIL (Personal Data Protection Act)

### Individual interview on tablet

Questionnaire for enriching traces and collecting habits, educational attitudes, opinions, intra-family interactions, representations...

### Participatory mapping workshop

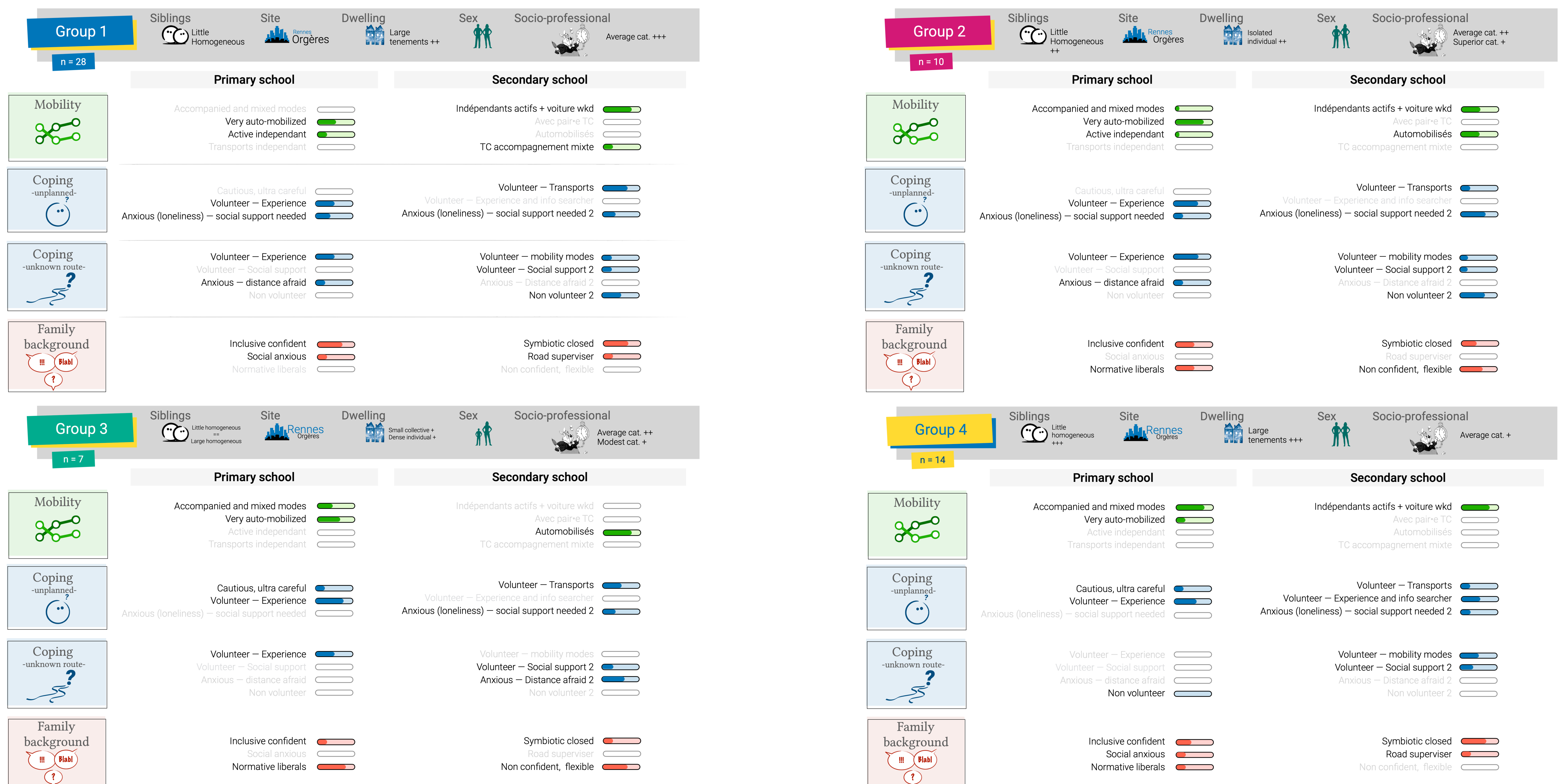
Mapping workshop organized by the ESO team and led mainly by geographers and psychologists.  
-Mind map collection  
-Visualization of the GPS tracks of the class  
-Handling of OSM (Open Street Map)



## Main results

- Overconfidence or bias of overestimation of their abilities for children in primary school less experienced in moving independently. Those children are then more willing to make unplanned trips to middle school. For unknown routes, no greater ease of movement among middle school students.
- Children's ability to imagine certain modes of transport to compensate for the effects of increased distance. I.e Use/knowledge of transport networks are used as cognitive support.
- Flexible parents are also those who may experience anxiety, prescriptive recommendations, and car coaching. Does not seem to favor the development of a strong autonomy, this is observed especially for girls.

## Observation of 4 groups of evolutions according to selected variables



## Conclusion

By focusing on active travels profiles of children, these first results show the changes in children's mobility between the 5th and the 6th grade. Then, it also raises question about the role of parents' educative profile, which are based on child-parent interactions in the choices of mobility but also on the exchanges with children and trusting relationships with the child from the outside. They make it possible to question the process of socialization to mobility and its role in encouraging active mobility. Future data processing should make it possible to define urban educational cultures by associating travel profiles.