



2 SOCIAL INEQUALITIES AND GENDER IN RELATION TO ROAD RISK

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All road users, whether or not they use a motor vehicle, can be exposed to road risk. To prevent and limit road accidents UMRESTTE's researchers study the most vulnerable populations. The interaction between social inequalities and gender seems to have a marked impact on our travel conditions, both in terms of access to mobility and exposure to road risks.

Identifying at-risk groups

In France, the police or gendarmerie record all the relevant data for every road traffic accident in which a person is injured.

This is fed into the "database of injury traffic accidents", known in French by its acronym of BAAC. For a given period, researchers exploit this information simultaneously with the data from the National Travel Survey (ENTD). This analysis enables them to define the characteristics that are shared by populations and thus to assess their road risk. At a local level, our researchers merge the data from the mobility survey (the Lyon Household Travel Survey (EMD)) with accident data from the Rhône Department Road Trauma Register (ARVAC)^{d-g}.

This work of identifying at-risk populations is refined by conducting additional studies. Thus, the perception of road risk among all the road users in the Rhône Département has been analysed^{a-b}. Another study ranked the risk factors for road crashes among young people, ranging from 14 to 17 years of ageⁱ. Their attitudes and behaviours have also been deciphered, in relation to their mobility practices and their socio-territorial environments^h.

Access to mobility

IFSTTAR's researchers are further deepening their research by conducting a large number of surveys on our travel habits³.

It emerges from these that women are less likely than men to choose certain modes of transport. This applies not only to motorised two-wheelers, but also to bicycles and, to a lesser extent, cars.

While the analyses do not reveal any significant difference in access to supervised driving⁴, the researchers have identified a significant difference in driving licence access among 18-24 year olds. The findings show that a young man in this age group has a 45% greater chance of holding a driving licence than a young woman, all other things being equal. Whether the young person's parents own a vehicle, no vehicle or several vehicles, or whether the young person lives in a poor or wealthy municipality, increases this disparity in access to a driving licence^e. However, once the young person has a licence, access to driving seems to depend more on their socio-economic background, the availability of a car within the family and the residential area, than on their gender^e.



*Maybe, but we've got a licence!

**This is the worst car on the estate!! It doesn't even go!!



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Exposure to road risk

With regard to road risk among young people under 25 years of age, a comparative analysis between the populations of municipalities which have and which do not have a designated sensitive urban area (ZUS⁵), reveals a significant excess risk of injury accidents in municipalities with a ZUS. This excess risk applies more to young males than females and is even higher among children under the age of 15^{f-g}.

As far as risk exposure is concerned, for the general population, men are generally 2 to 3 times more likely to be killed than women. On one hand, this is explained by their more dangerous behaviour, and on the other hand, women appear to be less exposed to high-risk types of travel (night driving, driving on country roads, use of motorcycles, etc.)^{c-d}.

“ **Taken together, these findings show that, in the study of social and/or territorial inequalities in relation to road risk, gender exerts a persistent cross-cutting effect that must be taken into account. It is therefore necessary to pay particular attention to this determinant.** ”

Further readings

- a. Haddak M.M., *Estimating the Willingness-to-pay for Road Safety Improvement*, *Transportation Research Procedia*, 2016, 14: 293-302.
- b. Haddak MM, Lefèvre M, Havet N, *Willingness-to-pay for road safety improvement*, *Transport Res Part A: Policy and Practice*, 2016;87:1-10.
- c. Bouaoun L, Haddak MM, Amoros E, *Road crash fatality rates in France: A comparison of road user types, taking account of travel practices*, *Accid Anal Prev*. 2015;75:217-225.
- d. Blaizot S, Papon F, Haddak MM, Amoros E, *Injury incidence rates of cyclists compared to pedestrians, car occupants and powered two-wheeler riders, using a medical registry and mobility data, Rhône County, France*, *Accid Anal Prev*. 2013;58:35-45.
- e. Licaj I, Haddak M, Pochet P, Chiron M, *Individual and contextual socioeconomic disadvantages and car driving between 16 and 24 years of age: a multilevel study in the Rhône Département (France)*, *J. Transp Geo*, 2012;22:19-27.
- f. Licaj I, Haddak M, Pochet P, Chiron M, *Contextual deprivation, daily travel and road traffic injuries among the young in the Rhône Département (France)*, *Accid Anal Prev*. 2011; 43(5):1617-1623.
- g. Licaj I, Haddak M, Hours M, Chiron M, *Deprived neighborhoods and risk of road trauma (incidence and severity) among under 25 year-olds in the Rhône Département (France)*, *J. Safety Research*, 2011; 42(3):171-176.
- h. Randriantovomanana, Eliette (2015). *Mobilité et accidentalité routière chez les adolescents*. Thèse de sociologie, Ecole doctorale de Sciences Sociales, Université Lyon 2.
- i. Licaj, Idlir (2011). *Inégalités sociales et territoriales de mobilité et d'accidents corporels chez les jeunes*. Sous la direction de Mireille Chiron, Mouloud Haddak et Parcal Pochet. Thèse en épidémiologie. EDISS, Lyon 1.

1. TS2: Transport, Health, Safety Department

2. UMRESTTE: Epidemiological Research and Surveillance Unit in Transport, Occupation and Environment

3. Enquêtes Nationales Transports Déplacements (ENTD) and Enquêtes Ménages Déplacements (EMD)

4. Based on very small samples (the 2015 Lyon Household Travel Survey)

5. Zone urbaine sensible

