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### ► **To cite this version:**

Marie-Axelle Granié, Thierry Brenac, Florence Huguenin-Richard, Thierry Saint-Gérand, Mohand Medjkane, et al.. Pedestrian adolescents: mobility and safety at secondary school in France. *Injury Prevention*, 2016, 22 (Suppl2), pp.A106-A107. 10.1136/injuryprev-2016-042156-291 . hal-01391958

**HAL Id: hal-01391958**

**<https://hal.science/hal-01391958>**

Submitted on 4 Nov 2016

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## PEDESTRIAN ADOLESCENTS: MOBILITY AND SAFETY AT SECONDARY SCHOOL IN FRANCE

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The road crash peak among children is around 11-12 years-old in France, as in many industrialized countries, at the time of entry in secondary school. The reasons why this vulnerability increases while the skills involved should have improved are not clear.

By linking two fields of analysis of road safety (fine spatial analysis of crashes and depth analysis of behaviors and psychosocial factors), our project aimed to finely identify the mobility and pedestrian accident involvement of the 10-15 years old and specify geographical, psychological and sociological determinants of both variables.

A study of accident processes among pedestrians aged 10-15 years over France for the period 2002-2011 was conducted, based on the national accident file and on a sample of accident police reports. It was completed in the field of study of the Lille region (France) by the spatial analysis of local accident data (including the identification of accident scenarios) and the mobility of 10-15 years, using data from the 2006 household travel survey.

Two field surveys were then conducted. A first survey among 2500 junior high school students has identified the fine mobility practices and their socio-spatial determinants. It also explored the demographic and psychological variables (age, gender roles, perceptions of social norms, risks, rules, level of supervision) explaining the reported pedestrian risky behaviors. A second survey among 300 junior high school students focused on their perceptions of known and unknown walking environments. It enabled to draw up a sensible mapping of their actual walking environment and a qualitative analysis of the elements using to judge the pleasantness and safety and characterize their representations of positive or negative actual and virtual travels as pedestrian. The results allow a better understanding of the phenomena and processes involved in the accident of pedestrian adolescents and to identify measures needed to overcome this problem.

**Keywords:** Pedestrian, adolescents, safety, mobility