

Deciding to be distracted: Drivers' strategic choices to interact with the mobile phone

Véronique Huth, Hélène Tattegrain, Yann Sanchez, Corinne Brusque

IFSTTAR-LESCOT
25 Avenue François Mitterrand, Case 24
69675 Bron Cedex
Tel: 0033-478656910
Mail: veronique.huth@ifsttar.fr

Previous research shows that using a mobile phone while driving can seriously impair the driving performance. Effects are particularly negative when visual-manual distraction is involved in addition to the cognitive distraction provoked by phone use. The developments in mobile technologies hint towards an upwards trend of visual-manual interactions with the phone, induced by the increasing use of mobile applications in addition to dialling a number and writing a text message. Since drivers are generally aware of the risks related to visual-manual secondary tasks, they may choose specific driving situations for this type of interactions so as to mitigate the effects of distraction. Such strategies could include stopping the car and taking advantage of waiting times at a traffic light or in a traffic jam.

A small-scale naturalistic driving study was carried out in order to investigate phone use in everyday driving. Analyses of frequency and context of mobile phone interactions were targeted at detecting whether drivers favour stopping situations and how phone use extends beyond this driving context. In addition, an observation study was conducted at urban crossroads controlled by traffic lights, with the aim to register the drivers' interactions with the mobile phone in a temporary stopping situation as well as its visible effects on the driving behaviour. The results from these studies provide new insights on exposure and strategies related to visual-manual interactions with the mobile phone in a naturalistic setting, complementarily drawing on a longitudinal design with a restricted participant sample and a cross-sectional approach that focuses on a specific setting with an extended sample.