

Driving without hands

Use of mobile phone and other objects while driving on Belgian roads

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Riguelle, F., & Roynard, M. (2014). Conduire sans les mains. Utilisation du GSM et d'autres objets pendant la conduite sur le réseau routier belge. Bruxelles, Belgique: Institut Belge pour la Sécurité Routière – Centre de connaissance Sécurité Routière

Summary

2014

Background

In September and October 2013, the Belgian Road Safety Institute (IBSR) conducted the first survey of behaviour concerning illegal use of mobile phones (i.e. without a hands-free kit) while driving in Belgium. Other potentially distracting behaviours were also observed: the handling of objects/food, the dashboard and cigarettes while driving. For the first time, this survey makes it possible to obtain an estimate of the point in time prevalence of distracting behaviour at country level. Distraction is a growing problem that is important for road safety. The majority of international studies estimate that between 5 and 25 % of car accidents are due to distraction. Talking on a mobile phone while driving, in particular, increases the risk of accident threefold. Composing or reading a text message is even more dangerous, given that the driver's attention is focused on the screen and no longer on the road for varying periods of time.

Study methodology

The study was conducted by means of direct observation, on the road, of the frequency at which drivers used mobile phones without hands-free kits or were engaged in activities unrelated to driving. The surveys were conducted at a series of sites representative of the Belgian road network, evenly distributed according to type of road (roads with speed limits of 30, 50, 70, 90 and 120 km/h) and the country's three regions. Besides motorways (126 sites), the surveys were conducted by observers positioned at the side of the road. On motorways (30 sections), the surveys were carried out from a car travelling in traffic. All of the sites were chosen in order to observe vehicles while moving and not, therefore, while at traffic lights or intersections, but in sections. The surveys were carried out during different time periods: weekday rush hour periods (business days from 7 a.m. to 9 a.m. or 4 p.m. to 6 p.m.), weekday off-peak times (business days outside rush hour periods) and during the day during weekends. No observations were made at night.

For each vehicle observed, four items of information were recorded:

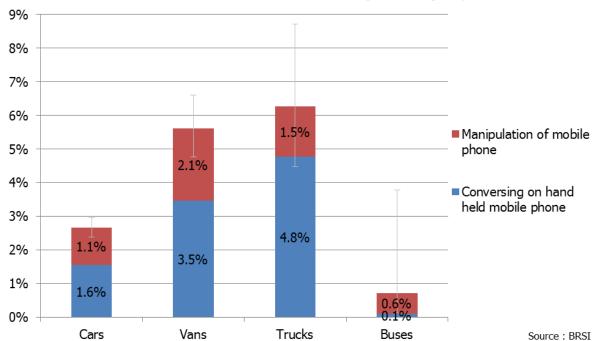
- Type of vehicle: car/van/truck/bus or coach
- Gender of driver: man/woman
- Whether passengers present: yes/no
- Presence of distracting behaviour on the part of the driver: Mobile phone held to ear/Mobile phone in hand/Object in hand (excluding mobile phone and cigarette) /Handling dashboard/Cigarette.

Results

Mobile phones

- 3.2 % of drivers observed were distracted by a mobile phone: 2 % were driving while talking on the phone and 1.2 % were handling their phones.
- Use of mobile phones while driving varied greatly according to the type of vehicle. This behaviour is more markedly present among van drivers (5.6 %) and truck drivers (6.3 %) than car drivers (2.7 %).

Use of mobile phones without a hands-free kit while driving according to type of vehicle



- Use of mobile phones increases with the speed limit of the road and is therefore very frequent on motorways (6.6 %). Motorways are especially characterised by a high percentage of van drivers handling their mobile phones (9 %).
- Use of mobile phones while driving is more common during the week (3.6 %) than during the weekend (2 %).
- Men (3.6 %) were more frequently observed than women (2.4 %) with a mobile phone while driving (especially handling the phones). However, the difference in behaviour between men and women is reduced only when car drivers, and not all drivers, are taken into consideration.

Cigarettes

- 2.4 % of drivers observed were smoking a cigarette.
- Van (4.2 %) and truck (4.4 %) drivers smoke more often than car drivers (2.1 %)
- Men (2.8 %) smoke more often, when driving, than women (1.6 %)

Handling other objects

- \bullet Handling of objects (excluding mobile phones and cigarettes) was observed among 1,9 % of drivers.
 - There are major differences according to type of vehicle: cars (1.6 %), vans (3 %) and trucks (3.9%).
 - Motorways are characterised by a higher frequency of such behaviour (6.2 %).

Handling the dashboard

• The overall percentage of drivers handling their dashboards was low (0.6 %). Such behaviour is often brief and lasts only a few seconds.

Summary

- 8.1 % of drivers observed displayed one of the potentially distracting behaviours observed.
- Given the excess amount of distractions observed among drivers of goods vehicles on motorways and during week days, it can be concluded that professional travel is especially affected by distraction-related issues while driving.
- Considering that at least as many people make calls with hands-free kits as without handsfree kits
 (as acknowledged by drivers surveyed for the IBSR's 2013 National Road Safety Survey), it can
 be estimated that at least 4 % of trips on Belgian roads are made while talking on the phone, in
 addition to drivers using their mobile phones to send or receive texts, browse the internet, play
 games, etc.

• There are too few international studies or the methodologies used are too variable to be able to determine whether the problem of mobile phone use while driving is greater in Belgium than elsewhere.

Recommendations

In light of the study findings, the ISBR has formulated several recommendations concerning research, the role of politicians and that of the police.

Among these, we recommend:

- that the IBSR devotes future research to distraction-related issues, using, among other things, simulator-based studies.
- that Belgian politicians increase the implementation of the problems relating to mobile phones and other on-board technologies in driver training in order to reach younger drivers.
- that the police organise crackdowns targeting mobile phone use while driving on motorways and systematically issue fines for any contravention observed.



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