

Decoding Mystery of Distracted Driving



Focused Research Group in Human Factors (FRGHF) of IIT Indore has decoded the mystery of distracted driving. Distracted driving is a major concern regarding safety issues behind the wheel all over the world. From the last one and half decades, the problem of distracted driving has worsened as more information and entertainment based technologies have found their way in the vehicles. According to the reports from Ministry of Road Transport & Highways (Government of India) the total number of persons killed in road accidents increased by 4.6 per cent from 1,39,671 in 2014 to 1,46,133 in 2015. Human Factors

& Applied Lab conducted an experiment in a naturalistic driving environment in order to investigate the effect of distraction on the visual behavior of drivers. The drivers were instructed to follow certain directions displayed on the sign boards which were installed along the experimental track. During driving they were supposed to perform another task (distracting task). The researchers found that the group of drivers which was distracted looked at the signboards for a very short period of time as compared to the group which was not distracted. The reason is that our working memory has a mechanism called as 'Articulatory Rehearsal Mechanism' (ARM) which converts the visual information into verbal sounds and rehearses the verbal information until the task is accomplished. In the case of a distracted driver the function of ARM is suppressed and it is not in a position to rehearse the information. In other words, performing the distracting task consumed cognitive resources of the drivers due to which they were not able to pay substantial amount of attention to the direction signboards. The research team is looking forward to join hands with road traffic officials like RTOs and different NGOs working for alleviating the on road casualties.