### شفارخة

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#### **P**oster Presentation

## The Study of the Mistakes and Errors Made by Distracted and Undistracted Drivers in Road Safety of Users

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#### **Abstract**

Road users such as drivers, motorists, motorcycle riders, bike riders and pedestrians play an important role in traffic safety. Most accidents can be prevented by accurate and regulated driving based on the traffic laws and regulation. In fact by recognizing the errors made by violated drivers we are able to find the appropriate lawful solution for them and to avoid repeating violations made by drivers in the near future and saving the life of road users such as pedestrians and drivers. This study aims to examine the kind and nature of mistakes made by drivers when distracted and not distracted. In fact this study examined what kinds of errors made in two situations and to compare them. In this study was asked from the participants drove an equipped vehicle around an urban test route both while distracted and while not distracted. Two in -vehicle observers recorded the driving errors and mistakes made, and a range of other data such as driver verbal protocols, video and the data of vehicle (speed, brake, steering wheel angle and so on). Categorization of the errors and mistakes showed that distracted drivers (drivers being distracted by playing mp3 player, talking to mobile phone and talking to occupant seating in the car) significantly make errors although undistracted driver's errors were prevalent. However the natures of errors made by both drivers were not significant. This study showed that in addition to making different types of errors, distracted drivers simply make a great number of the same errors type they make when not distracted. Understanding of the relationship between distraction and driving errors and mistakes are discussed along with the advantages of using a multi-framework for studying driver's behavior. Distracted divers made 268 mistakes and errors while undistracted made 180 errors. The general estimation equations (GEE) showed that distracted drivers had 48 percent errors more than undistracted drivers. The result also showed the common mistakes of both drivers such as turning left or right fast; hit the brake inappropriately and so on.

**Keywords:** Distracted Drivers, Undistracted Drivers, Drivers Behavior and Errors.

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