Abstract:
Traveling with children in tow can pose a serious distraction to the driver, effectively drawing much of the necessary attention away from the road and causing a disruption in normal driving patterns. In this paper we investigate the driver’s capacity to operate a vehicle safely when being exposed to a noise stimulus, specifically in the form of a crying baby for an extended period of time. For this purpose, we developed a tailored driving simulator framework to efficiently configure new experiments, built on modular components to make it easier to upgrade and update the experiment scenario and overall conditions.

We then compared the driving behavior of parents to individuals without children focusing particularly on the affects on driving performance when a sudden event occurred on the road. We aim to study driving patterns under stressful conditions such as having children as occupants in the vehicle to be able to classify drivers for background training purposes regarding in-vehicle behavior. Results have shown the tendencies of parents when having a baby in the vehicle to produce better driving performances.
Occurences:
  - Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Produktionstechnik > Lehrstuhl für Ergonomie (Prof. Bengler) > 2014_scopus
  - Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Produktionstechnik > Lehrstuhl für Ergonomie (Prof. Bengler) > 2014_Gesamt

entries: