

**DEVELOPMENT OF AN ON-ROAD DRIVING ASSESSMENT FOR NOVICE TEEN DRIVERS**

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**Background** A standardised measure of driving performance is needed to evaluate the effectiveness of driver training programmes for novice teen drivers.

**Aims/Objectives/Purpose** Develop and assess the reliability of an on-road driving assessment for novice teens, as well as their driving performance at two times: (1) after initial experience in a limited number of driving environments (early route) and (2) after experience in a wide range of environments (late route).

**Methods** We developed two routes with varying speed limits and a range of road characteristics to test driver competencies across six environments: parking lot, residential, intermediate roads, commercial, highway and rural roads. Nineteen teens drove one of the two routes accompanied by two certified driving evaluators. Performance errors at specified route segments were ascertained.

**Results/Outcome** Inter-rater (front vs back seat) reliability of the drives was excellent (ICC=0.79). There was significant variation in the number of errors committed by the 13 teens who drove the early route (mean: 24.2 errors, range: 8–46) and the six who drove the late route (mean:18.5 (15–22)). For both routes, the most common sources of error were turns, parking, backing up and lane changes.

**Significance/Contribution to the Field** We have developed an on-road driving assessment to evaluate novice teen driver performance that demonstrates excellent inter-rater reliability and an ability to identify a wide range of driving errors. Future assessments of discriminatory validity will be conducted. Refinement of the routes may enable adaptation to other geographic areas, providing an ability to evaluate a wide range of driver training programmes.