

Young passengers becoming young co-drivers to improve road safety: SAFER-Passengers

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Abstract

The pervasive problem of young driver road safety has led to a plethora of interventions targeting the driver, some of which are designed to build the situation awareness skills (SAS) – including hazard perception, comprehension, and projection skills – of these inexperienced drivers (e.g., SAFER, Scott-Parker, 2017). Crash data reveals however that adolescent passengers can increase crash risk, and that adolescent passengers are fatally-injured in young driver crashes. SAFER-Passengers broadly addresses adolescent road safety by developing SAS in the young ‘co-driver’ (not ‘passive passenger’), and building the self-efficacy of the adolescent. Results of the SAFER-Passengers randomised controlled trial will be presented.

Background

The increased road crash risks for young drivers who carry peer-aged passengers is well-recognised; male passengers, and more peer-aged passengers as vehicle occupants, substantially increasing young driver crash risk (e.g., Chen et al., 2000). What is less well-recognised regarding young driver crashes is that in a considerable proportion of occasions, the young driver survives the crash while the passenger(s) is (are) fatally-injured. Disturbingly, research has revealed the pervasive incidence and involvement of young driver crashes in which sober adolescent and young adult passengers are fatally-injured in a crash involving an intoxicated young driver (Williams, West, & Shults, 2011). In addition, while the road crash risks for adolescents and young adults travelling as passengers of young drivers are recognised, road crash risks for adolescents and young adults are susceptible to the driving behaviour of *all* drivers. To illustrate in the Australian context in 2016, 26% of fatalities for adolescents and young adults aged 17-25 years was as a result of being fatally-injured as a vehicle passenger by drivers of *all* ages (BITRE, 2016).

Given that both inexperience-related and age-related factors have been found to contribute to the incidence and severity of young driver crashes, and that adolescents and young adults on occasion are, and can be encouraged to be, a positive influence upon their peer young drivers (e.g., Buckley & Chapman, 2016; Buckley & Davidson, 2013), the young driver road safety-focused intervention SAFER (Situation awareness fast tracking, including identifying escape routes, Scott-Parker, 2017) was modified to a broader adolescent road safety-focused intervention, SAFER-Passengers. SAFER addresses driving inexperience-related road safety risks by building situation awareness skills (SAS) (hazard perception, comprehension, and projection) in an engaging pre-licence game brought to life by the parents of the young novice driver. A randomised controlled trial has revealed that SAFER significantly improved situation awareness skills in the 15-year old prelicence driver, and in the 16-year old learner driver (Scott-Parker, 2017; Scott-Parker, Wilks, & Griffin, 2017). SAFER-Passengers builds both SAS, and the self-efficacy to ‘speak up’ in the car, in the adolescent. A randomised controlled trial (RCT) of SAFER is currently underway.

Method

An RCT of SAFER-Passengers is underway with 60 Secondary Senior students attending two Sunshine Coast high schools (with random allocation of 30 students to SAFER-Passengers). In-car

passenger behaviour is captured via GoPro recording of forward roadway and vehicle cabin (1-month period), with analysis of verbal and non-verbal communication pertaining to the road context focused upon manoeuvres, road users, exposure, and infrastructure. SAFER-Passengers is evaluated through process (experience of the intervention) and impact (investigation of passenger behaviour captured by GoPro cameras; self-reported efficacy) evaluations at two 6-month intervals post training, and compared to control participants and pre-intervention passenger characteristics.

Results

The baseline evaluation of the in-car behaviour and the SAFER-Passengers is currently underway, and the results of the first post-intervention evaluation will be presented at the conference.

Conclusion

Given the efficacy of SAFER, it is anticipated that participants in SAFER-Passengers will exhibit greater SAS and 'co-driving' behaviour, and self-efficacy, compared to control passengers.

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