IN-TEXT REFERENCES: References cited within the text should use the parenthetical style.

Examples:

(Jones 2001) (Jones and Smith 2001) (Jones et al. 2001)

It was reported in 2010 that more than 9,000 traffic accidents occurred in the city of Orlando (Smith 2011).

REFERENCE LIST: The reference list should be in alphabetical order, and use the following formats:

Book:

Marowitz LA. The Relationship Between Drug Arrests and Driving Risk. Sacramento, Calif: California Department of Motor Vehicles, Research and Development Section; 1994

Edited Book:


Journal Article:


Conference:

Jeremy D, Freeman J, Palk G. Deterring the drug drivers: a study into the initial impact of oral random roadside drug testing. Paper presented at: International Conference on Alcohol, Drugs and Traffic Safety (ICADTS); August 22–26, 2010; Oslo, Norway.

Website:

driving, total distances driven, and the level of enforcement where impaired driving occurs. It is also possible that drivers with longer latencies between violations are not as dependent on alcohol as drivers with shorter latencies. In addition, temporary social, psychological, and/or health problems (such as divorce, loss of employment, or physical disability) may have caused drivers in the longer-latency subgroup to drive alcohol-impaired more frequently and recklessly than usual, thereby attracting police attention.

Changes in the COMAR regulations in October 2002 emphasized alcohol dependency and alcohol problems as criteria for determining administrative and judicial sanctions, including revocation and suspension of drivers’ licenses. Presumably, these regulations also apply to first offenders, who resemble multiple offenders in relevant demographic and behavioral respects (Cavaiola et al. 2007; R. K. Jones and Lacey 2000; Perrine 1990; Rauch et al. 2010; Winfree and Giever 2000). Built into the current COMAR regulations are the concepts of screening for alcohol problems through investigation, pre-reinstatement conference, or alcohol assessment, followed by mandated treatment for offenders who have alcoholism or unaddressed alcohol problems. This approach is consistent with recommendations of both the National Highway Traffic Safety Administration and the National Institute on Alcohol Abuse and Alcoholism. A Guide to Sentencing DWI Offenders (2005, p. 2) specifies that “Ideally, an evaluation of an offender’s problem with alcohol or abuse of alcohol, administered and interpreted by qualified professionals, should be conducted before deciding which sanctions to impose.”

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Maryland Department of Transportation. Code of Maryland Regulations (COMAR), Title 11. Annapolis, Maryland: Office of the Secretary of State, Division of State Documents; 2002.


severity, older vehicle occupants were significantly more prone to serious chest injury than their younger counterparts and that these injuries were predominantly due to forces exerted by the restraint system, particularly in frontal impacts. As reported previously, chest injuries are of special concern for older drivers. For example, Wang et al. (1995) reported that older people often do not have the lung capacity to recover from such injuries and found that older people died from chest injuries (rib fractures, collapsed lungs, damaged hearts, and ruptured arteries) at markedly higher rates than younger adults.

Some limitations of the study should be noted. First, the injury data presented in this article are based on the main injury sustained by the driver in the crash. It is possible that multiple injuries were sustained by drivers and that these other injuries were not captured in the current database. Though it is likely that older drivers sustained more injuries and more serious injuries than middle-aged drivers, due to their greater frailty and reduced tolerance to injury (Augenstein 2001; Dejeammes and Ramet 1996; Mackay 1998; Padmanaban 2001; Viano et al. 1990), the available data set did not allow injury severity to be investigated. Secondly, the available data did not allow more detailed analyses of the age and size of the vehicles driven in crashes. Thirdly, it is recognized that in 2-vehicle crashes, crash partner characteristics have a major role in determining particularly injury outcomes; however, data relating to crash partners were unavailable in almost all cases. Fourthly, due to changes in coding procedures toward the end of 2003, detailed injury data were unavailable for the majority of drivers injured between 2004 and 2007. Indeed, analyses revealed that the data set may be biased toward more minor driver injuries incurred between 2000 and 2003, with possible emerging trends in injury patterns at risk of being concealed. Finally, the cohort was confined to TAC claims data for a subset of injured older drivers and therefore the generalizability of these findings is limited. Future research in this area may consider using international in-depth crash data. These data may be examined in conjunction with local hospital and vehicle purchasing statistics to add relevance to the Australian context. Further enhancements to the TAC data may also offer potential in conducting more research in this area, such as adding vehicle makes and models, the presence of various safety features of involved vehicles, and more comprehensive injury data.

CONCLUSIONS

Older drivers are overrepresented in serious injury and fatal crashes based on most measurements. With the aging population, projections suggest that without appropriate intervention, older driver crash levels could triple over the coming decades. Though older driver crashes have a variety of causes, the research has clearly established older drivers' physical frailty as a major determinant of injury outcomes. It follows that improved protection of vehicle occupants will have a substantial impact on reducing the severity of their injuries. Future research should identify opportunities for reductions in older driver fatalities and serious injuries through improved vehicle design and performance, vehicle technological solutions, older driver training and educational programs, and improved highway design.

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response/reaction to avoid hazards (Wallis and Horswill 2007). Extra training of those who repeatedly fail the test should focus, through a review of their prior performances, on situations where they overlook or cannot perceive the hazard in time.

Similarly, in an a study carried out in Great Britain (F. P. McKenna and Crick 1997), novice drivers received lessons in hazard perception for about 4 h over a period of 3 weeks. The lessons consisted of video films during which young drivers were encouraged to predict what could happen. The trainers provided feedback and gave instructions on the answers given. As a result, the participants scored significantly better on the hazard perception test, almost as well as drivers with 10 years’ experience, than before the training. Similar hazard perception training techniques, namely, prediction of what could happen in particular situations, was used in an U.S. study that showed significant improvement in detecting and dealing with hazards (Fisher et al. 2006).

A rather more recent study, from New Zealand, used a video-based hazard perception dual task to compare the hazard perception skills of young drivers with more experienced drivers to determine whether these skills could be improved with video-based road commentary training (Ilsler et al. 2009). The primary task required the participants to detect and verbally identify immediate hazards on video-based traffic scenarios while concurrently performing a secondary tracking task, simulating the steering of real driving. The results showed that initially the young drivers perceived fewer immediate hazards. After the road commentary training, the mean percentage of hazards detected and identified by the young drivers improved to the level of the experienced drivers and was significantly higher than that of an age and driving experience–matched control group who did not receive any road commentary training. The performance on the hazard perception test in the New Zealand study was examined between younger (17–18 years) and older more experienced drivers (average age 35.5 years and held a full driver license for an average of 15.5 years) as opposed to among younger inexperienced drivers as in our study.

It is important to note that the main driving exposure measures used in our study include months on learner and provisional licenses as well as average weekly driving hours at the time of the survey. The study may have benefited from inclusion of a more accurate measure of driving mileage over the follow-up period; however, this was not available. In addition, the reliance on self-report may have led to inaccuracies in the reporting of driving exposure as well as other relevant factors such as risky driving behaviors by young drivers who participated in the study. However, studies assessing self-report against objective measures of various health risk-taking behaviors and health outcomes have shown that confidential self-report in adolescence provides accurate and reliable data (Boufous et al. 2010; Hatakka et al. 1997; Rahman et al. 2005).

CONCLUSIONS

The findings of this study show that after controlling for relevant factors such as driver training and experience, multiple failures on the practical on-road driving test and the HPT are associated with an increased risk of crash in young drivers. They also indicate that the ability of these tests to discriminate between safe and unsafe drivers was only apparent after the second successive failure, in the case of hazard perception, or the fourth failure on the on-road driving test and not the first attempt.

The findings have implications for licensing practices. Though the specific number of failures identified as predictive of crashes in the present study needs to be verified and confirmed in future research studies, the findings support a developing body of literature on this issue that suggests that young drivers with multiple failures on the practical driving and/or hazard perception tests need extra support in their attempt to get a driver license. A better understanding of the experiential, physical, and psychological factors that contribute to multiple failures in these tests will assist in developing adequate strategies to assist this group of young drivers and reduce their risk of a traffic crash.

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procedures used, any differences in the 2 populations are not considered consequential in the combined sample.

Official records of license holders have been found problematic. Self-reports should be accurate, because surely teens know what stage of licensing they are in. There is a terminology issue here, because restricted licenses also are referred to as provisional, probationary, or intermediate, depending on the state. To address this issue, careful descriptions were provided rather than relying on specific terms; for example, a license referred to in this report as a restricted license was described in the survey as a "provisional or intermediate license (initial license after passing the driving test, with some driving restrictions)." No problems in self-identification of license status were reported in the pretest, and it is assumed that these descriptions helped ensure accurate reporting.

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