INTRODUCTION

Drivers aged 16-24 are greatly over-represented in the statistics regarding crashes and fatalities on the road [1], also in Australia [2]. Only 16% of driver licences in Australia are held by young drivers, aged 17-25 years, while this group makes up almost one third of all road crashes; the youngest drivers, 17-20 year olds, have a crash rate almost three times that of older drivers, 40-49 year olds [3]. Young male drivers are more at risk than young female drivers and this risk has increased in the last decade [4].

The incidence of road injury and death overall has been reduced through road safety measures over the past decades, but the difference between crash rates for young drivers and all other age groups has remained the same [5]. It seems that the specific problem of young drivers has not been affected by general road safety improvements, which means targeted approaches are necessary to improve safety for young drivers [6].

This study explores possible relationships between thinking styles and driving styles of young drivers, and any sex differences that might occur in young drivers’ use of thinking styles, driving styles and the relationships between these style constructs.

METHODS

A convenience sample of 314 students from the University of Canberra and the Canberra Institute of Technology, from a range of disciplines, volunteered to participate in this study. They were asked to answer some demographic questions (age, sex, study, type of drivers licence and years driving) as well as information about exposure, by reporting on the average amount of kilometres driven per day during the week and during weekends. Participants then completed 2 questionnaires: the Thinking Style Inventory-Revised (TSI) [7] and the Multi-Dimensional Driving Style Inventory (MDSI) [8].

The TSI has 65 statements, with each 5 statements falling into one of the 13 thinking styles: legislative, executive, judicial, hierarchic, monarchic, oligarchic, anarchic, global, local, internal, external, liberal and conservative. Participants rate themselves on a 7-point Likert-type scale: (1) indicates that the statement does not at all represent the way they normally carry out tasks and (7) suggests that the statement characterises the way they normally carry out tasks extremely well. The MDSI is a 44-item scale assessing 4 broad domains of driving style, resulting in 8 different driving styles: risky, angry, high-velocity, patient, careful, anxious, distress reduction and dissociative. Participants rate the extent to which each item fits their feelings, thoughts and behaviour during driving on a 6-point scale ranging from (1) ‘not at all’ to (6) ‘very much’.

RESULTS AND DISCUSSION

Two thinking styles showed significant sex differences: males scored higher on legislative thinking and females on hierarchic thinking. Sex differences were significant in seven driving styles: males are more likely to use risky, angry, high-velocity and distress reduction driving styles; females are more likely to use patient, careful and anxious driving styles. Sex differences were also found for significant correlations between thinking and driving styles, for instance executive and hierarchic thinking styles have a negative correlation to the risky driving styles, but only for females, while global thinking has a correlation with patient driving, but only for males.

The original model for the MDSI puts risky and high-velocity driving into the same domain (reckless and careless), but the data from this study suggest that high-velocity and angry driving are more closely related than in the model, while risky driving is not related to the other driving styles.

CONCLUSION

The findings offer some interesting insights into the relationships between thinking and driving styles of young drivers, which will be further explored through focus group sessions. The results from this research could inform driver training.

REFERENCES

1. OECD Young drivers: the road to safety, 198-212, 2006