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The perceptions of young rural drivers in NSW, Australia of speeding and associated risk: A mixed methods study

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ABSTRACT

The study, using mixed methodology, examined perceptions of risk associated with speeding in young rural people. Focus groups discussions (age range 16–24) in which speeding was identified as often being an involuntary driving behaviour, informed the development of a survey instrument. The survey was conducted with two groups of young people, one rural (n = 217) and another semi-rural (n = 235). The results from both the focus groups and surveys indicate that young rural drivers had specific attitudes to speeding, when compared with other risk factors for crashing. Speeding behaviour was viewed as both acceptable and inevitable. Males and those from a rural area viewed speeding, and reducing trip time when compared to that of a peer, to be less risky than did females and those who lived in a semi-rural area. Speeding was considered to be less risky than drink driving. These perceptions of speeding may contribute to the crash rates on rural roads involving young, local drivers and need to be considered in interventions or educational programmes which aim to reduce the rural road crash rate.

1. Introduction

Worldwide, over 1.2 million people were killed in road crashes in 2011 (World Health Organisation (WHO), 2012) and between 20 and 50 million people were injured, as pedestrians, passengers or drivers. Road trauma ranks as the 10th leading cause of death, leading to 2.1% of deaths worldwide, with young drivers over-represented (WHO, 2012). In Australia (Haworth and Senserrick, 2004), young drivers are also over-represented in fatal and injury crashes; this is an issue which continues to be a concern for road safety (Chen et al., 2010a).

Although speed may contribute to crash involvement and to the severity of crash-related injuries (Hatfield et al., 2008), speeding is still a regular part of driving behaviour in Australia, with only 6% of NSW (New South Wales) drivers reporting that they never speed. Definitive measures of low-range speeding incidents, up to 10 km/h over the posted speed limit are not currently available; however, recent NSW Recorded Crime Statistics (January 2009[1] to September 2011) giving the number of driving offences recorded by NSW police indicate a total of 657,380 exceeding the legal speed limit, an average of 19,921 offences per month (NSW Bureau of Crime Statistics and Research, 2012).

Previous research has compared rural and urban driving by young people (Chen et al., 2009), by relating survey results of young people in NSW to police crash records. Only 5% of the respondents in the surveys were rural residents. These rural respondents were younger, more likely to be female, and had received less formal driving instruction. Rural drivers were more likely to be sensation seekers and more likely to be involved in a single vehicle crash than urban drivers. Loss of control on bends was an important contributor to speeding-related crashes in rural areas. In another study (Chen et al., 2010b), trends in fatalities related to rurality and socioeconomic status were examined over the 10-year period to 2007 in NSW. The rate of crashes for young rural drivers was 2–3 times higher than that of urban young drivers.

There is evidence from many developed countries that young drivers are over-represented in crashes (WHO, 2012), both fatal

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[1] *Note*: In July 2003, the NSW Police Force changed the way traffic incidents were classified. The incidence of specific driving offences can no longer be determined directly from police incident categories. In response to this change, from 2003 onwards, the unit of measurement used by the Bureau of Crime Statistics and Research when reporting driving offences has been the number of legal actions commenced by police rather than the number of incidents recorded. Legal actions include infringement notices, court referrals, formal cautions under the Young Offenders Act and Youth Conference referrals.

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and casualty. In Australia, drivers under 25 years are up to four times more likely to be involved in a fatal crash than older drivers (Haworth and Senserrick, 2004). Research in NSW from 1997–2007 into crash trends and casualty crashes (Chen et al., 2010a) indicated that drivers aged 17–20 had higher crash rates than those in the 21–25 year range. During the 10 years of that study, the Graduated Licensing Scheme (GLS) (which involves supervised hours prior to unsupervised on-road driving, and incorporates a range of restrictions aimed at a gradual introduction to a full licence with no incumbent restrictions) evolved further, with the time on a provisional licence extended. This change was correlated with a trend reduction in injury from 2001. Working with crash data, in a study examining the efficacy of Queensland's graduated driving scheme (Blackman et al., 2008) concluded that there was a difference between rural and urban driving which was not addressed by the scheme. Moreover, the scheme did not address issues involving unlicensed drivers, or those who drive prior to the age of licensure.

In a study in Norway which related survey data to fatal crash data (Eiksund, 2009) concluded that the road types most common in rural areas (two-lane with bends and a high speed limit) contributed to rural crashes. He also concluded that although rural driving might appear less complex than urban driving, the environment was more hazardous. In assessing rural driving behaviours, Eiksund found that rural drivers had sensation-seeking tendencies which were significantly lower than those of their urban counterparts.

There are few studies of young drivers who are not high risk takers, or have not been involved in crashes.

2. Aim

This study aimed to compare the attitudes and risk perceptions of young people from rural and semi-rural NSW about risk taking associated with speeding, and to compare these perceptions with those of other identified risk factors.

3. Methods

3.1. Context

The research was conducted in rural and semi-rural areas of NSW, Australia. *Focus groups* were conducted in four rural towns: Tumut (RA2) Tumbarumba (RA2), Gundagai (RA3), and Goulburn (RA2) (Australian Government Department of Health and Ageing, 2011). These Australian Standard Geographical system classifications use RA1, major City, RA2, Inner regional, RA3, Outer regional, RA4 remote and RA5 m very remote. Goulburn has, in common with the other study areas, agricultural production as its major local industry, and is adjacent to the Hume Highway, a major connecting highway between Sydney and Melbourne. For details on focus group methodology and results, the authors would refer readers to Knight et al. (2012a).

Surveys were conducted in Tumut, a rural town population approximately 6100, and Kiama, a semi-rural town, population 12,300 (Australian Bureau of Statistics, 2011) which is a popular tourist destination, adjacent to other towns with a range of transport infrastructure features not apparent in the Tumut region. Local roads in all areas are rural and of varying condition, from sealed to unsealed, usually two-lane with a speed limit of 100 kph, with restrictions to 50 kph in town centres. The Hume Highway services all the towns except Kiama and is predominantly, a divided dual carriageway with a speed limit of 110 kph.

Table 1
Participant characteristics.

Focus groups				
Location	Tumut	Tumbarumba	Gundagai	Goulburn
Number of participants	30	27	35	9
Male	16	16	16	7
Female	14	11	19	2
Age range	16–18	18	16–18	18–24

Written surveys		
Location	Tumut	Kiama
Number of participants	217	235
Male	103	129
Female	114	106
Age range	13–18	13–18

3.2. Participants

The 101 participants in the 10 focus groups were recruited both through the local road safety officer and through direct contact with schools. The age range of those from Tumut, Tumbarumba and Gundagai was 16–18 years; 48 were male and 44 female. The focus group in the regional centre of Goulburn was with TAFE (Technical and Further Education) students of post-school age (range 19–23 years); 7 were male and 2 female (see Table 1).

The survey participants were recruited from years 9 to 12 of two high schools, in Tumut and Kiama. They were aged between 13 and 18 and included 121 (26.8%) who lived or worked on farming properties. The characteristics of the participants are shown in Table 1. All students in these years were invited to participate in the written survey; those who returned a signed consent and parental consent form to the school completed the survey. The participants represented 82% of the Tumut High School population and 74% of the Kiama High School population.

3.3. Data collection

3.3.1. Focus groups

Ten focus groups (median number 10 per focus group) with young people from rural areas generated rich data on their views of speeding, risk taking, and rural factors. This was used to inform the development of a written survey to collect quantitative data.

The focus groups were led by the first author (PK). The proceedings were recorded and subsequently transcribed verbatim. The topic areas covered in all focus groups were driving-related issues such as pre-licensed driving experiences, risk perception, risk taking, on-road driving experiences and behaviours (Knight et al., 2012a). Those related to speeding and other risk factors are described in this research.

3.3.2. Survey

A survey instrument was piloted with 10 young people, from rural backgrounds, and of the same age group as those to be surveyed. This was to confirm that it was appropriately understood; amendments (which were semantic) were incorporated into the final instrument. The survey instrument, which was a four page written format, with a range of questions styles, including open ended, Likert scales and ordering preferences. The information collected included a range of demographic data, including age, gender, where the participant grew up, information about driving experiences, reasons for driving, who was the prime teacher of driving skills, how often the participant drove and attitudes towards aspects of driving-related attributes.

One of the questions, the focus of this paper, asked respondents: