Early driving experience and risk perception in young rural people

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Abstract

The research initiated from an interest in the area of young drivers and early onset of driving. Many young people who live in a rural or semi rural environment start to drive cars and other vehicles at a very early age, often to help with tasks around a property. This is a very different circumstance to how many young drivers embark on the driving stage of their lives. Initially also there was an interest to look further into the rationale that not all young drivers are risk takers, and that there may be some predictors of risk taking behaviour that relate to driving, and may be constructive to investigate this to gain a better and deeper understanding of these facets to potentially better empower young people to reduce their own risk taking behaviours whilst driving, with community based interventions or other interventions as indicated.

Literature searches revealed that there was apparently no recorded research specifically on this aspect of driving, driving experience, or related risk taking attitudes and behaviours. It seems therefore to be an area which is both neglected and intriguing. Although this research is limited to rural New South Wales, it is anticipated that the findings will have relevance not only to other rural areas within Australia, but also to comparable situations worldwide, or example in US and Canada.

In order to gain a deeper insight into these issues, focus groups were held in the three towns. These were with young people, of both sexes and in the age group from 15-21, and also with some adults who were to be supervising drivers for young family members about to start driving on roads as "L" drivers.

From the results of the quantative section of the study, it will be possible to identify factors which may influence or predict driving behaviours and attitudes to driving in young people in a rural or semi rural environment. It will also be possible to identify their personal driving experiences and reasons for these, and their profiles in relation to age, sex, where they grew up, and intentions for continuing with their education.

Keywords

Rural drivers, pre-licence experience, risk taking

Introduction

The research area, geographically, was based around the area of Tumut, Tumarumba and Gundagai, which are all rural towns of varying size, where the main industry is agricultural production. Focus groups were held in the towns. In addition, a focus group was held in Goulburn with young rural drivers who all had lived on properties, and were in a post school age group. They were all involved in a course a TAFE in Goulburn.

Using information and constructs analysed from the focus groups, a structured questionnaire was produced. This was then used in schools in Tumut, Tumbarumba and Gundagai to both triangulate the results from the qualitative stage of the enquiry and to ascertain if a predictive model of risk taking attitudes could be identified. This quantitative study was with students from years 9-12 of the public high schools in these areas.

This survey, which formed the quantitative study, was then repeated with the same age groups from Kiama High School, which, in comparison to the original areas is semi rural, being in the heart of a predominantly dairy industry area, but adjacent to large regional centres of Wollongong(population 200,000) and Nowra, (32,000). Within a ten minute drive of Kiama CBD, all major road structures, like traffic lights, roundabouts, multilane roads, multi lane intersections, can be experienced.

Research from Victoria (Crittenden et al, 1994) defines a sub group of young drivers which has a substantially higher than average crash rate, and seeks to justify if this group should receive specific attention. However, the conclusion drawn is that this should be a low priority compared with initiatives for the majority of young drivers. The research highlights the inadequacy of viewing driver behaviour from one perspective only. It cites looking at problem driving without considering skill levels. This is succinctly stated by "The focus of the 'problem driver' research has been to define a subgroup over represented in the crash statistics, who can be recognised by a certain collection of personal variables. The problem thus far is that so many different variables, in many different combinations have been found to be related to crash involvement at some time." In their work, they use a basis of the Problem Behaviour Theory (PBT) (Jessor, 1989, McDonald, 1992) to portray a psychological understanding of driver behaviour. This theory hypothesises that negative behaviours are usually displayed in more than one form, and are indicative of a basic trait of risk taking. That is that risky driving is likely to be one of a series of deviant behaviours in an individual. (This is distinct from risk taking behaviour whilst driving, which is the focus of this study). There are two distinct systems in PBT, the personality system which relates to an individual's values, beliefs, attitudes and expectations, and the perceived environmental system which has concepts of peer group behaviours and influences on behaviour. This has similarities to Aizen's theory, and still does not incorporate the effect of experience in the model.

The literature on teenage risk taking focuses on either the linkages of high risk taking behaviours and possible mental health issues or on deliberate high risk taking behaviours associated with drug and alcohol use, unsafe sex, firearms use and some high risk driving like drink/drug driving. This suite of behaviours is at the high range of risk taking; they are shown to be prevalent in a limited sector of young people and it appears inappropriate to extrapolate this to the entire population of young rural people. Crettenden's study title "The young driver problem versus the young problem driver" succinctly summarises this.

A forum for Youthsafe (Booth, presentation, 2002) sought to define risk taking as a deviant behaviour which results from poor self esteem, depression, poor social skills, impulsivity and a propensity for unconventionality. It appears that the latter two of these qualities would be demonstrated in the vast majority of the population at some time, whereas the former three are not. Sensation seeking individual behaviour is also attributable to a need for stimulation, which may underlie some risk taking behaviour, and may be associated with higher self esteem, in contrast to the initial characteristics described. The implications of this are in understanding why risk taking occurs, and hence to develop interventions that whilst reducing extreme risk, fulfil the function that the risk taking accomplished.

However, there is a paucity on research which directly links the pre licensing driving and vocational driving experiences of young rural drivers to their attitudes to both injury and risk taking in driving. The research aimed to investigate if there were linkages between early experience of driving and attitudes to risk taking.

The justification for this research into the perceptions of risk taking and driving in young rural living people is that it will explore the truths, values and perceptions that they hold, and which directly affect, direct and influence their driving behaviours

Methods

The research was in two distinct phases; the first qualitative phase involved focus groups, and was followed by a quantative phase using written questionnaires.

Focus Groups:

Ten focus groups were conducted in 4 towns in rural NSW. There were 73 participants aged 13-24 years recruited through the local road safety officer, TAFE and Schools. The focus groups considered early driving experience, learning to drive and the reasons for this, attitudes to injury, risks and risk taking, and views on driving on and off road.

The focus groups were conducted with young people, in Tumut, Tumbarumba, Goulburn and Gundagai, in rural New South Wales. These areas are typically agricultural with small/medium size towns, and are distal from major regional centres.

Participants included young (13-24 years) males and females who both live and work on farming properties.

Conduct of the focus groups

The focus groups were held in various locations and led by the author, with the proceedings being taperecorded. Topic areas covered included: perceptions of rural injury, experiences of injury or near misses when using vehicles, perceptions of risk and risk taking behaviour, their experiences learning to drive and age of onset of driving, perceptions of the difference between off road and on road driving, factors which have influenced them in their driving and risk taking behaviour, including their roles and responsibilities related to agricultural activities, at an early age.

Analysis:

The tapes from the focus groups were transcribed, without identifying participants. These transcripts were then analysed using structured thematic methods using the qualitative analysis program N-Vivo. This allows comments to be grouped in themes and subsets of themes, whilst being able to also analyse any patterns linking themes of comments or experiences by the participants.

Following analysis of the focus group discussions, a written questionnaire was developed for use in schools in the same areas. This was validated and trialled with young people prior to use.

Questionnaires:

The questionnaire was conducted with students in the Tumut region, being an area in which the focus groups were held, and, as these results represented a rural community, the questionnaire was repeated in Kiama, a small town with an agricultural base, mainly dairy and beef farms, but which is more developed and proximal to larger urban conurbations and associated traffic and road conditions.

There were a total of 454 students whose questionnaires were analysed, 218 from Tumut and 236 from Kiama, with students in years 9-12 completing the questionnaire

This age range represented students who were coming up to the age for licensing, and those who were old enough to hold a license. The questions sought to find background to the individual's driving experience, how they learnt to drive, their educational aspirations, their attitudes to different driving hazards, attitudes to risk taking, the difference between on and off road driving, and how effective they perceived interventions to be. Any involvement in a car crash was also recorded, either as a driver or a passenger. The two phases of the study sought to validate each other, being a mixed methods approach.

Results

The results from the focus groups are discussed; those from the questionnaires are not reported at this time, and will form part of a later publication.

The results are structured to reveal themes emerging from the focus group discussions.

Attitudes to Injury, Injury effects and risks:

Injury was deemed to be an integral part of rural living, particularly animal handling, injury associated with farm machinery, and drownings in young children. However, participants made a distinction between the perception of "work" related injury and injuries involving crashes, in which there was a general perception that behaviour was more important as a predictor of driving related injury than it was in general farm work. Injury risk when working on agricultural activities seems to be an accepted part of the activity, and this may, in part, account for the high injury rate in agriculture.

Risk and personal risk taking had a broad range of definitions, from "something that takes one out of a comfort zone", to knowing that there is a possibility of an unwanted outcome, but still choosing to proceed with the activity. It was also seen as something that had the potential to get out of hand, for instance speeding "to see what it felt like", and "hooning around" in cars.

The young people who took part in this study felt that there was the difference in risk taking behaviours associated with gender. They perceived that females are more influenced by their peer age group at a pre

driving age than young males. Young males spoke of risk taking and competing with their peers in driving behaviours on road, including in speeding, and in trying to reduce a time taken for a specific journey route.

The participants perceived risk taking to involve the choice - to complete or not complete an action. The focus groups clearly identified that there were specific sub groups for whom there was a definite attraction to taking risks, not only in driving but in other aspects of their lives. However, it should be recognised that the majority of the young people who were involved in these groups did not identify themselves as high risk takers.

What is risk? Some different perceptions:

Risk taking was closely linked with loss of control, even for a split second, and again the theme appears to be that, for instance, with speeding the driver still believes that they can control the situation. This is in contrast to drink driving, where there is intent to take risk prior to getting into the vehicle. They expressed the view that drink driving was not acceptable.

"Drink driving is too dangerous, too much of a risk, it's easier to overload the car if you have been drinking"

However, speeding was thought to be **not as risky** as drink driving. This was despite their limited on road experience and untested hazard perception skills.

"A risk is where the motivation is toward pleasure rather than fear of the consequences of the action"

There certainly seemed to be a very low awareness in these rural young people that speed is by far the biggest factor in fatal and serious injury crashes. They appeared to have a perception that speed because it was usually un-premeditated was therefore not a risk that the driver could avoid – it just happened. In rural areas, this seems to manifest itself in the constant challenge to decrease the time for a particular journey and to outdo others!

"I guess people still think they have control when they speed, compared with drink driving."

This seems to contradict the young people's perception of the difference in driving on roads compared with the off road situation, and their perceptions of the range of skills needed to drive safely on rural roads. They seem aware of the limitations of rural roads, with the quality of the roads being cited as a major concern along with a lack of signage or any noticeable police presence to enforce road safety and restriction measures.

"Off road in the paddock, who cares? On road, there is consideration for other road users and the law."

They were also acutely aware of the limitations of their own skills. However they thought it impossible to access professional driving instruction, both because of cost and location. When the driving time to access the tuition exceeded the time of the lesson, few of the young people were willing, or able to use it. It also required driving to the location by a supervising driver.

As many of the young rural males had a long experience of vehicle control, although mainly in off road situations, it could also be that their familiarity with vehicles may increase risk taking, as it may have enhanced their sense of being in control.

"The road is more flat, you still have to concentrate as much, but you don't have to be quite as careful, as when you are driving through objects that could cause damage to the car On the road, it could be someone else that causes the accident, not you yourself."

Driving experiences and Learning Driving Skills:

Many of the young people who live on rural properties learn to drive a vehicle at a very young age, from around 5 years, with most starting the learning process at around 10 years old. This is more prevalent in

males than females. The reasons for learning to drive so young are almost exclusively to help with tasks on the family property, or to help other family members, usually a grandfather, on his property. The tasks included all aspects of rural living such as feeding stock and fencing, or to drive across the property to the point where the school bus could pick them up.

"I learnt to drive at 10, to help Dad on the farm, so he could shoot animals as I drove"

These young people gain considerable experience in vehicle handling in the years before they obtain their learner driver status. However, the skills learnt are basic, and in a relatively forgiving and familiar environment. The young people usually drove for a work related purpose, on their own, without distractions or peer pressure, in vehicles which are not capable of speeding, and in areas where there are few other vehicles. Often seatbelts are not used as a matter of course, as is usual for on road driving, and this habit may lead to less use of restraints in later on-road driving.

"On the roads you can drag race, on the farm usually you are working, the driving is for a different purpose. You aren't allowed to drive on the roads 'til you are sixteen, but we drive much younger on the farm"

The most usual driving instructor was the father, with grandparents and older siblings also being strongly represented. Some were self taught. No one in the focus groups had been taught to drive by a professional driving school. Although they did make reference to the lack of professional driving tuition, the nearest available was in most cases well over an hour's drive away, and very expensive.

They made frequent references to the difference in skills needed to drive on the property, where there were no rules, no other drivers, and no warning signs compared to on the road driving where there were enforceable rules, other drivers, and plenty of signage. They were concerned with stock and other animals on roads, but they were not mentioned in the off road situation, presumably because they can be avoided in paddocks or because the drivers use lower speeds.

When discussing distractions whilst driving, mention was made of driving with the radio at high volume, and the presence of passengers. With off road driving, there could be up to 7 passengers when driving for leisure, (paddock bashing) which would not be permissible on the road.

Attitudes to driving on and off road, differences between country roads and towns:

Young drivers made distinctions between on and off road driving. The road condition, either physical or when affected by adverse weather conditions is a factor that they consider does affect both their driving skills and their own safety. They had apprehensions about other road users, and a distrust of older drivers who they believed do not update their driving skills in line with increased traffic on the roads, and changes in road rules.

"Up in cities there's more traffic lights and roundabouts and everyone's trying to get through town or something, and here there's no traffic lights or roundabouts"

They felt vulnerable in small cars, as they perceive them to be less safe than larger ones, and also consider all or 4 wheel drive vehicles safer. This may have been as a result of earlier driving experience of larger vehicles, tractors, and all terrain bikes.

They drew a distinction between off road driving, which is often alone, or when accompanied, the driver is only responsible for the passengers in that car, compared with on the road driving where there is also some level of responsibility towards other road users.

When discussing the issue of signage on roads, particularly that which informs, they reported that this was helpful, but that it was often lacking in rural roads. Distinctions were made between driving in a familiar locality, where there are no roundabouts or traffic lights, and driving in a town or city where all these factors are reversed.

Risk-taking behaviours:

There was an overall perception that drink driving was not an acceptable behaviour. They perceived this to have important consequences when living in a small community. They see a higher police presence as a positive thing for reducing risk-taking behaviours. However they clearly distinguished between situations where rules were enforceable (on main roads), to those were they were not such as off road or small rural roads. The less enforceable rules included seat belt use, number of passengers in vehicles, obeying signs as well as the 'road rules' generally.

There was a perceived **intention** to break these rules when people did not use seat belts or engaged in drink driving. They see speeding as something that happens without intending it so to do. It is somehow less controllable, as the intent to do it is not there. However, there is also certain knowledge of the inbuilt competitiveness in driving, with comparisons being made of times for known journeys, with intent to beat this timing.

Participants reported that direct or indirect experience is one of the most important influences on modifying risk-taking behaviours. This included their own personal experiences, experiences of friends and relatives. Incidents which had the potential for serious injury, such as a 'near miss' crash was reported as influencing risk taking driving behaviour.

The influence of other people in the car was a very powerful determinant of risk taking behaviour; it is reduced with people for whom they feel responsible, grandparent, children, babies and even a dog. However participants felt that there were significant peer pressures involved in driving with mates in the car. However the groups were divided about the effect of this on speeding with some feeling that they would drive faster as a result and others state that they drove faster when travelling alone.

They also reported a difference in male and female reactions to peer pressure with males putting pressure on their peers to push their driving to its limits. Males tended to show off with same sex peers, but were more cautious with female passengers.

They believe that driver education as well as more exposure to differing driving experiences may modify risk-taking behaviours.

Participants cited different situations when they would exercise more caution, being particularly aware of school zones, other road users, heavy traffic and the unpredictable behaviours of other road users.

Discussion

It is apparent that many young rural people acquire a range of driving experiences including vehicle handling skills, with a wide range of vehicles, from a very young age. However, it is also apparent that the transition from using vehicles vocationally, usually when working on their own, and for a defined purpose, to driving faster vehicles, often with passengers and in far less forgiving environments, on roads, is very rarely accompanied by any further driving instruction. A significant reason for this is the lack of available tuition, but also lack of appreciation for the differences between the on and off road environments which has been demonstrated in the group discussions.

The young driving experience of these young rural people is a very different set of circumstances from the young driver who has no vehicle handling skills before starting to drive on road at 16 years when obtaining their learner licence. They learn the road rules before learning to drive. Their first experience is with a vehicle which is designed for road use and is capable of speed, on roads with signage, environmental restrictions and other road users.

Attitudes of young rural people to risk taking while driving are influenced by their experience on the property. Early responsibility appears to give some resilience, particularly to high risk taking.

The young people had a totally contrasting attitude towards drink driving and speeding. They are of a generation when drink driving has always been a serious offence; this may have coloured their perception

of this compared with the older generation. They were generally very negative about it, feeling that to drink and drive was a decision which was premeditated and potentially harmful to all road users, self and others. However, the whole concept of speeding is that it is rarely intentional, is inevitable, and is something which just happens and is not a risk. This seems to be a fundamental which needs to be addressed with young rural drivers, as it seems to be the area in which there could be potentially most gains in terms of reducing rural road trauma.

As a result of this study for young rural drivers, we have identified the environment in which driving was learnt, the influence of peers and long trip times as being important aspects in attitudes to speeding.

If the young person believes that they have had a large amount of driving experience, even if it is mainly in basic vehicle handling and not in road use, they may perceive themselves to be more competent than they are at road skills.

Young rural drivers often have early driving experiences in circumstances which are not similar to urban driving; some of the driving conditions are different, for example longer distances, rural roads, less apparent enforcement, road condition. There appears to be a need for promotion in rural communities of the facts of speeding and increased risk of crashes, and of the range and complexity of skill acquisition needed for safe road driving, in traffic, with road rules, and in high powered vehicles often with passengers. There is also a need to confront the geographic and financial barriers to more professional tuition in on road driving.

There needs to be a greater recognition of the ambivalent attitudes of young drivers to speeding. Campaigns need to work towards modifying their perception of risk and responsibility. This may need to encompass other aspects of rural life.

When the results for the focus groups are analysed in conjunction with those from the questionnaires, the implications for further studies will be clearer.

The limitations of the work are that it was restricted to one area, and although it did involve participants from ten focus groups; comparisons with those from both remote and urban areas would strengthen the research.

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