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Learning to Take Risks: Risk-Taking by Young Male Drivers in the ACT¹

Dr Tanya Styles, Kelly Imberger and John Catchpole
ARRB Transport Research Ltd
(Phone +61 3 9881 1673, Fax +61 3 9887 9618, E-mail tanyas@arrb.com.au)

Risk-taking among young male drivers was investigated from the perspective offered by theories of learning. Group interviews with young drivers living in the ACT were held to determine whether their risky driving behaviours became more frequent during the first year after acquiring a provisional licence, and to investigate the influences that contribute to early occurrences of risk-taking behaviours and the factors that contribute to increases in risk-taking. As predicted, there was evidence to suggest that pragmatic pressures, sensation seeking and modelling of other drivers' behaviours all contribute to the initiation of some risky behaviours. There was also evidence to suggest that increases in risky driving behaviours were associated with increasing confidence and the extinction of safe behaviours in favour of risky alternatives that are reinforced in a variety of ways.

Introduction

It is well documented that young drivers' accident rates are far higher than those of experienced middle-aged drivers. One cause of the elevated accident rate of young drivers is a high level of risk-taking. This project, funded by the NRMA – ACT Road Safety Trust and carried out by ARRB Transport Research, investigated risk-taking among young male drivers from the perspective offered by theories of learning.

Several means by which risky driving behaviours may become part of a driver's regular repertoire have been suggested. It has been argued that 'anticipatory avoidance responses', such as slowing on approach to a blind curve on a narrow road, may be extinguished by repeated experience of situations where such responses are found to be unnecessary (Fuller 1984). This phenomenon is known to psychologists as *extinction*. A safe driving behaviour that is extinguished may be replaced by a risky alternative that might be reinforced in a variety of ways. For example, a driver who repeatedly slows on the approach to a blind curve and fails to encounter oncoming vehicles may increase his or her approach speed over time. A reduction in travel-time may reinforce this increase in approach speed.

Alternatively, increases in risk-taking may be a consequence of the rapidly increasing confidence that novice drivers experience as a result of the significant improvement in vehicle control skills that occurs during the early months of driving. Vehicle control skills improve more rapidly than the perceptual and cognitive skills that are critical to accident avoidance (Forsyth 1992). It has been argued that this disparity leads inexperienced drivers, particularly males (Spolander 1983), to be over-confident and to take risks (Brown 1982).

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A third possibility is that risk-taking may be largely controlled by the formation of habits during the first months of driving. Driving is routine for much of the time, and it has been argued that many driving behaviours are controlled by learned habits rather than by the exact parameters of the traffic situation (Summala 1985).

To suggest that drivers learn to perform risky behaviours if they do not experience negative consequences or as a result of habit formation leaves open the question of why the risky behaviour was performed on the first occasion. A number of explanations have been proposed for initial engagement in risky driving behaviours. Pragmatic pressures may motivate some risky behaviours. For example, speeding might be prompted by the desire to avoid running late for an appointment. Alternatively, the first performance of a risky behaviour may occur after other drivers are seen performing the behaviour with no negative consequence (modelling). Another possibility is that a risky driving behaviour may be first performed as a deliberate attempt to experience heightened arousal (sensation seeking).

The objectives of the research project described in this paper were to:

- Identify the influences and processes, such as pragmatic pressures, modelling and sensation seeking, that contribute to early occurrences of risk-taking behaviour.
- Discover whether the frequency of risky behaviours increases during the first year after a young male acquires a provisional licence.
- Investigate the role of the following three processes in contributing to increases in risk-taking:
 1. extinction of the safe alternative behaviour
 2. increasing confidence in ability to avoid negative consequences
 3. habit formation.

Method

Following a pilot interview session, eight group interviews, each lasting approximately 90 minutes, were conducted at four locations around Canberra. Participants were recruited in pairs in an effort to encourage honest contribution to the discussion. Three pairs of friends participated in each group.

All 48 participants were males between the ages of 17 and 21 years who had held a provisional licence for between 8 and 23 months (with an average of 14 months). All participants reported that they drove a vehicle at least twice a week and most drove every day.

Each group was led by two facilitators through a list of questions pertaining to:

- The risky driving behaviours the participants engaged in.
- The circumstances that first led participants to perform risky driving behaviours.

- Consequences experienced by participants following risky driving behaviours.
- Changes in risky driving since the participants acquired a provisional licence.
- Reasons for any change in the frequency or degree of risk of such driving behaviours.
- Changes in perceptions of the risk associated with behaviours performed.

Session transcripts were examined and a number of themes were identified. A summary of the findings is presented.

Results

Each group of participants selected either five or six of the risky behaviours they sometimes engaged in for discussion during the session. As shown in Figure 1, a total of 18 behaviours were selected by the eight groups.

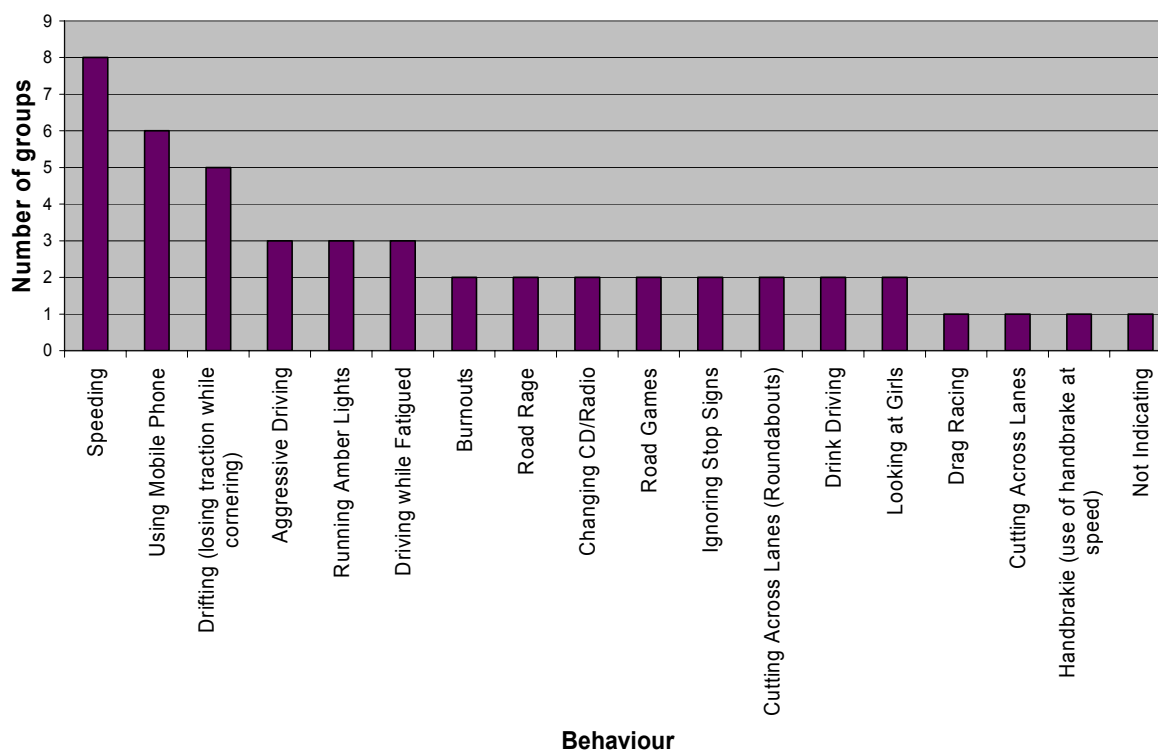


Figure 1 - Risky behaviours engaged in

Several factors were reported by participants to have motivated initial engagement in the various risky behaviours, as outlined below.

Pragmatic pressures: Some behaviours were initiated because they offered a means to an end. For example, some variant of ‘to get there faster’ was typically put forward as early motivation for speeding, cutting across lanes, ignoring stop signs and running amber lights. Drink driving was also associated with pragmatic concerns for some:

“like on Saturday night at 10 o’clock there’s no buses, and we don’t have money for a cab, we’ve drunk it all, then you realise all your mates have gone home and you’re like uh oh, stuck here!”

Increased freedom: Early engagement in some risky driving behaviours, especially speeding, was reported by many participants to be an expression of the freedom afforded by obtaining a provisional licence:

“because you can...when you’re on your L’s you have to do everything your parents say”

Other drivers: The behaviour of other drivers motivated initial engagement in some risky driving behaviours, including road rage, aggressive driving, speeding, ignoring stop signs and cutting across lanes. The impact of other drivers had occurred through three mechanisms. First, other drivers were seen by some participants to exert pressure on them to engage in risky driving behaviours:

“people honk you” (If you don’t go through stop signs)

Second, other drivers sometimes frustrated participants, causing them to engage in retaliatory behaviours:

“stupid driving from other people” “yeah, they do it on purpose”

Third, other drivers’ risky behaviour was sometimes modelled by participants:

“see someone else do it or see it at the Nats²”

Enjoyment (sensation seeking): Engagement in several risky driving behaviours was initially (and in many cases still) for fun and/or excitement. The ‘fun’ risky driving behaviours included drifting³, speeding, cutting lanes, burnouts, road games and drag racing.

“adrenaline, it’s like phwoah!” (burnouts)

Testing self and vehicle: The behaviours for which sensation seeking was a motivating factor were also often motivated by participants’ desire to challenge themselves or their vehicle. There was also some suggestion that practising risky driving behaviours would lead to greater car-handling abilities.

“pushing the boundaries of you and your car” (drifting)

Peer influence: Many risky driving practices were undertaken in association with encouragement from friends, but participants often reported that they wanted to engage in the risky behaviour anyway.

“if all your mates are standing around then you’re going to light it up, it’s not peer pressure cos you want to”

² Associated with the slogan “Australia’s biggest horsepower party,” Summernats, or Nats as referred to by participants, is a car festival held annually in Canberra.

³ Drifting was described by participants as the intentional loss of rear-wheel traction while cornering.

Emotional state: Some risky behaviours were first motivated by a particular emotional state that existed before the behaviour took place.

“stress relief” (aggressive driving)

Absence of negative consequences: Several participants indicated that they initially engaged in a risky behaviour because they saw no reason not to. In some cases it was apparent that the particular individual did not believe the behaviour to be risky for anyone.

“it’s just the same as changing the gear stick or putting the indicator on or winding the window down, you’ve just got the other hand there” (with which to use a mobile phone)

In other cases it appeared that, despite recognising the potential for danger, participants felt that they themselves were not at risk.

“certain signs are not worth worrying about, depending upon your knowledge of the road”

Among the members of each group there were mixed opinions about what changes in the frequency and severity of risky driving behaviours had occurred since they had obtained a provisional licence. Several participants reported variable change in some of their risky driving behaviours, whereby a behaviour might increase and decrease alternately in response to enforcement consequences, near misses or crashes, the type of car being driven, or the individuals’ mood.

“a lot of it depends upon the car you’re in, like if you’ve got a big V8 or something it’s cool but if you’ve got a little shitty Datsun everybody will just laugh at you”

Table 1 shows participants’ reasons for changes in a selection of behaviours.

Table 1 – Reported reasons for changes in the frequency of risky driving behaviours

Change	Reasons for Change
Driving while Fatigued	
Increase	<ul style="list-style-type: none"> • friends’ demands • increased socialising • work demands
Decrease	<ul style="list-style-type: none"> • greater number of friends have their own licence • decreased need to get home after socialising • can no longer ‘be bothered’ • more aware that fatigue can have consequences for drivers <p><i>“once you’ve done it once you’ve felt how bad it is, yeah, and how you know you’re not fully concentrating and it’s dangerous and you don’t want to be in that position again”</i></p>

Table 1 continued - Reported reasons for changes in the frequency of risky driving behaviours

Change	Reasons for Change
Speeding	
Increase	<ul style="list-style-type: none"> • confidence in driving ability and knowledge of the road • confidence in ability to avoid enforcement consequences • habit • increasing time pressures <p style="margin-left: 40px;"><i>“you think you’re a better driver after you’ve been driving for a year and a half or something”</i></p> <p style="margin-left: 40px;"><i>“probably at the start when you just get off your L’s you obey all the rules, now you’re just rebellious and, you know, you don’t have to because you’ve got away with it so much”</i></p> <p style="margin-left: 40px;"><i>“if you do it, like, a number of times your brain just gets used to it”</i></p> <p style="margin-left: 40px;"><i>“you know what you can do and where the cops are”</i></p>
Decrease	<ul style="list-style-type: none"> • relative had a near miss • became aware of the existence of speed cameras • decreasing time pressure • fewer trips with friends <p style="margin-left: 40px;"><i>“I used to drive around with a lot of friends more so we had a group of cars and we always used to try and beat each other, now we don’t do it that much”</i></p>
Road Rage	
Increase	<ul style="list-style-type: none"> • confidence in driving ability • speed more frequently • less tolerant of other drivers <p style="margin-left: 40px;"><i>“when you’ve just got your P’s, if someone does something you just go ‘I’ll just let it slide”</i></p> <p style="margin-left: 40px;"><i>“the more you speed the more others get in your way”</i></p>
Decrease	<ul style="list-style-type: none"> • greater awareness of the possible consequences <p style="margin-left: 40px;"><i>“if you go up and tailgate people and stuff, and you know now, like, if you smack into them you have to pay for their car and you’re like stuffed, why not just go ‘don’t worry about it’, unless they do something really stupid”</i></p>

Table 1 continued - Reported reasons for changes in the frequency of risky driving behaviours

Change	Reasons for Change
Drifting	
Increase	<ul style="list-style-type: none"> • increasing confidence in one's ability to drive • realise that it doesn't damage the car • realise how much fun it is • learn how to repair car damage <p style="text-align: center;"><i>"you don't get much damage to your car, which is pretty much the main thing"</i></p> <p style="text-align: center;"><i>"you learn how to drive so it's the next step up"</i></p>
Decrease	<ul style="list-style-type: none"> • the cost of car damage • can no longer 'be bothered' • had a crash • novelty has worn off
Using Mobile Phone	
Increase	<ul style="list-style-type: none"> • increasing comfort with the driving task • more social contacts • knowledge that police will not 'catch' the behaviour
Decrease	<ul style="list-style-type: none"> • increased awareness of the danger associated with mobile phone use <p style="text-align: center;"><i>"I think it's one of the most dangerous things"</i></p> <p style="text-align: center;"><i>"I could drive better when I'm pissed than on the phone"</i></p>
Ignoring Stop Signs	
Increase	<ul style="list-style-type: none"> • increasing familiarity with the roads and knowledge of which signs are 'safer' to ignore • awareness of other drivers not obeying stop signs <p style="text-align: center;"><i>"the more you stop at a stop sign, the less you obey it"</i></p>
No Change	<ul style="list-style-type: none"> • always obey them <p style="text-align: center;"><i>"who gives a rat's arse if it's clear or not, if it says stop I stop!"</i></p>

A number of issues not directly related to the study objectives emerged from the discussions. Perhaps most noteworthy of these were the fact that there is a culture associated with risky driving within the ACT, and that parental influence on driving through setting an example and through direct teaching were both recognised.

“there’s this thing called running the gauntlet, when you go on the other side of the road and it’s a blind corner ... you can’t see any cars coming... this car just came out of nowhere and hit the back of us”

“in Braddon right what happens is everyone goes there at night, there’s this one corner and they just dump oil onto it, and you go around...”

“what’s the record now? 180? (for the Marsheldon-Melrose street challenge) Some kid in a VL turbo did it. It’s like history, you go down in the books and people remember you for that”

“If I ever went through a stop sign my Dad would go nuts... because I did once while he was teaching me and he had this car heading straight for him”

“because my parents have always exceeded the speed limit I just learnt that it’s not as dangerous as what they told us in like the learning school and everything”

“the way my parents drive and stuff, they’re just like very cautious so I just picked up their habits”

“being with your parents as L drivers or even before when you were in the car as a small kid or whatever, you just kind of learn, you just learn where everything is, how to drive, and all that stuff”

“it can come from the parents, how your parents drive, how aggressive, or even your siblings, will affect the way, like your anger on the road too”

Discussion

There are a number of factors that must be considered when interpreting the results of this study. Much of the recruiting was done by word of mouth and so the sample cannot be considered a random sample. There was evidence to suggest that the sample may have been biased toward participants who were involved in the culture of risky driving for fun in Canberra. In a few groups, there were one or two members who appeared to have widely differing attitudes and perceptions from the rest of the group. Typically, this appeared to result in their being less willing to share their opinions. It was apparent in most groups that the majority of participants looked favourably upon many risky driving behaviours and thus some stories and opinions may have been embellished or fabricated to align with this group norm. It is also important to keep in mind that the findings of this study pertain to the psychological processes associated with behaviours that were defined as risky by participants and not according to any objective criteria.

A number of hypotheses were investigated during this study. First, three phenomena were proposed to contribute to participants’ early engagement in risky driving behaviours: pragmatic pressures, modelling of other drivers and sensation seeking.

There was evidence of the impact of pragmatic pressures on the initiation (and in many cases the continuation) of some risky driving behaviours. Modelling of risky behaviours within the media and at organised events were mentioned by some participants as having motivated some of their risky behaviours. Some participants also mentioned that the driving style of their parents has affected their own driving.

Peer modelling was not recognised by participants as a factor contributing to risky driving behaviours but this does not mean that peer modelling plays no role in promoting risky driving practices. Adolescence is a time of identity development (Kroger 1989) and it is quite possible that any statement to suggest that a behaviour was engaged in because someone else did it first may well be frowned upon by adolescent peers. It is also quite possible that participants were not aware of how modelling has impacted upon their behaviour.

In accordance with a considerable body of research which suggests that sensation seeking does promote risky driving behaviours (see Jonah 1997 for a review), sensation seeking appeared to be a powerful motivating factor for a subgroup of behaviours. Drifting, burnouts and road games were all engaged in almost purely for fun and excitement. While speeding and lane cutting were also exciting, other, often pragmatic, factors were the primary motivating factors associated with these behaviours for many participants.

Several additional motivating factors were described by participants. The transition from being supervised to having the freedom associated with solo driving prompted some participants to engage in risky behaviours. Other drivers were cited as prompting road rage and aggressive driving by engaging in behaviours that participants viewed as 'stupid'. Emotional states were recognised as contributing to early engagement in some behaviours, as was a desire to challenge oneself and test the vehicle being driven.

It appears that pragmatic pressures, sensation seeking and, perhaps to a lesser degree, modelling do play a role in the initiation of risky driving behaviours among young males. However, this is by no means an exhaustive list of contributing factors.

It was predicted that the frequency of risky behaviours would have increased in the time since participants obtained provisional licences. This was the case for many participants and many behaviours. However, decreases in most behaviours had occurred among at least some participants. These decreases were attributed to an assortment of factors, such as negative consequences experienced by self or others, the novelty having worn off and lifestyle changes.

Three phenomena that may account for increases in risky driving behaviours were of particular interest. It was hypothesised that if safe driving behaviours are extinguished due to lack of reinforcement they may be replaced by risky alternatives. It was also hypothesised that as participants gain confidence in their driving ability, their risky driving behaviours may become more frequent. Lastly, it was proposed that habit formation may play a role in the development and continuation of risky driving behaviours.

Extinction of the safer alternative: One participant provided a good example of extinction by noting that the more times he stops at a stop sign the less likely he is to obey it. Presumably the participant has repeatedly stopped for a stop sign and encountered negative consequences such as time delay as a result. He has also noticed on many occasions that there was no need to stop in order to avoid a crash.

Participants often used the phrases 'because you can' and 'because you can get away with it' in explaining some risky driving practices. These phrases imply that participants engage in some risky behaviours because they see no reason not to.

Increased confidence: Increased confidence in one's driving ability and, for some behaviours, in one's ability to perform specific risky behaviours, were reported as playing a role in increases in several risky behaviours, including drifting, road rage and speeding. Increased confidence in one's ability to avoid police detection also played a role in increases in some behaviours.

Habit formation: There was a small amount of evidence to suggest that some risky driving behaviours are habitual in that habit formation was mentioned by some participants in relation to speeding. It is possible that habit formation was not mentioned more frequently by participants because habits are often subconscious. It is also possible that habit formation was only beginning to take place within the sample of young drivers. If reasons for increases in risky driving behaviours were studied among an older sample, the impact of habit formation may be more readily identified.

In addition to the factors predicted to produce increases in risky driving practices, several other reasons for such increases, such as changing social circles, were noted by participants. So, as is to be expected with any behaviour as complex as risky driving, there appeared to be a large number of factors working in combination to determine how the frequency and extremity of participants' risky driving behaviours changed over time. Among these are extinction of safe behaviours in favour of reinforced risky behaviours, increased confidence in one's driving ability and, perhaps to a lesser extent, habit formation.

In addition to yielding information on the processes that govern risk-taking among young male drivers in the ACT, the results of this study had several implications for countermeasure development, including the following:

- Parent-directed countermeasures may be an avenue for influencing the driving of young males.
- To minimise the opportunity for young male drivers to learn how to avoid police detection, enforcement operations should be difficult to predict.
- The provision of opportunities for young drivers to learn from others' experiences of the negative consequences of risky driving behaviours may reduce some risky driving practices.
- Investigation of the impact on various risky driving behaviours of increasing young drivers' awareness of the extinction process would provide evidence as to whether activities that raise young males' awareness of the phenomenon should be an effective crash countermeasure.

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