

# Views, compliance and enforcement of Graduated Driver Licence Conditions: Findings from the New Zealand Drivers Study

Brookland<sup>a</sup>, R., Begg<sup>a</sup>, D.

<sup>a</sup>Department of Preventive and Social Medicine, University of Otago, Dunedin, New Zealand.

## Abstract

**AIM:** This paper describes young drivers' views of, and compliance with, the Graduated Driver Licence System (GDLS) conditions, and their GDLS traffic offences.

**METHOD:** The New Zealand Drivers Study (NZDS) is a prospective cohort study of newly licensed car drivers. 1599 young drivers (<25 years) progressed to full licensure and completed the NZDS baseline, restricted, and full licence interviews. Their views and experiences regarding GDLS conditions were obtained from these interviews. GDLS offences were sourced from official traffic records.

**RESULTS:** Young drivers thought the conditions were important for safety reasons, and agreement with conditions was generally high but, compliance with conditions was low: 24% breached the learner licence supervisor condition, 66% the restricted licence night-time condition, and 79% the restricted licence passenger condition. One in five young drivers breached all three conditions. Less than half thought it was likely they would be stopped by the police for not complying with licence conditions. Percentage of young drivers who received an offence notice for breaching conditions: supervisor condition (4%), night-time condition (4%), and passenger condition (12%).

**DISCUSSION:** Despite approving of the GDLS conditions, non-compliance was high, especially for restricted licence conditions. However, few young drivers received a police offence notice for these breaches of the law. Increasing compliance with conditions has been identified as a mechanism to reduce crash risk. Stricter enforcement by the police is required to help improve compliance; this would also assist parents to enforce the conditions. This combined effort should result in safety gains for young drivers.

## Introduction

The main factors that contribute to young driver crash risk, and may be modifiable, are: licence age, inexperience, and exposure to high risk driving situations (e.g., Williams & Preusser 1997; Mayhew, Simpson & Pak 2003; Williams 2003; Shope & Bingham 2008). Identification of these key risk factors contributed to the development and implementation of Graduated Driver Licensing in several countries throughout the world. GDLS have become the main intervention strategy adopted to address the problem of traffic related injury among young drivers (Simons-Morton & Winston 2006).

GDLS are designed to limit novice drivers' exposure to high risk driving situations, such as night-time driving and carrying young passengers, while allowing them to gain the experience they need under the supervision of an experienced driver (Ministry of Transport 1985; Waller 2003). The key elements of NZ graduated licensing are a learner licence period of supervised driving, with supervision normally provided by parents. This learner licence period allows a novice driver to gain initial experience in a low risk supervised environment. This is followed by a restricted licence period that allows unsupervised driving under certain low risk conditions. Restricted licence drivers are not allowed to drive unsupervised at night or when carrying young passengers. After the restricted licence stage, drivers are eligible to graduate to a full privilege driver's licence

(Begg & Stephenson 2003). Separate to GDLS, all drivers under 20 years of age, regardless of licence status, have a zero blood alcohol concentration (BAC) limit.

Population rates for young driver traffic related deaths have stabilised, or are declining in high-income countries, and this is largely attributable to GDLS (Williams, Tefft & Grabowski 2012). Young people, however, continue to be over-represented in motor vehicle crashes (IRTAD International Road Traffic Accident Database (OECD) 2010). If we are to see further reductions in crash risk all aspects of graduated licensing programmes need to be implemented and enforced. Breaching GDLS conditions has been shown to contribute to an elevated crash risk (Williams 2003; Carpenter & Pressley 2013) and increasing compliance has been identified as a potential mechanism to improve safety during the early stages of driving (Williams, Tefft & Grabowski 2012). The aim of this paper is to describe young drivers' views of, and compliance with, the conditions and their GDLS traffic offences, to assist the identification and development of strategies to increase compliance.

## Method

### *Study Context*

The NZDS is a prospective cohort study of 3992 newly licensed car drivers. The cohort was recruited between 1<sup>st</sup> February 2006 and 31<sup>st</sup> January, 2008 from driver licensing agencies and licensing courses throughout New Zealand (NZ), when potential participants passed their car learner licence theory test (Class 1L Licence). At this stage participants completed a self-administered baseline questionnaire. The follow-up telephone interviews were aligned with the licensing stages of the graduated driver licensing system, with the first taking place at the restricted licence stage (first follow-up interview) and then at the full licence stage (second follow-up interview). On-going follow-up continues through national databases that monitor motor vehicle crashes, infringements, convictions and hospitalisations. Further details about recruitment and follow-up methods have been published previously (Begg, Langley, Broughton, Brookland, Ameratunga & McDowell 2009; Langley, Begg, Brookland, Ameratunga, McDowell & Broughton 2012a; Langley, Begg, Brookland, Samaranyaka, Jordan & Davie 2012b)

The present study used data from the NZDS learner (baseline -LQ), restricted (RQ), and full licence (FQ) stage interviews and official traffic infringement records, for cohort members aged 15 to 24 years at learner licence (N=3695). Follow-up interviews with the cohort ceased on 1<sup>st</sup> May, 2013. At this time 80% (n=2955) of participants had progressed to a restricted licence, and 86% (n=2548) of them had completed the NZDS restricted licence (first follow-up) interview; 51% (n=1879) of the cohort had progressed to their full licence, and 91% (n=1711) of them had completed the NZDS full licence (second follow-up) interview. The analysis is based on the 1599 (85%) cohort members who progressed to their full licence and completed the restricted licence (RQ) and full licence (FQ) interviews.

### *GDLS Measures*

Under the requirements of a NZ learner licence there is one main driving condition. Learner licence drivers are required to have a supervisor with them at all times when they drive. A supervisor is a driver who currently holds, and has held for at least two years, a full privilege car driver licence. A supervisor must sit in the front passenger seat and is deemed in charge of the vehicle. For the restricted licence there are two main driving conditions. Restricted licence drivers are required to have a supervisor with them if they drive between 10pm and 5am (night-time condition) or if they drive with passengers (passenger condition), with some exceptions (e.g., carrying dependents).

*Opinions towards the GDLS conditions**Learner Licence Condition*

Level of support for the supervisor condition was measured before (LQ) and after (RQ) experience driving under this condition.

Before experience (LQ): “As a driver with a learner licence you are required to have a supervisor with you at all times. Do you agree or disagree with this?” Response options ranged on a four point Likert scale from ‘strongly disagree’ to ‘strongly agree’. After experience (RQ): “For safety reason, how important do you think it is for learner drivers to have a supervisor with them when they are driving?” Response options ranged on a four point Likert scale from ‘not at all important’ to ‘very important’.

*Restricted Licence Conditions*

Level of support for the restricted conditions was measured before (RQ) and after (FQ) experience with the requirements.

*Night-time condition*

Before experience (RQ) and after experience (FQ): “How much do you agree with the night-time driving restriction (need to have a supervisor from 10pm – 5am)?” Response options ranged on a four point Likert scale from ‘strongly disagree’ to ‘strongly agree’.

*Passenger condition*

Before experience (RQ) and after experience (FQ): “How much do you agree with the passenger restriction?” Response options ranged on a four point Likert scale from ‘strongly disagree’ to ‘strongly agree’.

*Opinions towards police enforcement of the GDLS conditions**Learner Licence Condition*

In the RQ, participants were asked “How likely are learner licence holders to be stopped by the police if they drive without a supervisor?” Response options ranged on a four point Likert scale from ‘not at all likely’ to ‘very likely’.

*Restricted Licence Conditions*

In the FQ, participants were asked “How likely are restricted licence holders to be stopped by the police if they drive, 1. without a supervisor at night (10pm-5am)? 2. with passengers without a supervisor?” Response options ranged on a four point Likert scale from ‘not at all likely’ to ‘very likely’.

*Compliance with GDLS conditions**Learner Licence Condition*

Compliance with learner licence supervisor condition: In the RQ participants were asked: “While you had your learner licence did you ever drive without a supervisor on a public road?” and “how often did you do this [drive without a supervisor]?” Responses were coded as never (0), occasional (1-9 times), regular (10 times or more). Drivers also reported their main reason for driving without a supervisor.

Drivers who reported breaching their learner licence condition were asked “how often they had passengers with them, when driving unsupervised?”. They were also asked if their parents knew they were driving unsupervised. Those who responded yes were asked “what did they think about you driving unsupervised?”

### *Restricted Licence Conditions*

Compliance with restricted licence conditions: The restricted stage compliance measure was created from the participant reports of breaches of the GDLS restricted licence conditions, from the FQ. Firstly, participants were asked if they drove at night (between 10pm and 5am) with or without supervision. Following this, drivers who had driven at night were asked “how much of it was without a supervisor?” Response options were ‘none of it’, ‘less than half of it’, ‘half of it’, ‘mostly all of it’ or ‘all of it’. Responses were coded as never (none of it), occasional (less than half of it or half of it), regular (mostly all of it or all of it). Drivers also reported their main reason for driving unsupervised at night.

Participants also reported about their driving with passengers. Firstly, drivers were asked if they drove with passengers with or without supervision. Following this drivers who had driven with passengers were asked “how much of it was without a supervisor?” Response options were ‘none of it’, ‘less than half of it’, ‘half of it’, ‘mostly all of it’ or ‘all of it’. Responses were coded as never (none of it), occasional (less than half of it or half of it), regular (mostly all of it or all of it). Drivers also reported their main reason for driving unsupervised with passengers.

Drivers were also asked if their parents knew they were driving at night unsupervised, or with passengers unsupervised. Those who responded yes were asked ‘what did they think about you driving unsupervised, 1. at night, 2. with passengers?’

### *Traffic Offences*

Traffic offences relating to breaches of the GDLS conditions were sources from official traffic infringement and offence records. 98% of participants gave consent for the research team to access all their traffic offence records. The offence records for the 2% who did not consent were set to “missing”.

### *Statistical Procedures*

All analyses were undertaken using SAS (9.3). Descriptive statistics were used to describe views and compliance with GDLS conditions and traffic offending. For comparison of paired data (before, after) the Wilcoxon matched-pairs signed-ranks test was used. Two-sided  $p < 0.05$  was considered statistically significant in all cases.

## **Results**

### *Opinions towards conditions*

Table 1 displays the views of young drivers towards the GDLS conditions, before and after experience with them. Overall, young drivers were highly supportive of the learner licence supervisor condition, and there was a significant increase in their level of support from before experience to after experience, ( $S=111490$ ,  $p < .0001$ ). Support for the restricted licence conditions was lower, although the majority did agree with them. For the night-time condition there was no significant change in support: 52% agreed before experience, and 56% after, ( $S=7490$ ,  $p = .1857$ ). For the passenger condition 62% agreed before experience, and 72% after, and this was a significant increase in level of support, ( $S=33128$ ,  $p < .0001$ ).

**Table 1.**

*Young drivers' opinion regarding GDLS conditions before and after experience with them.*

	Before licence stage		After licence stage		S	P-value
	N	%	N	%		
<b><i>Support for learner licence supervisor condition*</i></b>						
Strongly agree / very important	481	(31)	993	(62)	111490	p<.0001
Agree /important	936	(59)	531	(33)		
Disagree /not very important	118	(7)	69	(4)		
Strongly disagree / not at all important	42	(3)	5	(0)		
<b><i>Support for restricted licence night-time condition</i></b>						
Strongly agree	147	(9)	95	(6)	7490	p<.1857
Agree	683	(43)	803	(50)		
Disagree	628	(39)	591	(37)		
Strongly disagree	137	(9)	110	(7)		
<b><i>Support for restricted licence passenger condition</i></b>						
Strongly agree	153	(10)	143	(9)	33128	p<.0001
Agree	838	(53)	1005	(63)		
Disagree	492	(31)	387	(24)		
Strongly disagree	109	(7)	64	(4)		
*Different response categories for before and after questions						

### ***Compliance with conditions***

Table 2 displays the proportion of young drivers who reported breaching the conditions of their learner and restricted licences. One in four learner licence drivers reported driving unsupervised, and of these 43% had done so at least ten times (10% of all learner drivers). The main reasons given for driving unsupervised while on a learner licence were 'no supervisor available on occasion/at all' (45%) and 'to get feel of driving by myself' (19%). No other reason was reported by more than 10% of drivers. Half of all learner drivers who had driven unsupervised had carried passengers. For the restricted licence stage: two-thirds of drivers reported unsupervised driving at night (10pm - 5am). The frequency of unsupervised driving at night was high, with 54% of these drivers reporting that 'mostly all' or 'all' of their night-time driving was unsupervised (36% of all restricted drivers). The main reasons given for unsupervised driving at night were 'lazy/convenient for self' (37%), 'no supervisor available on occasion/at all' (21%) and 'needed to travel to/from work' (20%). No other reason was reported by more than 10% of drivers. Seventy nine percent of drivers reported driving unsupervised with passengers. This was also a frequent behaviour, with 41% of these drivers reporting that 'mostly' or 'all' of their driving with passengers was without supervision (33% of all restricted drivers). The main reasons given for driving unsupervised with passengers were 'lazy/convenient for self' (57%) and 'no supervisor available on occasion/at all' (16%). No other reason was reported by more than 10% of drivers. One in five young drivers breached all three conditions.

**Table 2.**

*Frequency of breaching learner and restricted licence stage conditions.*

	N	%
<b>1a. Drove without supervision, while on learner licence?</b>		
<i>No</i>	1214	(76)
<i>Yes</i>	383	(24)
<b>1b. How often did you drive without a supervisor [on learners]?</b>		
<i>None</i>	1214 (n=383)	
<i>1-9 times</i>	217	(57)
<i>10 times +</i>	166	(43)
<b>2a. Drove at night without supervision, while on restricted licence?</b>		
<i>No</i>	542	(34)
<i>Yes</i>	1049	(66)
<b>2b. How much of the night time driving was without a supervisor?</b>		
<i>None</i>	542 (n=1049)	
<i>Less than half - half of it</i>	483	(46)
<i>Mostly all - all of it</i>	566	(54)
<b>3a. Drove with passengers without supervision, while on restricted licence?</b>		
<i>No</i>	336	(21)
<i>Yes</i>	1263	(79)
<b>3b. How much of driving with passengers was without a supervisor?</b>		
<i>None</i>	336 (n=1263)	
<i>Less than half - half of it</i>	742	(59)
<i>Mostly all - all of it</i>	521	(41)

### *Parental awareness and approval*

Seventy percent of learner drivers who drove unsupervised reported that their parents were aware they were doing this. Two thirds of these young drivers reported that their parents generally approved of them driving unsupervised ('weren't worried about them driving unsupervised, approved in certain situations, easier for parents, okay as long as I didn't get caught, had to pay fines if caught').

Eighty eight percent of restricted drivers who drove at night unsupervised reported that their parents were aware they were doing this, and 62% of these young drivers reported that their parents generally approved of them doing so.

Seventy two percent of restricted drivers who drove unsupervised with passengers reported that their parents were aware of this and 65% of these young drivers reported that their parents generally approved of them doing so.

*Perception of police enforcement of GDLS Conditions*

Table 3 shows young drivers' views on the likelihood that drivers would be stopped by the police for breaching the GDLS conditions. Young drivers had mixed views on the likelihood of being stopped while driving in breach: 'not at all likely/not very likely' to be stopped learner supervisor condition (52%), night-time condition (70%) passenger condition (54%).

**Table 3.**

*Perception of police enforcement of GDLS Conditions.*

	<i>not at all likely</i>	<i>not very likely</i>	<i>likely</i>	<i>very likely</i>
	%	%	%	%
<b><i>How likely are learner licence holders to be stopped by the police...</i></b>				
if they drive without a supervisor?	4	48	36	12
<b><i>How likely are restricted licence holders to be stopped by the police...</i></b>				
if they drive without a supervisor from 10pm-5am?	9	61	27	3
if they drive with passengers without a supervisor?	5	49	41	5

***Traffic infringements and offences***

During the learner licence stage 55 (4%) drivers received at least one traffic offence notice for breaching the learner licence supervisor condition. During the restricted licence stage 64 (4%) drivers received at least one notice for breaching the night-time condition, and 194 (12%) drivers received at least one notice for breaching the passenger restriction.

**Discussion**

The effectiveness of graduated driver licensing programmes to reduce crash risk is limited if the main components are not complied with. The aim of this paper was to describe young drivers' views of, and compliance with, the GDLS conditions and their traffic offences received for breaching the conditions of their graduated licence.

Overall, young drivers had generally positive views of the conditions, and their support for them increased after they had experienced the licence stage, particularly for the learner supervisor and restricted passenger conditions. Despite this reasonable level of support, breaching licence conditions was very common, especially once young drivers progressed to the restricted licence stage, which allows solo driving. One in four young drivers breached the learner supervisor condition, two-thirds had driven unsupervised at night, and almost 80% had driven unsupervised with passengers while on their restricted licence. One in five young drivers breached all three conditions.

The majority of young drivers reported that parents were aware that they were driving in breach of their conditions and most appeared to approve, from the young drivers viewpoint. A common opinion given by young drivers was that their parents weren't worried, were okay about it in certain

situations, or okay as long as they didn't get caught. Alongside their view of parental acceptance of non-compliance, young drivers had mixed expectations of being caught by the police for driving in breach, with the majority of drivers thinking it was unlikely they would be stopped. This viewpoint is supported by the low number of young drivers who received an offence notice for breaching a GDLS conditions, compared to the high levels and frequency of non-compliance reported.

### *Conclusion*

Despite young drivers approving of the graduated licensing conditions, non-compliance was high, especially for the restricted licence conditions. Few young drivers, however, received a police offence notice for breaches of the GDL laws. Alongside few young drivers experiencing legal repercussions for driving in breach, parents appear to be complicit in the high level of offending by appearing, according to the young drivers, to not be overly concerned. In recent years there have been a number of programmes targeted at parents to increase their involvement in adolescent driving to reduce crash risk. However, relying on parents to enforce licensing conditions is unlikely to work in isolation. Stricter enforcement by the police is required to help improve compliance; this would also assist parents to enforce the conditions. This combined effort should result in safety gains for young drivers.

### **Acknowledgements**

The New Zealand Drivers Study was funded by the Health Research Council of New Zealand (2005 - 2013), the Road Safety Trust (2005 - 2013) and the Accident Compensation Corporation (2005 - 2009). No funding source had any involvement in the preparation of this paper.

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