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## **Young Driver and Passenger Behaviours across Nottinghamshire:**

**Review, Results and Discussion**

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## 2. Overview

The Nottinghamshire Road Safety Partnership (NRSP) supported by CoverBox Insurance Ltd conducted a survey into young driver and passenger behaviours across both Nottingham City and Nottinghamshire. The survey used was a replication of a survey conducted by the Gloucestershire Road Safety Partnership (GRSP) and the Research Box in 2013. The aim of the survey was to provide NRSP with an evidence base of up to date and local information on self-reported young driver and passenger behaviours. This information will be used to inform the content and style of future road safety education interventions in schools and colleges.

An online survey was sent out to schools and colleges across Nottinghamshire in the early spring of 2014. Responses were encouraged via the offer of a chance to win an iPad Air worth £400 kindly donated by CoverBox Insurance Ltd. Responses were collected and analysed with gender comparisons conducted. As with the GRSP survey responses were sought from both young drivers and their passengers. Passenger reports of risk-increasing behaviours were sought in order to provide a balanced perspective next to driver self-reports that may contain the possibility of social response bias.

As expected passengers reported witnessing higher amounts of risk-increasing behaviours compared to driver self-reports. However both groups reported witnessing the same behaviours in the same order of occurrence. From the most experienced/engaged in behaviour these were; talking to passengers, singing and dancing, eating and/or drinking, setting a satnav, reading a received text, driving far too fast for the conditions and sending a text or email.

Overconfidence was evident particularly but not exclusively amongst males with half of all respondents saying that they are more skilful than the average driver. Driver ability and beliefs with regard to overtaking were also particularly strong with almost three quarters of all young drivers surveyed saying they knew exactly what risks they could take when overtaking. When asked what they thought were the causes of young driver crashes over-confidence was one of the most common responses suggesting that young drivers recognise this risk-increasing belief in others but not in themselves.

Over a third of all young passengers reported having experienced feeling uneasy, worried or scared by another young persons driving on at least one occasion. Of these 13% said that they felt unable to say something when this happened. Females were more likely than males to have felt uneasy, worried or scared, where as males were more likely to feel excited as a passenger with 43% of them reporting experiencing this feeling when in a car driven by another young driver.

Results of the survey are reported and discussed in full with reference to the results of the GRSP survey and in relation to a review of relevant literature rather than being seen in isolation. This allows for conclusions to be drawn and recommendations to be made with regards to future educational interventions from NRSP.

## **3. Introduction**

### **3.1 Young Driver Risk**

It is well known that driver error is the main cause of car crashes with human factors and driver behaviour said to be a causal factor in over 90% of crashes. Young drivers (17-24 year olds) are over-represented in road traffic collisions across the globe (DfT, 2012, OECD, 2006). In the UK 26% of all car user deaths are young people aged between 17 and 24 (AA, 2012). In Nottingham and Nottinghamshire over the last 10 years there have been over 1'500 young drivers/riders killed or seriously injured (Local Authority Data).

### **3.2 Causal Factors**

Age and inexperience are known to be the predominant risk factors within this group (TRL, 2013). It is known that risk acceptance is higher amongst young people and in-particular males. Low impulse control and high thrill seeking tendencies are also more common within this age group (Turner & McClure, 2003). In the UK in recent years road safety initiatives have tended to focus on the 'fatal four' causal factors of crashes these are; the non-wearing of seatbelts, use of mobile phones, drink/drug driving and inappropriate speed.

### **3.3 Behavioural Research and Education**

It has been suggested that educational interventions aimed at reducing young driver risk should be grounded in theories of behavioural change (Ulleberg & Rundmo, 2003) such as, the theory of planned behaviour (Ajzen, 1985) and the trans-theoretical model of change (Prochaska & Velicer, 1997).

Driver education in the UK is currently undertaking a process of change with a move away from traditional methods of instruction based upon theories of skill acquisition such as Gagne's 9 events of Instruction (Gagne, 1988) towards a more client-centred method of teaching. This change in educational style is evident in the introduction by the Driver and Vehicle Standards Agencies (DVSA) of a new standards check for approved driving instructors launched in April 2014 that allows for client-centred and coaching methods to be used and rewarded. This new standards check is based upon the National Driver and Rider Training Standards first set out in 2011 and last updated in December 2013, (DSA, 2013). An evaluation of the new syllabus was conducted and a report published however there were flaws in the evaluation process (e.g. small sample and a lack of control of extraneous variables) results were unsurprisingly inconclusive (DSA, 2013a).

The push for a client-centred approach emerged from the European Union's HERMES project in driver coaching (2010). The HERMES project adopted the Goals for Driver Education Matrix (Hatakka, et al. 2002) as a framework for all driver training across the EU. The GDE Matrix (see figure 1.) consists of four levels; vehicle control, driving in traffic, goals and context of driving and goals for life and skills for living. These levels are dissected by three columns; knowledge and skill, risk-increasing aspects and self-assessment.

Figure 1. Adapted from, Hatakka et al. (2002).

## (GDE Matrix – Goals for Driver Education)

Levels	Area	Knowledge and skill	Risk increasing aspects	Self assesment
<b>Goals for life and skills for living</b>		Lifestyle, age, group, culture, social position etc, vs. driving behaviour	Sensation seeking, Risk acceptance, Group norms, Peer pressure	Introspective competence, Own preconditions, Impulse control
<b>Goals and context of driving</b>		Modal choice, Choice of time, Role of motives, Route planning	Alcohol, fatigue, Low friction, Rush hours, Young passengers	Own motives influencing choices, Self-critical thinking
<b>Driving in traffic</b>		Traffic rules, Cooperation, Hazard, perception, Automatization	Disobeying rules, Close-following, Low friction, Vulnerable r.u.	Calibration of driving skills, Own driving style
<b>Vehicle control</b>		Car functioning, Protection systems, Vehicle control, Physical laws	No seatbelts, Breakdown of vehicle systems, Worn-out tyres	Calibration of car-control skills

The GDE Matrix is a framework which aims to provide us with the essential elements necessary to make a safe driver.

Research has shown that driver training and education which includes higher order thinking skills, self-reflection and observer feedback can encourage an internal locus of control (Huang & Ford, 2012). People who think internally (reflect on own performance) are shown to have a lower accident risk than people who think externally and blame the third party or their environment (Jones & Wuebker, 1985).

## 4. Background

Gloucestershire Road Safety Partnership (GRSP) conducted a survey into young driver behaviours in 2013 (the same survey replicated in the current study). The aims of their research were to quantify risk-increasing behaviours and to explore why young drivers engage in such behaviours.

The Gloucestershire survey found that the most commonly reported risk-increasing behaviours were; singing or dancing, eating or drinking or setting a satnav with more than half of all passengers reporting witnessing such behaviours.

Next most common were drivers reading incoming texts or driving far too fast. Many passengers also reported feeling uneasy, worried or scared when being driven by another young driver with nearly half feeling uneasy and nearly a quarter reporting feeling scared.

Drivers reported committing the same risk-increasing behaviours as their passengers observed but to a noticeably lesser extent. Results also showed that young drivers consider themselves to be more skilful than the average driver with almost 80% self-reporting that they were either a bit or much more skilful than other young drivers. This confidence extended to risky manoeuvres such as overtaking, where 72% agreed that they knew exactly what risks they could take when overtaking. A significant minority of 18% also believed it was ok to speed as long as you were careful.

The Gloucestershire young drivers and passengers held several key beliefs about the causes of young driver crashes, these were; inexperience, over-confidence, showing off, peer pressure, lack of attention/concentration caused by distractions and driving too fast for the conditions. When asked what might change young driver behaviour a few options were put forward these mostly focused on; better training and education in schools or driving lessons and over a longer period of time, greater understanding of consequences and harsher legal penalties and restrictions combined with greater enforcement of traffic laws.

Greater restrictions on young drivers and longer learning periods are a key element of most graduated driver licensing (GDL) systems. An evidence review and evaluation into GDL and driver education in the UK was conducted by the Transport Research Laboratory (TRL, 2013) on behalf of the Department for Transport (DfT). This review concluded that there was minimal to no evidence available to suggest that educational interventions aimed at pre-drivers had any safety benefit at all, pointing out that giving young drivers information only is no guarantee of improved safety and that there is only a weak link between attitude and behaviour. Many interventions so far have aimed to change attitudes. The review also warns that training and education should be very wary not to increase confidence as this has been shown to increase crash risk.

The 2013 review comes out strongly in favour of introducing a GDL system into the UK stating that the evidence for its effectiveness in other countries is 'overwhelming'. The review concludes that the most important factors in successful GDL systems are; a minimum learning period, minimum number of hours of

supervised practice, night time restrictions and passenger restrictions. Parental support and parental enforcement of restrictions is also seen as being key to the effectiveness of any GDL system (TRL, 2013).

Calls for a GDL system in the UK have been growing in recent years with both the RAC foundation (Box & Wengraf, 2013) and the Association of British Insurers in 2012 publically calling for GDL. The UK government though does not seem keen on pursuing GDL despite the evidence for its effectiveness. Just after receiving the report from TRL the DfT indefinitely withdrew an already delayed green paper on young drivers.

In 2010 a previous DfT literature review was carried out looking into ‘The development of children’s and young people’s attitudes to driving’ (Durkin & Tolmie, 2010). This review was based upon 8 psychosocial predictors of driver behaviour these were; attitudes, perceived threat and perceived benefits of driving in a particular way, norms, personality, identity, task difficulty/habituation, effects of education and training and wider contextual influences. The review also stresses the weak link between attitudes and behaviour and states that ‘in pre-drivers, the relationship is complex, subject to other influences and is changeable over time’ (Durkin & Tolmie, 2010 p7). The authors suggest that education should target specific behaviours in specific contexts by specific drivers (i.e. be client-centred in its approach) and that just providing information about risky behaviour is unlikely to induce behavioural change. They conclude that a ‘one size fits all’ approach is ineffective.

Durkin & Tolmie (2010), make multiple suggestions for young driver education going forwards among these are;

- education should focus on the perceived benefits of safe driving more than perceived risks
- it should publicise the positive behaviours of adolescents and portray peer-norms as pro-safety
- earlier road safety training such as crossing the road and cycling as well as pre-driver training should emphasise self-regulated learning and focus on reading the road,
- the ‘real nature’ of driver competence should be promoted,
- that adolescents should be provided with the opportunity to evaluate other’s safety levels and in how to raise concerns about others driving
- educational interventions should develop broad ranging strategies that take into account the multiple influences on young people’s orientations towards driving.

One young driver intervention that aims to change driver behaviours by encouraging young drivers to think of their own coping strategies is the Get in Gear project ran by Transport for Buckinghamshire. This project was evaluated in 2013 by its creator, Ian Edwards. Get in Gear aims to train newly qualified drivers to critically analyse their own driving ability as described in the GDE Matrix (Hatakka, et al. 2002). Get in Gear aims to achieve this through the use of coaching approaches based on the recommendations of the HERMES project (2010).

The Get in Gear evaluation used a video of multiple traffic scenes and asked the participants to score the drivers from 1 to 5 (very poor – very good) for three aspects

of their driving; speed, anticipation and positioning. Scores were taken at three time points, pre-course, immediately post-course and 3 months post-course. Results showed that participants rated the clips more critically post-course and 3 months post-course than they did prior to taking the course and that the speed factor was significantly different at both post-course time intervals (Edwards, 2013).

While these results are promising in showing that education with a coaching approach which promotes self-reflection did increase young driver's ability to critically analyse driving ability it was only the driving ability of a third party that was analysed, so no conclusion can be drawn on participant's ability to self-analyse.

Another road safety project which aims to change attitudes in an attempt to influence behaviour is Sheffield's 'Safety Drive' (Rowe & Norman, 2013). Again this project adopted a coaching approach and was based upon the theory of planned behaviour (Ajzen, 1985) along with other behaviour change models from the public health sector. The evaluation focused on attitude change post-intervention based on responses to the Attitudes to Driving Violations Scale (ADVS). This scale has been scientifically validated and scores have been shown to correlate to crash risk. Other attitudes measured were towards alcohol use, fatigue and distraction while driving.

Post-intervention scores on the ADVS were reduced however attitudes to alcohol use, fatigue and distraction remained fairly stable. Such mixed results for an educational intervention are not unusual and may reflect the fact that drink driving is deemed socially unacceptable in general and that people's attitudes to risk issues do not necessarily reflect their behaviour.

## **5. Aims of the Survey**

The survey conducted by Nottingham City Council on behalf of the Nottinghamshire Road Safety Partnership and supported by CoverBox Insurance Ltd aims to add to the current data available on self-reported young driver and passenger behaviours. This study is a replication of a survey conducted by Gloucestershire Road Safety Partnership (GRSP) and The Research Box Ltd in 2013.

Providing up to date and localised data about the attitudes and behaviours of Nottinghamshire's young people when in cars, it is hoped that the results can help to inform the content and style of upcoming educational approaches based upon the GDE Matrix (Hatakka, et al. 2002) being proposed by the Nottinghamshire Road Safety Partnership.

## 6. Method

A replication of the Gloucestershire survey (The Research Box, 2013) was sent out to heads of post-16 in 14 schools across Nottingham and Nottinghamshire. Each department head was sent an email and accompanying letter explaining the purpose of the study. Heads of post-16 then either forwarded the link to the online survey to all of their students under their jurisdiction via email or posted the link on other online internal communications such as the schools intranet for the students to access.

Schools were chosen based on their geographical location to ensure an even spread of students across the city and county.

Responses were encouraged by the offer of entry into a prize draw to win a brand new iPad Air worth £400. This prize was supplied by the survey sponsor CoverBox Insurance Ltd whose logo appeared at the top of the survey.

The survey contained multiple choice questions and open questions based on previous examples of research, these included questions on:

- Driving Activity
- Experiences of Being a Passenger
  - Driving Behaviours Experienced
  - Experience of Crashes and Violations
  - Levels of Anxiety Experienced
- Experiences of Being a Car Driver
  - Perceptions of Skill
  - Driving Behaviour
  - Experience of Crashes and Violations
  - Attitudes Towards Breaking the Law
- Beliefs Concerning
  - Why Young Drivers have Crashes
  - What Might Change Behaviour
  - What Else Can Be Done to Reduce Young Driver Crashes

## 7. Sample and Response

A non-probability sampling method described above was used.

Emails and letters were sent out in two rounds in order to gauge the initial response rate. The first round was sent out in February 2014 and was sent to 3 schools. A second round was sent out on later in the same month to a further 17 schools. In total 208 responses were collected. 172 of these were fully completed with 36 partial responses.

Partial responses have been included in the results as an initial comparison of partial and complete responses showed no significant differences. Also there was no compulsion to answer all questions and no assumption is made to suggest that partially completed surveys provide invalid data.

As responses were gained from 11 out of 20 schools approached it is assumed that employee's of 9 schools did not pass the survey on to their students. Based on this assumption the students from these schools have been excluded in the sample size measure. A breakdown of the sample obtained is shown in table 1 and table 2.

The total number of responses shown in table 2 (165) is 43 lower than the overall response rate, this is due to students opting out of the question of which school they attend, however it still gives a good overview of the response rate from particular schools.

Response rates varied from 0.8% (Rushcliffe) to 16.22% (Quarrydale). The mean response rate across all schools from whom responses were gained was 8.14%. The cause of variation in response rates is unknown however it can be hypothesised as being either a difference in student attitudes towards such surveys within a school or the level of support and interest from staff when distributing the survey. A combination of both factors is also possible.

Table 1. Total sample size and response rate.

<b>Number of schools</b>	<b>Number of students</b>	<b>Responses</b>	<b>Response Rate</b>
11	2556	208	8.14%

Table 2. Sample size and response rate per school.

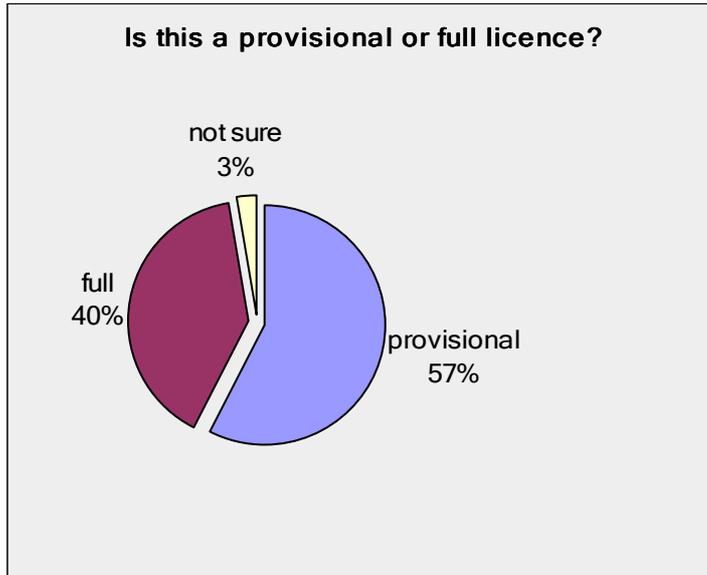
<b>School</b>	<b>Number of Students</b>	<b>Responses</b>	<b>School Response Rate</b>
Rushcliffe	248	2	0.80%
Nottingham Academy	222	4	1.80%
Djanogly	289	9	3.11%
Redhill	204	6	2.94%
West Bridgford	317	14	4.42%
Trinity	270	12	4.44%
Tuxford	317	28	8.83%
Arnold Hill	350	46	13.14%
Quarrydale	148	24	16.22%
Serlby Park	77	2	2.60%
Emmanuel	114	18	15.80%

# 8. Results

## 8.1 Driving Experience and Activity

67% of respondents owned a valid UK driving licence of any type. Of these 40% owned a full licence and 57% a provisional licence (the remaining 2% were unsure of their licence status) reflecting the young age group of the target population. 94% of licences held were for Category B, car or van.

Figure 2. Licensure Status



60% of full licence holders had passed their test within the last 6 months, putting them in the riskiest demographic group. Another 22% passed their test within the last 6 – 12 months.

Table 3. Driving Experience (measured by time since licensure)

Time since passing test	Percentage
Within the last 6 months	59.7%
More than 6 months ago but within the last year	22.6%
More than a year ago but within the last 18 months	12.9%
More than 18 months ago but within the last two years	0.0%
More than two years ago	4.8%

Of all responders with either a full or provisional licence 65% had driven or do drive a car on either an infrequent or frequent basis including 52% of responders who reported driving at least once a week.

Table 4. Driving Exposure (measured by driving frequency)

How often do you drive a car?	Percentage
Everyday	15.1%
About once a week	21.6%
Several times a week	15.1%
About once a fortnight	4.0%
About once a month	2.5%
Less often	7.0%
Never	34.7%

Of those who do drive almost 39% drove a car belonging to their parents with only a quarter (26%) reporting owning and driving their own car.

Table 5. Car Ownership and Use

Whose car do you drive the most?	Percentage
Your own	26.1%
Your parents	38.6%
Your brothers or sisters	3.3%
Your partners	0.7%
Your friends	0.7%
A hire car	0.7%
A car belonging to someone else	30.1%

The high figure for a car belonging to someone else (30%) may represent responders who are on a provisional licence and currently taking professional tuition.

## 8.2 Parental Restrictions

The majority of responders 68% reported that they were under no parental restrictions what so ever when it came to driving. Of the 32% of responders who did report parental restrictions the most common were; no alcohol or drugs (87%), you must wear your seatbelt (84%), you must never use a mobile phone while driving (78%), you agree to obey all traffic laws (73%), you cannot lend the car to anyone (63%) and you must pone if you are going to be late (39%).

Only 38% of parents who enforced restrictions applied a curfew on time of day, 18% limited the number of passengers allowed to be carried and 11% limited total weekly mileage.

## 8.3 Experiences as a Passenger

83% of all responders reported being a passenger in a car driven by a young driver (under 25). The 17% who said they had never been were asked to skip this section.

Risk-increasing behaviours reported by passengers are summarised and discussed starting with potentially distracting behaviours.

Table 6. Potentially Distracting Behaviours as Reported by Passengers

Have you ever been in a car driven by another young driver when the driver has...?

<b>Risk-Increasing Behaviours</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>
Talked to his or her passengers	94.0%	5.9%	0.0%
Talked on a mobile phone (not hands free)	12.7%	85.5%	1.8%
Read a received text message or email	27.0%	67.0%	6.0%
Sent a text message or email	15.6%	82.6%	1.8%
Posted on social media	5.5%	91.5%	3.0%
Been grooming (e.g. applying make-up or shaving)	6.7%	92.7%	0.6%
Set the destination for a satnav	46.7%	53.2%	0.0%
Browsed the internet	7.8%	92.2%	0.0%
Read a map	18.8%	79.4%	1.8%
Driven whilst eating or drinking	48.8%	50.6%	0.6%
Read a book or e-reader	0.6%	98.8%	0.6%
Been singing or dancing	61.5%	38.0%	0.6%
Taken a picture on a camera or smart phone	8.5%	90.3%	1.2%

The most common potentially distracting behaviour reported by passengers was the driver talking to passengers (94%), this is unsurprising and dependent on the type of conversation being engaged in is not necessarily risk-increasing. Singing or dancing whilst driving was the next most common distracting behaviour (61.5%) followed by eating and drinking (48.8%) and setting the destination on a satnav (46.7%). Reading a map also ranked relatively highly at 18.8%.

It was almost twice as common to look at received texts and emails (27%) than it was to send outgoing communications (15.6%) and less common again to talk on a mobile phone (not hands free) (12.7%). The use of electrical devices for other purposes varied from taking a picture on a camera or smart phone (8.5%) to reading a book or e-reader (0.6%).

Passengers also reported being in a car driven by another young driver when the driver was engaged in other risk increasing behaviours such as; driving without a seatbelt (8%), driving under the influence of alcohol (8%), driving under the influence of drugs (2.5%), being too tired to drive (10%) and driving far too fast for the road conditions (26%).

Table 7. Risk Increasing Behaviours as Reported by Passengers

<b>Risk-Increasing Behaviours</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>
Been driving without a seatbelt	7.9%	92.1%	0.0%
Driving under the influence of alcohol	8.0%	90.1%	1.2%
Driving under the influence of drugs	2.5%	97.0%	0.6%
Too tired to drive	10.4%	88.4%	1.2%
Driving far too fast for the road conditions	26.2%	70.1%	3.1%

## 8.4 Feelings and Emotions

Young passengers were asked about their feelings and emotions when being driven by another young driver and whether they had ever experienced the particular feelings of unease, worry or being scared or excited when in the passenger seat.

Over a third of all passenger respondents (35%) reported being made to feel uneasy as a passenger, almost a quarter (23%) had been worried by another young person's driving and 18% had actively felt scared. On the other side of the emotional scale almost a quarter (23%) admitted to feeling excited at times when being driven by another young driver.

Females reported a higher than average experience of feeling uneasy (42%), worried (29%) and scared (22%). Males were much more likely to have been excited by another young person's driving (43% to 14%).

Table 8. Male and Female Emotional Experience Comparison

Emotion	Male	Female
Felt uneasy about their driving	33.3%	42.1%
Felt worried about their driving	22.2%	29.2%
Felt scared about their driving	17.0%	21.8%
Felt excited by their driving	42.6%	14.0%

The gender of the driver when these emotions were experienced was predominantly male (40%). Though female drivers were not far behind at 28% and the gender of the driver being described as either (32%) when these emotions were experienced suggesting that this is not a male driver only issue.

13% of young passengers reported that they would feel unable to say anything to the driver if they felt, uneasy, worried or scared by their driving, amongst females this rose to 15.9%. If you include the responders who were unsure if they would speak up the overall figure rises to just over 20% or passengers who may not speak up.

## 8.5 Skill Perception and Beliefs

Of the responders who drove on either a regular or occasional basis (UK full or provisional licence holders) 50% thought that they were either much more skilful or a bit more skilful than the average driver.

Table 9. Young Driver Skill Perception

How skilful do you think you are compared to the average driver?

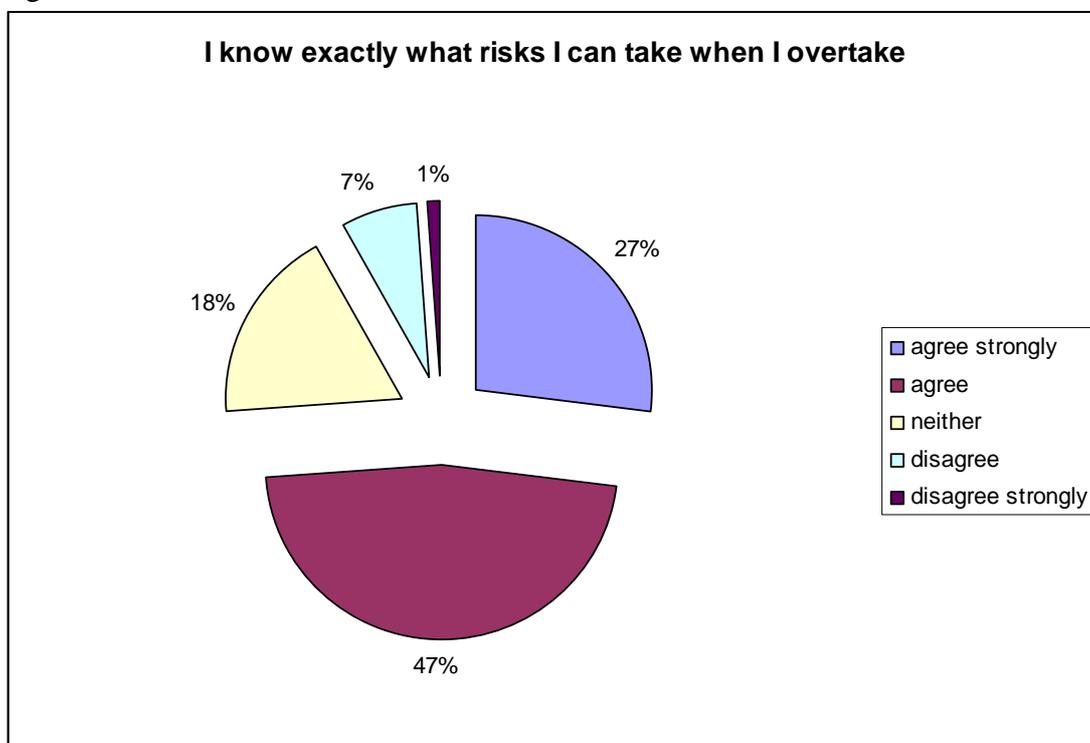
Perceived Skill Level	Percentage
Much less skilful	4.9%
A bit less skilful	13.7%
The same in terms of skill	31.4%
A bit more skilful	32.4%
Much more skilful	17.7%

Gender comparisons of skill perception revealed that young males perceive themselves to be a much more skilful driver than females (32% to 8%) however females did still rate themselves as being a bit more skilful (32% males to 33% females).

Young drivers were asked about their attitude and beliefs to risk regarding four area's; breaking the speed limit, overtaking, drink driving and close following.

The majority either agreed or strongly agreed that close following was unacceptable (91%). 28% believed that they knew exactly how much they could safely drink and drive. 10% believed that is acceptable to break the speed limit as long as you drive carefully and 74% either agreed or strongly agreed that they knew exactly what risks they could take when overtaking.

Figure 3.



### 8.6 Experiences as a Driver

Young drivers were asked the same question sets regarding potential distractions and risk increasing behaviours as were posed to passengers allowing for a direct comparison of responses. Young drivers under-reported engaging in all distracting behaviours compared to their passenger reports with the exception of read a book or e-reader down from 1% to 0.6%. This is a statistical error caused by the very low reporting rate of this behaviour and the slightly different response rate to both questions. In reality both figures represent one driver.

Table 10. Comparison (Driver Vs Passenger) Self Report Rates for Potentially Distracting Behaviours

<b>Risk-Increasing Behaviours</b>	<b>Driver</b>	<b>Passenger</b>
Talked to his or her passengers	91.2%	94.0%
Talked on a mobile phone (not hands free)	6.9%	12.7%
Read a received text message or email	18.8%	27.0%
Sent a text message or email	11.9%	15.6%
Posted on social media	2.0%	5.5%
Been grooming (e.g. applying make-up or shaving)	1.0%	6.7%
Set the destination for a satnav	21.0%	46.7%
Browsed the internet	4.0%	7.8%
Read a map	3.0%	18.8%
Read a book or e-reader	1.0%	0.6%
Driven whilst eating and drinking	33.0%	48.8%
Been singing or dancing	39.0%	61.5%
Taken a picture on a camera or smart phone	7.0%	8.5%

The largest differences in driver and passenger reporting rate came in the highest reported distracting behaviours; set the destination for a satnav (difference of 25.7%) and singing and dancing (difference of 22.5%).

Comparisons of the reporting rates of other risk-increasing behaviours followed the same pattern with driver's under-reporting compared to passengers with the exception of driving whilst tired, which had a higher reporting rate by drivers (13%) than by passengers (10%).

Table 11. Comparison (Driver Vs Passenger) Self-Report Rates of Risk Increasing Behaviours

<b>Risk-Increasing Behaviours</b>	<b>Driver</b>	<b>Passenger</b>
Been driving without a seatbelt	4.0%	7.9%
Driving under the influence of alcohol	5.9%	8.0%
Driving under the influence of drugs	2.0%	2.5%
Too tired to drive	12.9%	10.4%
Driving far too fast for the road conditions	7.9%	26.2%

The largest difference in reporting rate was for driving far too fast for the road conditions with 18.3% more young passengers reporting it than young drivers.

In addition young drivers were asked how often they thought they had driven a car whilst under the influence of drink or drugs. The vast majority (92% of 104 responses for this question) said that they had never driven a car whilst under the influence, meaning that 8% of young drivers admitted doing so, this represented 8 drivers. Of these 4 said that they had done it just the once, 2 had drove under the influence rarely, 1 occasionally and 1 very often.

## 8.7 Crash and Violation Involvement

Both young passengers and drivers were asked about their crash and violation involvement and experiences. Both crash involvement and experience of violations were rare with 93% of drivers and 91% of passengers reporting never being involved in any such instances. However crashes (regardless of fault) were again reported less by drivers than by passengers.

Table 12. Self Reported Crashes and Violation for Young Drivers and Young Passengers

Crash/Violation Type	Driver	Passenger
An accident - where another vehicle was at fault	5.0%	6.3%
An accident – where you/your driver was at fault	3.0%	1.9%
When the car was flashed by a roadside speed camera	3.0%	3.2%
When you/your driver was stopped by the police for speeding	2.0%	0.0%
When you/your driver was stopped by the police for another traffic offence	2.0%	0.6%
None of these	93.0%	90.5%

## 8.8 Open Response Questions

All survey respondents were asked three open response questions, these were:

1. Why do you think young drivers have accidents?
2. What do you think may change the driving behaviour of young drivers?
3. What else do you think should be done to tackle the problem of young driver accidents?

Question 1 received 173 responses, question 2 received 165 responses and question 3 received 155 responses. A sample of these responses is summarised here.

### Question 1. Why do you think young drivers have accidents?

The most common responses focused on driver's inexperience, over excitement, over-confidence or feeling the need to prove themselves in front of friends. This was summarised by one responder;

*Because they are new to driving and get overexcited at the prospect of being on the road in their own car, and drive carelessly to show off and to 'enjoy themselves'. Showing off to their friends who may enjoy the driver speeding and find it exciting, is likely to be another cause of young driver accidents. Not wanting to disappoint their friends or appear boring, the driver tries to impress them by driving without care, and speeding. Another reason could be that driving lessons are very different to driving alone on the roads, and there should be more focus in driving lessons on other driver's actions.*

Others mentioned lack of experience;

*I think young drivers may have accidents due to the lack of experience they gain when taking their driving lessons.*

And over-confidence;

*Being far too confident and driving stupidly when they have friends either driving along side them or in the car with them too.*

Other causal factors mentioned were; lack of concentration and distractions including, friends and phones excessive speeding and drink/drugs;

*They get distracted easily.*

*Mobile phones and friends causing distraction.*

*Drive to fast and lack of awareness.*

*Too busy on their phone or speeding.*

Or a combination of factors;

*They think they are being cool by speeding or texting while driving which leads to lower concentration on the road.*

*Because they are younger and inexperienced, also some young drivers may try to impress friends and hence cause accidents.*

*Competing, being impatient, also buying old cars due to not having sufficient funds and the high insurance so driving an old car might mean that some of the features don't work properly and could result in an accident.*

*Not knowing how to handle some situations on the road and panicking.*

## **Question 2. What do you think may change the driving behaviour of young drivers?**

Answers focused on gaining more experience, placing restrictions on young drivers, harsher penalties and stronger implementation of the law as well as improved driver education in both driving lessons and schools.

*Stricter traffic penalties and education.*

*Curfew.*

*Restrictions.*

*Extra experience in all situations.*

*Making young drivers learn for longer.*

*If they are well enough informed about their actions and the consequent consequences.*

*More awareness of how easy it is to be in an accident, show examples they can relate to. MORE EDUCATION ON THE MATTER!*

*If they are given more confidence in that their driving style is suitable or they are made more aware of the dangers and the consequences that their actions can have.*

*More danger and prosecution awareness.*

Some respondents chose to focus on what they think is wrong with current driver education and road safety initiatives;

*Not much that is used already.*

*I don't know but lecturing them won't help.*

*To not have drama or plays on it, it makes it un-cool.*

*Less of a negative attitude about young drivers.*

One respondent expanded on the similar thoughts of many that improved education can help to alter behaviour;

*I think that the way driving lessons are taught should be adapted. Driving alone in your own car is significantly different to a driving lesson; not only because it is the first time you are truly alone operating a different vehicle, but because the focus in driving lessons is very technical, and less about anticipating other road users movements properly. Many accidents that young drivers have may not be from reckless driving, but because they wrongly judged the actions of the oncoming driver.*

### **Question 3. What else do you think should be done to tackle the problem of young driver accidents?**

This question gave respondents the chance to expand upon previous answers and allowed for further thought and reflection.

In addition to the focus on increased restrictions, enforcement and improved education responders also mentioned, making the driving test more difficult, raising or lowering the age limit, incentivising good drivers and black box insurance.

*Make it harder to pass your driving test/ raise the age limit.*

*Incentives to drive carefully.*

*More road safety given to them.*

*More education in schools especially sixth forms.*

*Lower the learning age to 16, but cannot pass until 17- provides more experience.*

*Black box's made compulsory up to 21.*

*When learning how to drive it should be a theme throughout the teaching process and should also be an aspect of the test. A top up driving test/course on safety and the risks of unsafe driving should be provided by the government.*

*Young drivers should be given information about not just driving but how to avoid accidents and also how to handle it if one does occur – e.g. who to contact and what to make a note of like the other drivers name and stuff.*

*More road safety given to sixth formers.*

*Drivers educated on the ways which distractions effect driving.*

*Educate potential passengers to young drivers make road safety a mandatory course for young people whether they are learning to drive or not.*

*More education about road safety and driving theory in schools.*

## 9. Discussion

### 9.1 Comparisons of Gloucestershire 2013 Survey

There were many similarities with the responses found in the current survey to that conducted by Gloucestershire Road Safety Partnership in 2013. In both surveys passengers reported witnessing more risk-increasing behaviours than young drivers admitted to engaging in themselves. This may be for various reasons; firstly young drivers may not be aware of the extent to which they engage in such behaviours, potentially their over-confidence and in-ability to see beyond themselves is blinding them to it, at times it appears as if they see the potential dangers in others but not in themselves. This shows the importance of higher order thinking and self-reflection as described in the GDE matrix (Hatakka, et al. 2002) and recommended by (Durkin & Tolmie, 2010). Secondly there may be an element of social response bias in the answers being provided by the young drivers. A mix of both factors is quite likely.

In both counties the majority of young drivers considered themselves to be more skilful than the average driver. In both counties males were most likely to label themselves as much more skilful but females were almost equally as likely as males to say that they were a bit more skilful.

In terms of attitudes towards risk increasing behaviours again both surveys found that the majority of young drivers think they know 'exactly what risks' they can take when they overtake (72% Gloucestershire and 74% Nottinghamshire). As far as drinking and driving is concerned a similar sized significant minority believe that they know exactly how much alcohol they can safely drink and drive (Gloucestershire 32% and Nottinghamshire 28%). These similarities in results suggest that such over-confidence is a national and not a localised issue and that there is some stability in young driver beliefs within this age group (the vast majority of responders in both surveys were 17-19 years old).

When listed in order of passenger reported occurrence the 7 most common risk-increasing behaviours were identical in order in both Gloucestershire and Nottinghamshire. This is an important finding as it gives us a clear indication of what the most common behavioural risks are that young drivers and their passengers face.

In order they are;

1. Talking to passengers
2. Singing and dancing
3. Eating and/or drinking
4. Setting a satnav
5. Read a received text
6. Drove far too fast for the conditions
7. Sent a text or email

All risk-increasing behaviours were more highly reported in Gloucestershire than they were in Nottinghamshire for example; singing and dancing – Gloucestershire 71%, Nottinghamshire 61%. This may be due to the Nottinghamshire survey being

sponsored by an insurance company which may have caused distrust in the use data. Also the sampling methods used varied slightly with the Gloucestershire survey taking its sample from one college and Nottinghamshire's sample spread more thinly across multiple colleges.

In both surveys drink and drug driving were rarely reported. In Nottinghamshire 6% of young drivers admitted driving under the influence of drink and 2% under the influence of drugs. In Gloucestershire these figures were both 3%. In both counties the majority of drivers who admitted to these offences reported that it happened rarely or only once. In fact in Nottinghamshire there was only 1 respondent out of 104 responders who said that they drove on drink or drugs 'very often'. This young driver is clearly a concern however the fact that they are in a tiny minority of young drivers backs up the call by Durkin and Tolmie (2010), for road safety initiatives and driver education to normalise safe behaviours amongst young people and their peers rather than giving information on (and risk normalising) risk-increasing behaviours that the vast majority do not engage in.

Self-reported emotions of unease, worry or fear were recorded in both surveys. In Gloucestershire males were more likely to report these feelings than females whereas in Nottinghamshire it is females who are more likely to feel uneasy, worried or scared. The reason for this regional variance is unknown but may be down to demographic and environmental (road type) differences. In both counties males were most likely to feel excited by another young person's driving.

The majority of full licence holders in Nottinghamshire mostly drove a car belonging to a parent (39%) in Gloucestershire the majority drove their own car (62%) this is most likely due to demographic and economic regional variances. Whether young drivers are driving cars belonging to parents or not the vast majority of parents are missing out on the chance of imposing parental restrictions in an effort to keep their children safe. In Nottinghamshire only 32% of parents enforce any type of restrictions at all. In Gloucestershire 1 in 7 drivers are restricted by parents in some way. Of the few that are restricted by parents the most common restriction in Nottinghamshire is no alcohol or drugs. Considering that only 6% of young drivers in Nottinghamshire admitted to having ever drunk and drove it could be argued that the parental restriction is working or that most of the young drivers had no intention of doing it anyway.

In Gloucestershire the most common restrictions are; you must wear your seatbelt, you must never use a mobile phone and you must obey all traffic laws.

## **9.2 Education, Restrictions and Crashes**

Parental enforcement is a key component of graduated driver licensing (GDL) systems (TRL, 2013). Where GDL is not present parental restrictions could be even more important in reducing young driver crashes. In Nottinghamshire out of the parents who do enforce restrictions only 38% have a rule about time of day and 17% a limit on the amount of passengers to be carried, yet research has shown that these are the two most important restrictions when it comes to reducing young driver and passenger fatalities (TRL, 2013). Educating parents about the potential benefits of restrictions should be considered.

Very few experiences of crashes or violations were reported by either passengers or drivers (All crashes Nottinghamshire, drivers 8%, passengers 8.2%). In Nottinghamshire this may be due to respondents not being keen to admit to crashes in a survey sponsored by an insurance company. The reported crash rate was slightly higher in the Gloucestershire survey (passengers, 18%) which supports this, however the difference in crash rates could be real and due to regional differences. It should also be noted that the age groups in both surveys was very young with the vast majority of respondents in the 17 – 19 year old age group, both samples also contained provisional licence holders who are less likely to crash. A more stable and reliable measure of crash rates amongst young drivers is available from DfT.

### **9.3 Potential for bias**

Self selection bias is a possibility in the current study as a non-probability sample was used. Students chose themselves whether to respond to the survey once it was emailed to them by members of their schools staff. Self-selection bias presents the possibility that only students who see value in responding to a survey such as the one in the current study bother to respond hence the sample population may not be totally representative of the target population

Social response bias is also possible as students may well at times have given socially acceptable or morally right answers. This is suggested by the lower reporting of unsafe behaviours when driving compared to when a passenger. The same was found in the original survey conducted by Gloucestershire Road Safety Partnership, (The Research Box, 2013). As such the author considers it likely that unsafe behaviours when driving are being under-reported by students.

It is also possible that students with no interest in driving chose to pass over the survey, seeing it as ‘driver focused’ despite the reference to passengers in the title. This is suggested by the 67% of respondents who reported owning a driving licence (full or provisional).

## 10. Conclusion

The results of the survey show that there is a real need in Nottingham and Nottinghamshire for improvements in new/young driver training and education. Young drivers are over-confident in their ability and recognise this in their peers yet often fail to see it in themselves. The Nottinghamshire Road Safety Partnership should focus its efforts on an educational intervention which promotes internality, self-reflection and accurate peer review. As one respondent said lecturing young drivers does not work and the evidence review by TRL (2013) shows clearly that there is no evidence to support knowledge based interventions.

Any educational intervention aimed at young drivers should contain effective aspects of a GDL system for example, extending the learning period and encouraging parental restrictions such as night time driving and limiting the number of passengers. All educational interventions should be evidence led and research based using the GDE Matrix as a framework to ensure that behavioural issues are discussed and included rather than just eluded too.

Educational content and style should aim to deal with unsafe or risk increasing beliefs rather than just knowledge, skills and attitude. Any training delivered should be done in a client-centred manner as recommended by the HERMES project (2010) and educational interventions should follow the recommendations laid out by Durkin & Tolmie, (2010).

If particular issues are to be covered, then based on the results of this survey common distractions are; singing and dancing, map reading, setting satnavs and reading received texts. These are all GDE level 3 and 4 issues so personality, the effects of passengers and journey planning should all be included. Messages should be delivered in a positive manner highlighting the social norm of safe driving.

The open responses to this survey have shown that young drivers and passengers are asking for improved driver training and education in schools as well as stronger enforcement of traffic laws. Nottinghamshire Road Safety Partnership should look at how it can help to provide and promote this.

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