



**RAC Foundation submission to Petitions  
Committee and Transport Select Committee  
Inquiry**

**Car insurance costs for 18-25 year olds**

**1.0 About the RAC Foundation**

The RAC Foundation is a transport policy and research organisation which explores the economic, mobility, safety and environmental issues relating to roads and their users. The Foundation publishes independent and authoritative research with which it promotes informed debate and advocates policy in the interest of the responsible motorist.

**2.0 Summary**

The high cost of motor insurance for young drivers is an issue of concern, in particular in the context of wanting to give young people entering the workplace access to a wide range of employment opportunities.

The problem with imposing an arbitrary cap on premiums for any given age group is that the companies thus affected would need to adjust other premiums in order to raise sufficient income to cover their actuarial risk exposure. Although there is evidence to suggest this is precedented overseas, it is also a reflection of very different insurance practices that exist in different countries.

Arguably the cost of giving young people access to mobility through motoring is one which society could bear through accepting higher premiums in general.

That said it is equally important to understand the root causes of high premiums and the other options that exist to reduce the risks surrounding young and inexperienced drivers, because, ultimately, the desired outcome must be – safer younger drivers and affordable mobility.

Motor insurance premiums reflect an assessment of four things:

- the value of the vehicle and its vulnerability to theft;
- the likely cost of repairs to the vehicle;
- the risk profile of the insured party; and
- the general cost of meeting claims.

Our submission focuses on the risk profile of the driver, but we note that the cost of settling claims for serious injuries and for whiplash have been cited as general factors driving high premiums in the UK market as a whole.

High car insurance costs for young drivers reflect the higher risk of serious injury (and the higher costs of those risks) posed by younger drivers on the road network, for themselves and others involved in a collision. There is much that can be done to improve the safety of young drivers, which should, in turn, reduce car insurance premiums for younger drivers.

Car insurance premiums for young drivers are more expensive in Great Britain than in Europe. This is largely due to differences in underwriting, regulatory approaches, insurance caps, typical cover options, personal injury claims, younger driver risk exposure and market competition in different countries.

We would encourage the Government to explore the insurance approaches from overseas, in order to establish the costs and benefits of taking these approaches from a safety and mobility perspective. Meanwhile, Great Britain has a fast-developing telematics ('black box') insurance offer for younger drivers, which appears to be amongst the most advanced in Europe. Evidence indicates that telematics insurance (which relates premium to monitored driving style) is helping to moderate risk and reduce insurance costs for this at risk group, particularly by providing feedback on performance. Telematics therefore looks to have an important role to play in reducing car insurance costs for younger drivers.

Beyond seeking changes within the insurance market in Great Britain, we believe the Government should look to take the following action to reduce the cost of insurance for young drivers:

- **Reduce the level of insurance premium tax** – for all drivers or young drivers specifically. Insurance premium tax is significantly higher in Great Britain than many other EU countries, and as a percentage hits particularly on those already facing higher premiums; and
- **Provide an Insurance Premium Tax break for learner drivers**, to make getting supervised practice before passing the driving test more affordable, which in turn should help reduce car insurance costs if young drivers are safer as a result.

And in order to reduce the risk exposure that is at the root cause of high premiums:

#### *On learning to drive*

- encourage or mandate an increased amount of on-road supervised experience whilst learning to drive;
- encourage or mandate learner drivers to practice in a variety of situations that they will experience on the road (such as driving in the dark, on motorways and in different weather conditions);
- accelerate the introduction of the new practical driving test, which the Driver and Vehicle Licensing Agency has been trialling, which is widely recognised

as providing a more realistic assessment of real-world independent driving;  
and

- ensure, as part of the learning to drive process that, road safety education teaches young drivers how to develop self-regulatory plans to reduce driving risk - it is not enough to just teach the physical skills and capabilities needed for driving.

#### *Once qualified*

- encourage young drivers and their parents/guardians to be cautious about taking passengers and driving at night in the first six months after obtaining a full driving licence; and
- encourage the take up of telematics policies, that continue to provide feedback to the driver as their experience grows

We note that Great Britain has been a world leader in introducing hazard perception skills as an element within the driving test and this has been found to have a sizeable effect on young driver safety. Future work should seek to build on this success.

### **3.0 Background**

#### **3.1 Car use amongst young people**

There are 2.7 million full licences held by those aged 17-24 in Great Britain, which equates to 7% of all licence holders (DfT, 2006). In this age group 42% held a licence in 2016. In 2012 44% held a licence. This is a much lower rate of licence holding in comparison to those aged 25 years and over.

The reasons for these changes in licence holding are likely to be related to a combination of the following (Berrington & Mikolai, 2014):

- greater access to higher education;
- changes in employment patterns;
- increased costs relative to earnings (housing and motoring in particular);
- the rise of virtual mobility (where technology substitutes for travel); and
- the shifting pattern of traditional life stages (e.g. leaving home, buying a house, having children).

It is also worth noting that in an RAC Foundation analysis of the Department of Work and Pension's 'Universal Jobmatch' database completed in 2016, found that 1 in 5 roles required or stated it is either a benefit or practical to be able to drive and/or own a vehicle. This compared to 1 in 6 roles in the 'Find an Apprenticeship' database.

15% of jobs in the 'Universal Job match' database explicitly required candidates to have a driving licence or own a vehicle. This compared to 5% in the 'Find and Apprenticeship' database (Makwana, 2016).

### **3.2 Younger Driver Safety**

Between 2013 and 2015 young drivers accounted for 7% of full driving licence holders, yet were involved in 25% of all Killed and Seriously Injured (KSI) casualties that occurred on the nations' roads (MAST Online, 2017). This disproportional involvement of young drivers in KSI collisions can also be seen within the International casualty statistics (Avenoso, 2015). Young drivers have been found to be at particular risk when travelling at night and at weekends and when travelling with multiple passengers (Box & Wengraf, 2013). Elevated young driver risk can be seen as both a consequence of age and limited experience (Emmerson, 2008) - the younger a driver is, the greater risk posed whilst driving. The first 1,000 miles of solo driving is when drivers pose the greatest risk to themselves, their passengers and the wider public (Helman et al., 2010). Neurological development during the teenage years such as the activation of the limbic system under the influence of puberty related hormones (Twisk, 2015; Box, 2016) also has important implications for the learning to drive process.

### **3.3 Car insurance for young people**

It is now common for young drivers to be offered annual insurance policies at a price well in excess of the value of the vehicle insured, in stark contrast to most drivers. This is largely because young drivers are a greater risk to themselves and others whilst on the road, and the collisions they are involved in produce greater numbers of expensive, 'catastrophic' (i.e. in excess of £500,000) claims which has raised insurance costs in this age group in particular (ABI, 2012). When asked about the reasons for not driving, many young adults indicate that the driving licence process is the main reason why they do not hold a full driving licence (Le Vine, et al, 2014).

Le Vine et al (2014) finds that there are two distinctive groups of young people who identify that costs deter them from driving – a less well-off group that suggests costs are the primary determinant of non-licence holding, and a more well-off group who indicate that other factors also apply.

Car insurance is calculated based on a number of personal, vehicle and insurance factors<sup>1</sup> including:

- Age;
- Occupation;
- Home location;
- The car driven and its insurance rating;
- Value, power and desirability of vehicle (as well as vehicle modifications);
- Car use type and annual mileage;
- Driving history, no-claims bonus and excess; and

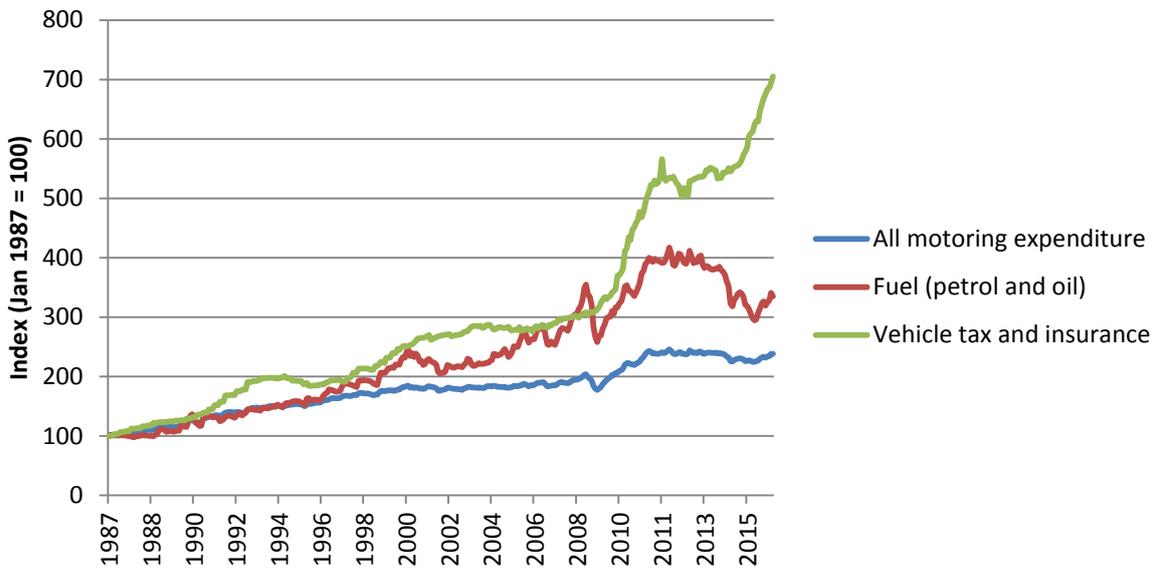
---

<sup>1</sup> <https://www.confused.com/motor-insurance/get-covered/how-car-insurance-is-calculated>

- Type of cover purchased (third-party, third-party fire and theft, comprehensive)

Insurance costs, relative to other motoring expenditure, and relative to the basket of 'all items' which make up the Retail Price Index (RPI), have increased over time. Figure 1 shows how fuel costs and tax and insurance have increased above the rate of inflation. This increase is especially prominent in the premiums available to those under the age of 25.

Figure 1: 'Fuel', 'Vehicle Tax & Insurance' and 'All Motoring' price indices relative to 'Prices of All Items', RPI, 1987 to 2016 (Jan 1987 = 100)



Source: ONS, 2016

The costs younger drivers face in Great Britain is some of the highest in Europe. A forthcoming report for the RAC Foundation, (Starling, Forthcoming) reviewing the young driver insurance market in the UK, Germany, France, Italy, Spain, Netherlands and Sweden concludes that motor insurance premiums are higher for young drivers in the UK than elsewhere in Europe. There are significant issues associated with establishing comparable data, but the following figures in Table 1 can be derived for the average premium for all drivers across the countries studied.

Table 1: Average car insurance premium for all drivers (personal insurance): combined third party and material damage, and including tax (2013 data)

Country	Average car insurance premium (€)
Netherlands	€ 550
<b>UK</b>	<b>€ 530</b>
Sweden	€ 525
France	€ 481
Italy	€ 412
Spain	€ 370

Source: Insurance Europe (2015)

Since insurance premium tax in the UK has now increased to 10%, the differential is now greater. There are no published data for young drivers, other than in the UK. Motor insurance premiums for young drivers look to be higher than other European countries for the following reasons:

- **Underwriting approaches:** In the UK risk is primarily calculated from the individual and then takes account of vehicle type and location. In most countries in continental Europe the risk is calculated primarily from the vehicle, with age and location being secondary variables. Therefore whilst average premiums are comparable across Europe, younger driver insurance costs are lower in mainland Europe;
- **Insurance cover format:** In many European markets third party cover is the norm and is generally cheaper. In the UK comprehensive cover is the norm and is more expensive than third party insurance because it is perceived to demonstrate greater risk;
- **Market regulation:** Markets in other countries tend to be more regulated, with limitations on percentage increases or decreases in premiums for example;
- **Competition:** the UK market is considerably more diverse and competitive than continental counterparts, especially with the growth of the aggregator market. This has in turn created a strongly risk based approach, as insurers seek to concentrate on specific sectors of the market. As the risks associated with young drivers are considerably higher, this has led to higher premiums;
- **Personal injury claims:** The major component of young driver premiums are personal injury claims. Personal injury awards, particularly for catastrophic and severe injuries, are considerably higher in the UK than elsewhere in Europe;
- **Young driver risk exposure:** Although the UK has a good road safety record overall, there is a larger exposure of young drivers in the UK (due to a lack of Graduated Driver Licensing), and the minimum driving age is 17, not 18, as in most other countries.

(Source: Starling, Forthcoming)

The high and increasing cost of insurance for young people has a number of implications. These include:

**Barrier to entry:** Recently, there has been a decline in young driver licence-holding, and according to the National Travel Survey (NTS), cost-related factors are the main barrier to learning to drive for the young. Of those aged 19–24, 32% gave costs (learning to drive, insurance, purchase and other motoring costs) as the main reason for not driving. By comparison, a further 29% explained that they were currently learning to drive, and 24% either had others to drive them, alternative modes available, were too busy to learn or not interested. Given the available evidence, insurance costs (along with other motoring costs) look to be a significant barrier to young people learning to drive (Le Vine et al., 2014).

**'Fronting':** Unaffordable insurance costs are used by many young motorists to justify being inappropriately insured. Fronting insurance describes the situation in which a young driver – who plans to drive a vehicle as the main driver – will get insurance on the basis of the name of a lower-risk driver (usually a parent) given to the insurer as the 'main driver'. It is clear that this fraudulent activity is common and often thought of as normal: 53% of the public think that it is acceptable or 'borderline' acceptable behaviour to engage in this form of deception (ABI, 2011).

**'Under-insurance':** High insurance costs may encourage drivers to minimise up-front costs by choosing a less expensive third party policy only, when they would otherwise have a more extensive insurance policy.

**Driving without insurance:** According to the DVLA, about 7,500 drivers with up to three years of driving experience – novice drivers – lose their licence each year for driving without insurance (Box & Wengraf, 2013). These figures only include novice drivers who have been caught and convicted. Only about half of the drivers who have their licence revoked ever properly become re-licensed (House of Commons Transport Committee, 2007). Uninsured driving has a clear impact on the cost of motor insurance for the insured driver population. The Motor Insurance Bureau (MIB) estimates the annual cost of uninsured driving to be £400 million, adding between £15–£30 annually to each motor insurance policy (MIB, 2013a; 2013b IN Box & Wengraf, 2013). In addition, being an unlicensed driver is also a predictor of increased crash risk (Clarke et al., 2008; Knox et al. 2003). Knox et al. (2003) estimate that unlicensed driver crash risk is between 2.7 and 9 times greater than the risk for all drivers.

There appears to be a lack of understanding amongst young people on why insurance costs are high. Work commissioned by the Department for Transport (DfT) established that uninsured drivers are anxious about being caught by the police rather than being concerned about the implications of any crash, stating that they drive more cautiously for essential journeys only (Watt et al., 2013).

The bulk of younger non-licence-holders do intend to acquire a licence at some point in the future. According to the NTS, 90% of 17- to 20-year-olds think it likely that they will have a licence within the next year or within the next five years (DfT, 2012a: NTS0204). Given this, it may well be that as costs have risen for this cohort and wealth and need for travel has declined, younger people are coping by deferring the age at which they begin driving. It is worth noting the risk of an increase of unlicensed and/or uninsured drivers in an environment of very high costs and few practical alternatives

#### **4.0 Measures to improve younger driver safety and lower insurance costs**

##### **4.1 Graduated Driver Licensing**

In recent years policy orientated research on Young Driver Safety, throughout the UK, has largely focused on the potential of Graduated Driver Licensing (GDL) to improve younger driver safety (Box & Wengraf, 2013; Kinnear *et al.*, 2013; Kinnear *et al.*, 2014). Whilst International evidence (Box & Wengraf, 2013; Winston *et al.*, 2016) illustrates that GDL is effective at reducing KSIs amongst young drivers, the UK government has ruled out the implementation of GDL, at least in the short to medium term, stating that the Government is seeking to strike ‘the right balance between driver safety and restricting the freedom of our young people’ (Mr Goodwill, HC Deb, Column 246W, 26 Mar 2014). The RAC Foundation, alongside a number of other road safety charities and academics maintain that Graduated Driver Licensing has been one of the most effective approaches taken throughout the world to reducing Young Driver casualties (Jones *et al.*, 2015). An article published in the British Medical Journal in 2015 by the RAC Foundation and others stated that:

*‘Calculating a single effect size and separating out the effects of the different elements of such schemes is very difficult, but it is reasonable to suggest a 20-30% decrease in crashes, casualties, and fatalities among young drivers’* (Ibid.)

Given that attention is instead focusing on to what extent technology, via telematics ‘black box’ insurance style products and educational programmes can reduce the number of KSIs amongst this vulnerable group (DfT, 2015), it is worth considering the extent to which elements of GDL could be incorporated in a safer system for younger drivers, namely:

- Increasing the amount of on road supervised practice whilst learning to drive has a protective safety effect (Gregersen *et al.*, 2000);
- Varying the type and amount of driving during the learning to drive process – as being currently considered and implemented as part of changes to the learning to drive process;
- Encouraging night-time travel and passenger precaution during the first 6 months of full licensure – which could be supported via parental contracts and support, feedback from telematics systems and training young drivers in the tools and techniques needed to develop their own behavioural plans to use in

risky situations – which would also cover avoiding and/or managing impairments (e.g. alcohol and drugs) and distractions (e.g. passengers, mobile phone communications) (Box, 2016, also see Road Safety Education below).

Graduated driver licensing has been described as

*“a universal level intervention, that is an important foundational component of a tiered-risk framework, but insufficient for a comprehensive approach to young driver safety...While strengthening GDL is the best strategy at the universal level, political conditions may preclude such enhancements putting young drivers at risk. In such locales, young drivers and their families would likely benefit from a selected level, more intensive intervention that includes education and support to fill the gap related to weak laws.”*

*Winston et al, 2016*

Here select level interventions refers to seeking out young drivers with more than the ‘average’ propensity for risk linked to biophysical (e.g. atypical development, attention deployment and behavioural and emotional regulation – ADHD for example) and family (e.g. permissive or uninvolved parents, a family history of moving citations or at-fault collisions) factors which have found to increase a young driver’s crash propensity and risk for engaging in unsafe behaviours (Ginsburg et al, 2009 & Wilson et al, 2006). In the continued absence of Graduated Driver Licensing in Great Britain the evidence suggests that there is a clear need for the development of select level interventions to reduce young driver risk.

Whilst recognising that individuals may well need a different and supported approach to learning to drive, it is important not to demonise young drivers. The real issue for the vast majority of young people learning to drive is that they lack the appropriate level of on road experience and do not have the behavioural tools and techniques to hand, to help with controlling risky behaviours.

## **4.2 Road safety education**

Road safety education interventions in the UK rarely meet the standards of equivalent health based initiatives in other fields, with very few randomised control trials implemented. Where evaluations have been completed they seldom provide a robust evidence base upon which to base an assessment of effectiveness (McKenna, 2010; Sullman, Forthcoming; Hoekstra & Wegman, 2011). A notable exception in the UK includes the evidence based-approach taken to the development of speed awareness and other NDORS courses (See: [NDORS website](#)), although evaluation of these courses, administered to 1.4 million people in UK over 2015 (NDORS, 2016), has, to date, only been completed in a limited way (See: [NDORS research library](#)). The DfT has commissioned work on evaluating the effectiveness of the National Speed Awareness Course (NSAC) (Lord Ahmad of Wimbledon, HL Deb, HL3346, 5 Nov 2015) which is due to report in 2017.

In advance of the formal learning-to-drive process, pre-school and school-age children are engaged in discussions about road safety. There are no formal requirements to include road safety education within the curriculum, but road safety teaching is one way in which schools can meet statutory Personal, Social and Health Education (PSHE) and Citizenship requirements and to promote development and well-being. Road safety education can also help schools meet their health and environmental targets. Given that attitudes and behaviours are developed at a very young age, and in the main fixed before age 11 (Deighton & Luther, 2007), early education in schools about safe road usage, as pedestrians, cyclists and drivers, is an important activity.

The DfT's THINK! campaign has an extensive suite of resources for road safety education designed for early years, primary school and secondary school levels<sup>2</sup>. A number of other national organisations provide curriculum-linked resources for schools, such as the Royal Society for the Prevention of Accidents (RoSPA) and Brake. Resources are also developed at a local level by local authorities, road safety officers, schools and other interested bodies such as the police and fire and rescue services.

Behaviour change techniques (BCTs), and the theories that underpin them, are increasingly applied to an array of public policy questions. There is now a significant literature available to the policy making community to ensure programmes are developed based on the evidence (NICE, 2007, 2014; Institute for Government, 2010; BPS, n.d.).

Only a small subset of BCTs are being employed within road safety interventions (Fylan & Stradling, 2014, Sullman, Forthcoming), and recommendations have been made to intervention developers to help encourage programmes to be based more clearly on theoretical models of behavioural change (ibid.). As McKenna (2010) noted "*Educational interventions are often designed in the absence of theory or any formal body of evidence*"; and "*In some circumstances they may inadvertently increase exposure to risk*".

Soon to be published work for the RAC Foundation (Sullman, forthcoming) provides some indication of effective BCTs (using the 26-item taxonomy of BCTs from Abraham & Michie, 2008) in other areas of public health and poses the question about the extent to which these 'active ingredients' could be systematically applied to road safety education programmes. The six most successful BCTs (for all ages combined – in order of success) were found to be:

- prompt self-monitoring behaviour (BCT 12);
- prompt specific goal setting (BCT 10);
- provide information on consequences (BCT 2);
- plan social support/social change (BCT 20);

---

<sup>2</sup> <http://think.direct.gov.uk/education/early-years-and-primary/>

- provide instructions (BCT 8); and
- provide feedback on performance (BCT 13).

If road safety education, designed at the national or local level, is to be effective at influencing the attitudes and behaviours of young drivers it needs to be developed in light of the research evidence, by those who have the relevant skills and expertise to do so. There is also the need to recognise that there is promise in joining risk based education more generally for young people – across driving and other fields (such as drink, alcohol and sexual health behaviours). There are now a number of studies in the driving field (Senserrick et al, 2009 and Paavera et al, 2013) and further afield (Oettingen & Gollwitzer, 2015) which illustrate how resilience based interventions<sup>3</sup> and those that moderate personal psychological risk factors and/or seek to achieve self-regulation have the potential to reduce road casualties amongst the young driver 'at risk' group.

In Australia, a large scale cohort study found that administering a resilience based intervention that sought to develop self-regulatory approaches towards risky adolescent behaviours, across all areas, inclusive of driving, was much more effective at reducing crash risk (by 44%) over the first year of driving, than driving based courses alone, which had no discernible effect on crash risk (Senserrick et al, 2009). Mental contrasting and Implementation intention development, as described in a policy relevant context at [www.woopmylife.org](http://www.woopmylife.org) may also have useful relevance in developing appropriate education to influence young driver safety.

A recently published report from the Transport Research Laboratory (TRL) (Helman, 2016), commissioned by the Department for Transport (DfT) recommended the following four interventions for controlled scientific evaluation based on the research evidence via randomised controlled trial in GB:

- an intervention to engage parents in managing post-test driving in specific risky situations;
- an intervention to engage a range of stakeholders (utilising a logbook approach) in increasing the amount and breadth of pre-test on-road experience;
- an intervention utilising technology (in-vehicle data recorders or 'telematics') and possibly parents to manage driver behaviour post-test; and
- an intervention to train hazard perception skill

---

<sup>3</sup> Resiliency interventions are based on the 'positive factors in youth's lives that become the focus of change strategies designed to enhance strengths' rather than focusing on 'cataloguing risks and fixing problems' (Zimmerman, 2013).

Given the appetite at the National policy level for developing effective educational interventions for younger drivers (DfT, 2015), and the lack of quality, evidence based interventions within the UK across the discipline of young driver education the DfT's current research out to tender on testing intervention options via large scale trials is welcome.

The available research shows significant promise for reducing killed and serious injuries (KSIs) amongst young drivers through systematically applying behaviour change techniques and other promising theories.

### **4.3 Insurance products**

Telematics insurance, which provides 'real-time' pay as you go road user insurance related to driving performance, has been an increasingly available and popular option for younger drivers. It has now widely available to the young driver market from numerous providers, often at a lower cost to this group than traditional one-off insurance products. It is estimated that over 450,000 black box insurance policies are in operation in the UK, with a 40% increase in black box telematics car insurance policies in the past year (BIBA, 2016). It is estimated that these types of policies can offer savings of up to 25% for careful drivers. In particular, young drivers can save over £1,000 (Ibid.).

A number of telematics insurance providers have started to provide a summary of the impacts that their premium offer and service has had on young driver safety. For example the ingenie Young Driver Report (2014) states that:

- 70% of ingenie customers receive a performance-related discount on their premiums;
- After one year with ingenie, young drivers halve their crash risk; and
- 90% engage with automatic telematics feedback about their performance and those who engage with it most frequently are less likely to crash.

Telematic insurance is still in its infancy, but it appears to provide a promising option for reducing costs for younger drivers. Providing feedback on performance has been identified as an effective behavioural change technique (BCT) in other public health programmes (See: Section 4.2 above) and with recent TRL research also finding good evidence to support the inclusion of parents within intervention design alongside feedback mechanisms such as telematics (see: Shimshoni et al, 2015), the results of the forthcoming DfT research in this area will provide much needed independent evaluation of how technology can assist in this field.

#### **Contact:**

Elizabeth Box – Head of Research  
RAC Foundation  
January 2017

## 5.0 References

- ABI (2011). Motorists cutting corners risk driving illegally warns the ABI. [Press release]. Retrieved from <https://www.abi.org.uk/News/News-releases/2011/01/Motorists-cutting- corners-risk-driving-illegally-warns-the-ABI>
- ABI (2012) Improving the Safety of Young Drivers. London: Association of British Insurers. Retrieved from [https://www.abi.org.uk/~/\\_media/Files/Documents/Publications/Public/Migrated/Motor/Improving%20the%20safety%20of%20young%20drivers.ashx](https://www.abi.org.uk/~/_media/Files/Documents/Publications/Public/Migrated/Motor/Improving%20the%20safety%20of%20young%20drivers.ashx)
- Abraham C. & Michie, S (2008). A Taxonomy of Behaviour Change Techniques used in interventions. *Health Psychology*, 27(3): 379 – 387.
- Avenoso, A. (2015). Young Europeans Acting for Road Safety – YEARS European Transport Safety Lecture [Powerpoint slides]. Retrieved from <http://etsc.eu/young-road-user-risks-is-age-the-only-fix>.
- Berrington, A. & Mikolai, J. (2014) *Young Adults' Licence-Holding and Driving Behaviour in the UK: Full Findings*. London: RAC Foundation. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/Young-Adults-Licence-Holding-Berrington-Mikolai-DEC-2014.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/Young-Adults-Licence-Holding-Berrington-Mikolai-DEC-2014.pdf)
- BIBA (2016). 40% increase in telematics motor policies in a year [Press release]. Retrieved from <https://www.biba.org.uk/latest-news/40-increase-in-telematics-motor-policies-in-a-year/>
- Box, E. (2016). Parents as a route to self-regulation in teenage risk taking: Implications for young driver safety [Powerpoint slides]. Retrieved from <http://nationalroadsafetyconference.org.uk/agenda-speakers/main-conference-session-1/>
- Box, E. & Wengraf, I. (2013). *Young Driver Safety: Solutions to an age-old problem*. London: RAC Foundation. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/young\\_driver\\_safety-box\\_wengraf-july2013.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/young_driver_safety-box_wengraf-july2013.pdf)
- British Psychological Society (n.d.) *Behaviour change briefings*. Retrieved from <http://www.bps.org.uk/what-we-do/our-influence/behaviour-change-briefings/behaviour-change-briefings-0>
- Clarke, D. D., Ward, P. J., Truman, W. A., and Bartle, C. L. (2008). A poor way to die: Social deprivation and road traffic fatalities. *Paper to Behavioural Research in Road Safety: Eighteenth Seminar*. London: Department for Transport.

- Deighton, C. & Luther, R. (2007). *Pre-driver Education: A Critical Review of the Literature on Attitude Change and Development, Good Practice in Pre-driver Education and Programme Effectiveness*. London: Department for Transport. Retrieved from <http://webarchive.nationalarchives.gov.uk/20110509101621/http://www.dft.gov.uk/pg/roadsafety/research/rsrr/theme2/predrivereducation.pdf>
- DfT (2012a). National Travel Survey 2011. Retrieved from <https://www.gov.uk/government/organisations/department-for-transport/series/national-travel-survey-statistics>
- DfT. (2015). *Working Together to Build a Safer Road System British Road Safety Statement. Moving Britain Ahead*. London: Department for Transport. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/487949/british\\_road\\_safety\\_statement\\_web.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/487949/british_road_safety_statement_web.pdf)
- DfT (2016) *GB Driving Licence Data, March 16*. Retrieved from <https://data.gov.uk/dataset/driving-licence-data>
- Emmerson, K. (2008). *Learning to Drive: The Evidence*. London: Department for Transport. Retrieved from <http://webarchive.nationalarchives.gov.uk/20090417002224/http://www.dft.gov.uk/pg/roadsafety/research/rsrr/theme2/rsrr87.pdf>
- Fylan F., Stradling S., (2014). Behavioural change techniques used in road safety interventions for young people. *European Journal of Applied Psychology*. 64(3), 123 - 129. Retrieved from <http://www.sciencedirect.com/science/article/pii/S1162908814000073>
- Ginsburg K.R., Durbin D.R., García-España J., et al. (2009). Associations between parenting styles and teen driving, safety-related behaviors and attitudes. *Pediatrics* 2009;124:1040–51. doi:10.1542/peds.2008-3037
- Gregersen, N.P., Berg, H.Y, Engstrom, I., Nolen, S, Nyberg, A., Rimmo, P.A. (2000). Sixteen years age limit for learner drivers in Sweden – an evaluation of safety effects. *Accident Analysis & Prevention*, 32(1), 25-35. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0001457599000457>
- HC Deb 26 March 2014, col 246W. Retrieved from <http://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm140326/text/140326w0001.htm#14032680000008>
- Helman, S. (2016). Young and novice driver interventions – which approaches show most promise? [Powerpoint slides]. Retrieved from <http://nationalroadsafetyconference.org.uk/agenda-speakers/main-conference-session-1/>

Helman, S., Grayson, G., & Parkes, A. (2010). *How can we produce safer new drivers? A review of the effects of experience, training and limiting exposure on the collision risk of new drivers*. Crowthorne: Transport Research Laboratory. Retrieved from <https://trl.co.uk/reports/INS005>

HL Deb, 5 Nov 2015, HL3346. Retrieved from <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Lords/2015-11-05/HL3346>

Hoekstra, T., & Wegman, F. (2011). Improving the effectiveness of road safety campaigns: Current and new practices. *IATSS Research*, 34(2), 80 – 86. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0386111211000045>

House of Commons Transport Committee (2007). *Novice Drivers. Seventh Report of Session 2006-07 Volume I*. Retrieved from [www.publications.parliament.uk/pa/cm200607/cmselect/cmtran/355/35502.htm](http://www.publications.parliament.uk/pa/cm200607/cmselect/cmtran/355/35502.htm)

ingenie (2014). *Ingenie Young Driver Report*. London: ingenie. <https://www.ingenie.com/wp-content/uploads/2014/11/ingenie-young-driver-report-2014.pdf>

Institute of Government (2010) *MINDSPACE Influencing behaviour through public policy*. London: Institute of Government. Retrieved from <http://www.instituteforgovernment.org.uk/our-work/better-policy-making/mindspace-behavioural-economics>

Insurance Europe (2015). *European Motor Insurance Markets*. Belgium: Insurance Europe. Retrieved from <http://www.insuranceeurope.eu/sites/default/files/attachments/European%20motor%20insurance%20markets.pdf>

Jones S., McKenna F., Stradling S., Christie N., Mullarkey T., Davies D., Box E., Townsend J., Dalton J.. (2015). Crashes involving young drivers. *BMJ*. 2015 Feb 11;350:h659. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/25672903>

Kinncar, N., Lloyd, L., Helman, S., Husband, P., Scoons, J., Jones, S., Stradling, S., McKenna, F., Broughton, J. (2013). *Novice Drivers: Evidence Review and Evaluation: Pre-driving education and training, Graduated Driving Licensing and the New Drivers Act. Published Project Report PPR673*. Crowthorne: Transport Research Laboratory. Retrieved from <http://www.trl.co.uk/reports-publications/report/?reportid=6844>

Kinncar, N., Lloyd, L., Scoons J., Helman, S. (2014). *Graduated Driver Licensing: A regional analysis of potential casualty savings in Great Britain*. London: RAC Foundation. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/graduate\\_d\\_driver\\_licensing\\_regional\\_analysis\\_trl\\_270514.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/graduate_d_driver_licensing_regional_analysis_trl_270514.pdf)

Knox, D., Turner, B., Silcock, D., Beuret, K., Metha, J. (2003). *Research into Unlicensed Driving: Final report*. London: Department for Transport. Retrieved from <http://webarchive.nationalarchives.gov.uk/20100203035050/http://www.dft.gov.uk/pg/r/roadsafety/research/rsrr/theme2/researchintounlicensedreport.pdf>

Le Vine, S. & Polak, J. (2014). Factors Associated with Young Adults Delaying and Forgoing Driving Licenses: Results from Britain. *Traffic Injury Prevention*, 15(8) Retrieved from <http://www.tandfonline.com/action/showCitFormats?doi=10.1080%2F15389588.2014.880838>

Makwana, B. (2016). *Driving as an employment qualification. Technical paper*. London: RAC Foundation. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/Technical\\_paper\\_driving\\_as\\_an\\_employment\\_qualification\\_Makwana\\_April\\_2016.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/Technical_paper_driving_as_an_employment_qualification_Makwana_April_2016.pdf)

MAST Online (2017) *Bespoke data tables for Young Drivers 2013-2015*. London: RAC Foundation.

McKenna, F. (2010) *Education in Road Safety: Are we getting it right? Report Number: 10/113*. RAC Foundation. London. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/education%20in%20road%20safety%20-%20mckenna%20-%20080910%20-%20report.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/education%20in%20road%20safety%20-%20mckenna%20-%20080910%20-%20report.pdf)

NDORS (2016) *Trends and Statistics*. Retrieved from NDORS website: <https://ndors.org.uk/trends-stats/>

NICE (2007) *Behaviour Change: General approaches. Public health guideline [PH6]*. London: NICE. Retrieved from <https://www.nice.org.uk/guidance/ph6>

NICE (2014) *Behaviour change, Individual approaches. Public health guideline [PH49]*. Retrieved from <https://www.nice.org.uk/guidance/ph49/chapter/3-Context>

Oettingen, G., & Gollwitzer, P. M. (Eds.) (2015). *Self-regulation in adolescence*. New York: Cambridge Press.

ONS (2016) *RPI All Items Index: Jan 1987=100*. Retrieved from <https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/chaw/mm23>

Paavera, M., Eensso, D., Kaasikb, K., Vahta, M., Mäestu, J., Harro, J. (2013) Preventing risky driving: A novel and efficient brief intervention focusing on acknowledgement of personal risk factors. *Accident Analysis and Prevention*, 50, 430–437.

Pascotto, L. (2012). *Presentation about younger drivers. Workshop on Graduated Driver Licensing*. Brussels: FIA.

- RAC Foundation (2016) *Young driver safety and mobility facts*. London: RAC Foundation. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/RACF\\_young\\_driver\\_factsheet.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/RACF_young_driver_factsheet.pdf)
- RAC Foundation (2013). *Keeping the Nation Moving: Young Driver Safety: Solutions to an age-old problem [Factsheet]*. London: RAC Foundation. Retrieved from [http://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/young\\_drivers\\_factsheet\\_september\\_2013.pdf](http://www.racfoundation.org/assets/rac_foundation/content/downloadables/young_drivers_factsheet_september_2013.pdf)
- Senserrick, T., Ivers, R., Boufous, S., Chen, H.Y., Norton, R., Stevenson, M., van Beurden, E., Zask, A. (2009). Young driver education programs that build resilience have potential to reduce road crashes. *Pediatrics*, 124(5):1287-92. doi: 10.1542/peds.2009-0659. Epub 2009 Oct 5. Erratum in *Pediatrics*, 125(2):415. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19805458>
- Shimshoni, Y., Farah, H., Lotan, T., Grimberg, E., Ditter, O., Musicant, O., Toledo, T., Omer, H. (2015). Effects of parental vigilant care and feedback on novice driver risk, *Journal of Adolescence* 38, 69-80.
- Starling, N. (Forthcoming). *Working title: RAC Foundation Young Drivers Study*. London: RAC Foundation.
- Sullman, M. (Forthcoming.) *A review of behaviour change techniques for future road safety interventions*. London: RAC Foundation.
- Twisk, D. (2015). Young road user risks: Is age the only fix? [Powerpoint slides]. Retrieved from <http://etsc.eu/wp-content/uploads/ETSC-lecture-versie-2.pdf>
- Watt, C. Murphy, L. & O'Brien, I. (2013). *Young drivers' attitudes to insurance*. London: Department for Transport. Retrieved from [www.gov.uk/government/publications/young-drivers-attitudes-to-insurance](http://www.gov.uk/government/publications/young-drivers-attitudes-to-insurance)
- Wilson, R.J., Meckle, W., Wiggins, S., et al. (2006). Young driver risk in relation to parents' retrospective driving record. *J Safety Res* 37, 325–32. doi:10.1016/j.jsr.2006.05.002
- Winston, F., Puzino, K., Romer, D. (2016). Editorial: Precision prevention: time to move beyond universal interventions. *Inj Prev*, 22:87-91 Retrieved from <http://injuryprevention.bmj.com/content/22/2/87.full>
- Zimmerman, M. (2013). Resiliency Theory: A Strengths-Based Approach to Research and Practice for Adolescent Health. *Health Educ Behav*; 40(4): 381–383. doi: 10.1177/1090198113493782 Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3966565/#R11>