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# A segmentation of novice drivers in Great Britain: Factors associated with intention to take advanced driver training

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Commissioned by

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# A segmentation of novice drivers in Great Britain
Factors associated with intention to take advanced driver training

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# IAM
# Chief Executive's Foreword

Thirty per cent of car occupant fatalities are drivers aged 17-24, or passengers of a driver aged 17-24. We know that errors and careless behaviour contribute to the vast majority of accidents involving young drivers, yet few take additional training which could improve their safety, and the safety of other road users.

By understanding the barriers which prevent people from taking post-test training we can engage more young drivers. Increasing our awareness of motivating factors for further learning means that the IAM can further develop our offer and appeal to young people.

I believe that the best way to understand the opinions and needs of young people is to ask them what they think. With this in mind, the IAM commissioned this report from the Transport Research Laboratory (TRL). They surveyed over 1,000 novice drivers aged 17-30 and investigated the factors which are associated with the consideration of taking further training.

The IAM has produced an accompanying policy paper, 'The Fast and the Curious: Young people's attitudes to driver training', which summarises and responds to TRL's findings. The paper looks at the wider context of young driver issues and highlights some of the key survey results.

TRL's evidence shows how vital it is to engage young drivers within the first year of passing their driving test. It also highlights the important fact that those who pass first time are often amongst those who would find additional training most useful.

Simply informing young people that they carry a high risk of being involved in an accident is not enough. The study shows that offering a real incentive through reduced insurance premiums would encourage young novice drivers to consider further training.

The IAM would like to see closer working between government, the advanced driver training community and the insurance industry to provide real incentives. We open up this discussion in 'The Fast and the Curious: Young people's attitudes to driver training' by putting young driver views and attitudes at the forefront.

I would like to thank Dr Shaun Helman, Dr Neale Kinnear and the team at TRL for such a sound and detailed analysis.

As the UK's largest independent road safety charity, the IAM is committed to reducing accidents involving young drivers through Momentum; our targeted campaign and assessment initiative for young drivers under 26. Of course, we also have many younger drivers take the IAM advanced driving programme. I would like all young people to consider taking advanced driver training; the IAM will use this report to further to develop our offer and appeal to young people to make this happen.


Simon Best
Chief Executive
IAM
(Institute of Advanced Motorists)

# Executive summary

Previous research has shown that novice drivers feel unprepared for driving after passing their practical driving test, and can find the transition to solo driving stressful (e.g. Wells, Tong, Sexton, Grayson & Jones, 2008; Christmas, 2007). This suggests a role for post-test training to ease the transition from accompanied to unaccompanied driving.

Very little is known about the underlying motivating factors and needs that novice drivers have towards further training. Specifically, we do not know which underlying variables (attitudes, demographics etc.) best predict how likely novice drivers are to take further training. This means that training providers do not know how best to design and market their range of products.

Against this context, the Institute of Advanced Motorists (IAM) commissioned TRL to carry out a segmentation of novice drivers to understand what motivates their intentions to engage with different types of driver training. This report describes analyses designed to answer the following two research questions for the IAM:

1. What types of novice driver intend to take part in post-licence driver training?

2. Do different types of post-licence driver training appeal to different types of novice driver?

Three types of training were investigated:

1. Training that provides experience of a wide range of road and traffic situations ('experience' training)

2. Training in vehicle control skills ('vehicle control' training)

3. Training to develop anticipation and safer attitudes to driving ('anticipation and attitudes' training)

These categories were demarcated on the basis of the widely accepted theoretical and empirical distinction that can be made between the differential contributions to safety outcomes of on-road experience, specific vehicle control skills, and higher-order cognitive skills and attitudes (see Helman, Grayson and Parkes, 2010 for a recent review).

One thousand and seven novice drivers (stratified to match as closely as possible the population of practical test passers in Great Britain aged between 17 and 30) were surveyed through an online panel provider. Respondents were asked questions about their personality, their attitudes towards various driving behaviours and training types, and various self-reported behavioural and demographic characteristics. They were also asked to state their intentions to engage in the three types of post-licence driver training under investigation; their stated intentions were used as a proxy for likely future behaviour (see Webb & Sheeran, 2006).

Discriminant analyses were used to establish those sets of variables that best discriminated between novice drivers who intended to take future training, and those who did not. The analyses showed that when compared to those novice drivers who had no intention of taking more training, those who did intend to take training:

1. Were more likely to report being nervous about driving

2.  Were more likely to report committing driving violations and general driving errors

3.  Were more likely to have positive attitudes about the benefits of training (including acceptance by peers)

4.  Were more motivated to reduce insurance costs through training

5.  Tended to have driven fewer miles driven since passing the practical driving test ('experience' training and 'anticipation and attitudes' training only)

6.  Tended to have taken fewer attempts to pass the practical driving test ('experience' training and 'vehicle control' training only)

Demographic variables (including age and gender), self-rated driving skill, and worry about accidents and consequences did not add significantly to the discriminatory power of the models for any of the training types, suggesting that such variables are not useful in identifying people who may wish to take further training, once the effects of the underlying attitudinal and behavioural variables identified above have been accounted for.

The added benefit of understanding underlying attitudinal and behavioural variables associated with training intentions in novice drivers is that this can inform the strategies that might be used to market training products aimed at these consumers.

On the basis of the main findings, the following recommendations are made for IAM:

1.  The first recommendation offered is that IAM would be advised to market its novice driver products as helping to reduce nervousness of driving, helping to reduce violations and errors committed when driving, and helping to reduce insurance costs (if this can be shown to be the case). Advertising the potential for such training to make people 'better' drivers would also be of use, but improving 'advanced skills' or avoiding accident risk seem not to be as important as motivations for novice drivers in seeking further training.

2.  IAM might wish to seek opportunities to survey novice drivers to measure their positive attitudes towards the benefits (including insurance costs) and peer acceptance of training, driving nervousness, and tendency to commit violations and general errors when driving, in addition to measuring driving mileage since passing the practical test, and test attempts. People who score high on these variables (and low on mileage and test attempts) would appear to be more likely to take up training.

By marketing its novice driver training products (and identifying likely customers) on the basis of the key underlying attitudinal and behavioural factors identified in this research, TRL believes that IAM can achieve success in reaching out to novice drivers beyond that which is possible by relying on more traditional techniques.

# Abstract

It is known that novice drivers find driving immediately after passing their practical driving test stressful, and that this presents an opportunity for those organisations who offer post-licence training. The Institute of Advanced Motorists commissioned TRL to carry out a segmentation of novice drivers in terms of their stated intentions to engage with post-test training. One thousand and seven novice drivers aged between 17 and 30 in Great Britain completed an online survey measuring various attitudinal, behavioural and demographic factors, as well as their stated intentions to engage in further training of three different types (training providing extra experience of a wide range of driving situations; training in vehicle control skills; training designed to encourage hazard anticipation skills and better attitudes). The analyses showed that compared to those novice drivers who have no intention to take further training, those who do are more nervous about driving, report more violations and general errors when driving, report positive attitudes towards the benefits and peer acceptance of training, and are more motivated by saving insurance costs through training. For 'experience' and 'anticipation and attitudes' training, those intending to engage had also driven less since passing their practical test; for 'experience' and 'vehicle control' training, those intending to engage had taken fewer attempts to pass their practical test. Recommendations made include changing the focus of marketing novice driver products to reducing nervousness, violations and errors, and reducing insurance costs (if possible). Ways of identifying likely customers are also recommended.

# Table of Contents

# 1    Introduction

Research on novice drivers has shown that many of them feel unprepared for solo driving, despite having passed the practical driving test (e.g. Wells, Tong, Sexton, Grayson & Jones, 2008). Research also shows that some novice drivers (those who lack confidence) experience the transition from accompanied driving to solo driving as a negative event (Christmas, 2007).

Such findings suggest an opportunity for providers of post-licence driver training; if novice drivers feel unprepared for post-licence driving, then they may perceive post-licence training as desirable. However, little is known about novice drivers' needs and motivations when it comes to engaging with post-licence training or to what extent these vary. For example, some novice drivers may be especially hesitant and wish to have further accompanied practice, while others may wish to improve their driving skills with more advanced techniques.

One way of delineating markets so that products can be tailored for use within them is to use statistical techniques to segment consumers and understand their motivations. Traditional market research often utilises a cost-benefit analysis to segment consumers based on willingness-to-pay for a product. While novice drivers could be segmented based on willingness-to-pay alone, this approach would be unable to expose the motivations (that are not related to cost) behind novice drivers' decisions to engage with further training. A reliance on demographic variables such as age and gender alone also falls short of accessing these underlying factors.

To generate a greater understanding of novice drivers' purchase intentions for further training, analysis must also take into account various behavioural, personality and attitudinal factors that are generally accepted as important in consumer decision-making. Measuring these factors enables the segmentation of consumers into coherent groups for the purpose of understanding those things that are most predictive of specific consumer choices, such as the desire to buy particular types of product.

This report describes such an analysis of novice drivers from across Great Britain. The analysis explores various personality factors, attitudinal factors, and behavioural and demographic characteristics of novice drivers, as they relate to stated intentions to engage in different types of post-licence driver training. The analysis seeks to answer the following research questions:

1.  What types of novice driver intend to take part in post-licence driver training?

2.  Do different types of post-licence driver training appeal to different types of novice driver?

Three types of training were investigated:

1.  Training that provides experience of a wide range of road and traffic situations

2.  Training in vehicle control skills

3.  Training to develop anticipation and safer attitudes to driving.

These categories were demarcated on the basis of the widely accepted theoretical and empirical distinction that can be made between the differential contributions to safety outcomes of on-road experience, specific vehicle control skills, and higher-order

cognitive skills and attitudes (see Helman, Grayson and Parkes, 2010 for a recent review).

In addition to serving as a useful snapshot of training intentions in novice drivers in Great Britain, the overall aim of the report is to provide the Institute of Advanced Motorists (IAM) with an evidence-based understanding of which groups of novice drivers might be most amenable to IAM products, which types of products the IAM might be best advised to produce to tap into future market potential, and how to market them.

The remainder of this report is structured as follows:

Section 2 describes the methods used to collect and analyse the data. Section 3 describes the results of the analyses. Section 4 discusses the implications of these results for the IAM, and Section 5 summarises overall recommendations.

References and appendices are referred to throughout the report, and are included at the end in their respective sections.

# 2    Method

## 2.1    Participants

Survey respondents were recruited through an online survey company[1]. The sampling criteria were that respondents should be aged between 17 and 30, and should have passed their practical driving test within the last three years. Respondents received a small incentive for taking part in the survey[2]. The achieved sample is shown in Table 1.

**Table 1: Achieved sample of respondents (N=1,007)**

| Age range | Male | Female |
|:---:|:---:|:---:|
| **17–19** | 282 | 250 |
| **20–22** | 116 | 119 |
| **23–25** | 66 | 45 |
| **26–28** | 38 | 46 |
| **29–30** | 15 | 30 |
| **Total** | **517** | **490** |

The age and gender split of the sample was designed to correspond as closely as possible to those taking the practical driving test in GB (data for the year to 31st March 2010 were used as the reference for this). In terms of gender balance the sample was not significantly different to the reference group ($p > 0.10$)[3]. In terms of age there was a greater proportion of sample respondents than reference group respondents in the 20–22 age group and fewer than expected in the 17–19 age group ($p < 0.01$). This is to be expected, since the reference group is made up of people at the ages at which they took their practical driving test, while the sample is made up of people who have already passed their test, up to three years previously.

## 2.2    Design and analysis

Data from the online survey were provided to TRL in the statistical software package SPSS for analysis. Multiple-item scales within the questionnaire were each subjected to factor analysis in order to reduce the explanatory variables to a smaller set of underlying psychologically meaningful constructs. Factor analysis achieves this through identifying variables that show similar patterns of variation across respondents; the questionnaire was designed to include sets of variables relating to underlying latent factors and those

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[1] OpinionPanel provided half of the participants directly from its Future, Student and Graduate panels, and the other half through one of its partner companies (SSI).

[2] OpinionPanel respondents received either a £2 high street shopping voucher or a £2 Amazon voucher. SSI respondents received points within a voucher system to the value of 50 pence, or charity-based or sweepstake-based incentives that have been calibrated to the points system to ensure that differing incentives do not influence responses.

[3] The p-value refers to the probability that any difference was due only to random variation in the data. A difference is considered 'statistically significant' if this probability is less than 5% (i.e. $p < 0.05$).

correlated variables are assumed to measure the same underlying construct. Even previously-validated scales were subjected to factor analysis given the very specific nature of the participant sample (novice drivers) as this could be used to confirm the expected factor structure for those scales. The resulting list of individual items and factors is shown in Section 3.1.

After the factor analyses, Chi-squared and Kruskal-Wallis tests of association were run to establish which factors and items were associated with the three outcome variables (stated intentions to take further training of the three types investigated), so that the subsequent discriminant analyses could be based on a small number of highly relevant and discriminating predictors.

Items and factors that showed an association with the outcome variables were then entered into the discriminant analyses (separately for each outcome variable) to establish which combination of items and factors could best discriminate between those respondents who expressed an intention to take further training, and those who did not.

## 2.3    Materials

An online survey was designed to include pre-existing and bespoke scales to measure various demographic, behavioural, attitudinal and personality variables that were regarded as being of potential value in predicting future intentions to engage with post-licence driver training. The full questionnaire, along with a list of variables included, is reproduced in Appendix A.

Three types of training were investigated. Each was described in detail in the questionnaire and respondents were asked to indicate their intention to engage with each type of training over a given timeframe (see Section 3.1), as well as being asked to indicate their attitudes about the types of training. Broadly, the three types of training can be described as:

1. Training that provides experience of a wide range of road and traffic situations
2. Training in vehicle control skills
3. Training to develop anticipation and safer attitudes to driving

These are referred to as 'experience' training, 'vehicle control' training and 'anticipation and attitudes' training respectively throughout the report.

## 2.4    Procedure

Fieldwork was conducted by OpinionPanel between the 15th of September and the 4th of October 2011. Two screening questions were used to ensure that the sample met the sampling criteria. The first screening question asked respondents whether they currently held a valid UK driving licence; all those who did not were screened out. The second screening question filtered out all of those who had not passed their driving test in the last three years (i.e. since September 2008).

# 3 Results

The overall aim of the analysis was to establish which variables (attitudes, behaviours, demographics etc.) were associated with an intention to take further training. In order to achieve this aim, the steps outlined in Section 2.2 were followed.

Section 3.1 describes the outcome variable (intention to take training) and the sample characteristics on this variable for each type of training.

Section 3.2 describes the individual variables and underlying factors that were identified by the factor analysis as the 'pool' of variables taken forward into the next step.

Section 3.3 describes the results from initial tests of association between these variables and the intention to take different types of training; these associations were used to decide the most relevant variables to be taken forward into the discriminant analyses.

Section 3.4 describes the outcome of the discriminant analyses for the three types of training under investigation. These analyses sought to establish the best mix of variables that discriminate between those novice drivers who intend to take further training, and those who do not.

## 3.1 Outcome variable (intention to take training)

For each type of training under investigation, an item was included in the survey that measured stated intention to take this type of training at some point in the future. The statement used for each type of training was:

> "If easily available and affordable I would take this kind of training within the next…"

Options given were '12 months', '1–3 years', '3–5 years', '5+ years', and 'I would never take this type of training'.

The outcome variable is described as 'intention to take training' throughout the report, but it should be noted that this is with the caveat 'If easily available and affordable…' This caveat is necessary to set the context for the intention statements; the analyses in this report are not designed to establish a market rate for training products, and the absolute level of take-up of such products will clearly depend on absolute levels of price and accessibility, analyses of which are beyond the scope of this report. Table 2 describes the sample breakdown on the outcome variable for each type of training.

**Table 2: Breakdown of sample by intention to take different types of training, over given timeframes**

| "I would take this kind of training within the next…" | 'Experience' training | 'Vehicle control' training | 'Anticipation and attitudes' training |
|---|---|---|---|
| 12 months | 539 | 473 | 414 |
| 1–3 years | 196 | 227 | 220 |
| 3–5 years | 55 | 59 | 58 |
| 5+ years | 29 | 32 | 40 |
| Never | 188 | 216 | 275 |
| **Total respondents** | **1,007** | **1,007** | **1,007** |

The data in Table 2 illustrate that the majority of novice driver respondents in this survey (with the caveat mentioned above) state an intention to take the various types of training, most often within the next 12 months or 1–3 years.  Training that is designed to provide experience of different road and traffic situations seems to be marginally more popular than training focused on vehicle control skills, and both of these training options are preferred to the 'anticipation and attitudes' training.  However even for the least popular type, around three quarters of the sample still intend to engage with it if it were available and affordable.

## 3.2    Predictor variables

A number of the sections used in the questionnaire were (either pre-existing or bespoke) scales with a given number of items that were designed to measure a smaller number of underlying constructs.  All such scales were subjected to a factor analysis (see Appendix B for detailed description of methods used) to reduce the total number of items used as predictor variables in later analyses.  The factors suggested by the initial analysis were checked for internal reliability (Cronbach's Alpha); any that lacked sufficient reliability (Cronbach's alpha of 0.6 was used as the criterion) were separated back out into individual items so that the later analyses proceeded on the basis of only internally reliable factor scores or individual items.

The final list of factors (in bold) taken forward in the next stage of analysis (as well as some individual items from those scales) is shown in Table 3.  In addition, variables that began as single items (e.g. demographic variables) were also taken forward.

**Table 3: Factors and variable taken forward after factor analysis**

| Factor/variable | Description |
|---|---|
| **Driving nervousness** | **Factor measuring nervousness of driving in different situations** |
| Insurance savings | Single item measuring motivation to take training if it saves money on insurance |
| P-plates | Single item measuring opinion on whether new drivers should display 'P' plates |
| Post-test training | Single item measuring opinion on whether all post-test drivers should take further training |
| **Worry about accident involvement and consequences** | **Factor measuring level of worry about being in an accident, and possible consequences for self and other drivers** |
| **Positive attitudes about training[4]** | **Factor measuring generally positive attitudes about the usefulness of post-licence training, and perceived approval of peers** |

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[4] Note that these factors and scores on them were derived separately for each of the three different types of the training under investigation.

| Factor/variable | Description |
|---|---|
| Negative attitudes about training[3] | Factor measuring generally negative attitudes about the usefulness of post-licence training, and perceived disapproval of peers |
| Perceived ease of access of training[3] | Factor measuring perceived ease of access of post-licence training in the respondent's local area |
| Car image | Factor measuring the belief that the type of car someone drives is important for image and 'prestige' |
| Driving enjoyment | Factor measuring enjoyment of driving |
| Driving dependence | Factor measuring perceived dependence on driving in one's lifestyle |
| Worry about running costs | Factor measuring concern about running costs (fuel, insurance) and how this can affect driving |
| Close following and support for greater enforcement[5] | Factor measuring attitudes towards close following and support for greater enforcement of the law with respect to other risky behaviours |
| Negative attitudes towards speeding and drink driving[5] | Factor measuring the perception that speeding and drink driving are dangerous |
| Support for self-monitoring of risk-taking[5] | Factor measuring the attitude that drivers should be able to set their own limits on risky behaviours |
| Social acceptance of speeding and risky overtaking[5] | Factor measuring perceived social acceptance of speeding and risky overtaking |
| Positive attitudes towards speeding[5] | Factor measuring the attitude that speeding is OK as long as you are doing it carefully or to keep up with traffic |
| DBQ violations and general errors[6] | Factor measuring self-reported tendency to commit traffic violations and general errors |

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[5] These factors are derived from the items on the DAQ (Driver Attitudes Questionnaire) – a previously created scale that measures attitudes towards various risky driving activities (Parker, Stradling & Manstead, 1996). The factor structure found here is not perfectly in line with what has been found in other studies, which typically find a four-factor solution based on the four behaviours (close following, speeding, drink driving, and dangerous overtaking). Because of the very specific sample used in this study – novice drivers – we have chosen to accept the factor structure suggested in the analysis, rather than force a four-factor solution onto the data.

[6] These two factors are derived from the items on the DBQ (Driver Behaviour Questionnaire) – a previously created scale that measures self-reported tendency to commit driving violations, errors, and lapses (Parker,

| Factor/variable | Description |
|---|---|
| DBQ lane errors[6] | Factor measuring a tendency to commit driving errors involving lane position at roundabouts and junctions |
| Self-perceived driving skill | Factor measuring self-perceived ability at different components of driving skill (e.g. vehicle control, fast reactions) |
| Safety motives | Factor measuring self-perceived 'safety motives' of driving (e.g. courtesy, care) |
| Sensation-seeking | Factor measuring the personality variable 'sensation seeking' |
| Avoidance of suspenseful or frightening movies | Single item from sensation seeking scale measuring propensity to avoid frightening movies |
| Carrying out illegal or immoral actions | Factor measuring tendency to do things considered immoral, illegal, or disapproved of by friends and family |
| Attitudes to risk | Factors measuring tendency to engage in risky activities |
| Driving sensation seeking | Factor measuring tendency to take use driving as an outlet for sensation seeking |
| Big-five personality variables (Openness to experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism) | The expected factor structure of these five well-established personality constructs was found, but most of the factors were found to lack sufficient internal reliability and so items were entered into later analyses separately |

## 3.3 Tests of association between predictor variables and outcome variables

The next stage of the analysis involved running appropriate tests of association between the predictor variables and the main outcome variables (intentions to take the three types of training under investigation). For categorical variables a Chi-squared test of association was used, and for continuous variables a Kruskal-Wallis test was used. Table 4 shows those variables that had a statistically significant association (at the 5% level) with at least one of the outcome variables. Note that the direction of the association is not considered at this stage but is discussed at the next step – the discriminant analyses.

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Reason, Manstead & Stradling, 1995). The factor structure found here is not perfectly in line with what has been found in other studies, although it should be noted that previous studies have also failed to find the expected factor structure (see af Wåhlberg, Dorn & Kline, 2009). Because of the very specific sample used in this study – novice drivers – we have chosen to accept the factor structure suggested in the analysis.

**Table 4: Predictor variables that had a statistically significant association with intention to take at least one of the three types of training**

| Variable or factor | Type of training | | |
| | 1 | 2 | 3 |
| | (Experience) | (Vehicle control) | (Anticipation and attitudes) |
| --- | --- | --- | --- |
| Gender | x | | |
| Parental social class | | | x |
| Months elapsed between starting learning to drive and passing practical driving test | | x | |
| Attempts to pass practical driving test | x | x | |
| Miles driven since passing the practical driving test | x | | x |
| Possession of a full motorcycle licence | x | x | x |
| Possession of a foreign car licence | | x | |
| Have taken previous training – Pass Plus | x | x | x |
| Have taken previous training – IAM | x | x | x |
| Have taken previous training – BSM | x | x | x |
| Have taken previous training – RoSPA | | x | x |
| Have taken no previous training | x | x | x |
| Whether regularly driving for work, or to and from work | x | x | |
| Times flashed by a speed camera since passing practical driving test | | x | x |
| Times stopped by police since passing the practical driving test | | | x |
| Penalty points on driving licence | x | x | x |
| Regular access to a car | x | x | x |
| Use car as driver regularly | x | | x |
| Used local bus, tube, tram regularly | x | | x |
| Used bike regularly | x | x | x |
| Walk regularly | | x | |

| Variable or factor | Type of training | | |
|---|:---:|:---:|:---:|
| | 1 (Experience) | 2 (Vehicle control) | 3 (Anticipation and attitudes) |
| Used scooter/motorcycle regularly | x | x | |
| Age | x | x | x |
| Highest educational qualification | | x | x |
| Employment status | | x | |
| Married/single status and living arrangements | x | x | x |
| Insurance savings | x | x | x |
| P-plates | x | | x |
| Post-test training | x | x | x |
| Avoidance of suspenseful or frightening movies | x | | x |
| Driving nervousness | x | x | x |
| Worry about accident involvement and consequences | x | x | x |
| Driving enjoyment | x | x | x |
| Worry about running costs | x | x | x |
| Self-perceived driving skill | x | | x |
| Positive attitudes about training | x | x | x |
| Negative attitudes about training | x | x | x |
| Close following and support for greater enforcement | | x | |
| Negative attitudes towards speeding and drink driving | x | x | x |
| Support for self-monitoring of risk-taking | x | x | |
| Positive attitudes towards speeding | x | | x |
| DBQ violations and general errors | x | x | x |
| DBQ lane errors | x | x | |
| Attitudes to risk | x | x | x |
| Driving sensation seeking | x | | x |

In addition to those variables listed in the table, several personality items were also associated with intention to take some of the types of training, and were included in later discriminant analyses. However none of these variables were found to be relevant in discriminating between those novice drivers who intend to take further training and those who do not, so they are not discussed in detail here.

## 3.4 Discriminant analyses

The variables in Table 4 that were significantly associated with each outcome variable (i.e. intention to take each type of training) were entered into three discriminant analyses. Discriminant analysis aims to establish the smallest set of variables that best discriminates between different discrete outcomes; in this case we ask what are the variables that best discriminate between those novice drivers who state that they intend to take further training, and those who do not. In Sections 3.4.1, 3.4.2 and 3.4.3 we describe the results of this analysis for each type of training under investigation. The implications of these results are discussed in Section 4.

### 3.4.1 Training that provides experience of a wide range of road and traffic situations

The variables in Table 4 that had a significant association with the intention to take 'experience' training (i.e. those variables with a cross in column '1') were entered into the discriminant analysis. The outcome variable was treated as dichotomous (those people who expressed an intention to take 'experience' training at any time in the future, and those who expressed an intention to never take this type of training).

Eleven variables were combined in the model that best discriminated between those intending to take 'experience' training, and those who were not. The model correctly classifies 85% of respondents[7]. Figure 1 and Table 2 show the differences between the groups. The data show that when compared with those who do not intend to take 'experience' training, those who intend to take such training:

- Were more likely to think that this type of training would be useful, and approved of by their peers (and less likely to think the opposite)

- Were more likely to report committing driving violations and general errors when driving

- Were more nervous about driving

- Had driven fewer miles since passing their practical driving test

- Took fewer attempts to pass their practical driving test (more first time passers)

- Had driven less regularly in the last 12 months

- Were more motivated by saving money on their insurance through training

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[7] After this analysis we intended to break the outcome variable down into finer gradations of time (i.e. splitting intention to take this type of training to within a year, 1–3 years, 3–5 years, or more than 5 years from now, and comparing these to the 'not at all' group). However the best model resulting from this analysis was only able to achieve a 66% correct classification for this training type (60% and 58% for the other types) which was not felt to be robust enough to be useful. Therefore our interpretation and conclusions from the analysis here, and for later types of training, are based on the models using the dichotomous outcome variables.

- Were more likely to agree that further training should be compulsory post-test

- Were more likely to think that all drivers should be required to take post-test training in general[8]
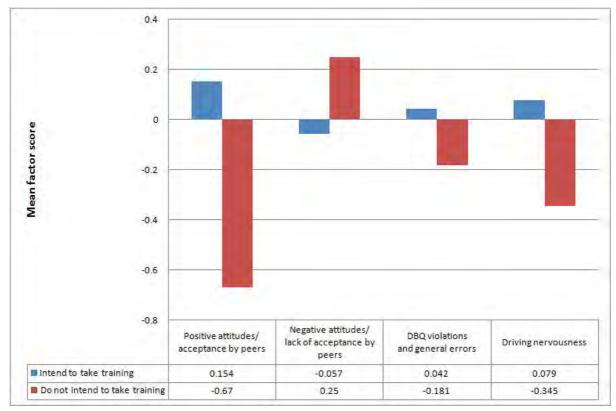


**Figure 1: Mean factor scores by 'experience' training intention[9]**

The chart shows the following data table:

| | Positive attitudes/ acceptance by peers | Negative attitudes/ lack of acceptance by peers | DBQ violations and general errors | Driving nervousness |
|---|---|---|---|---|
| Intend to take training | 0.154 | -0.057 | 0.042 | 0.079 |
| Do not intend to take training | -0.67 | 0.25 | -0.181 | -0.345 |

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[8] Those drivers who intended to take training were also less likely to have penalty points on their licence, and more likely to have done previous IAM training; however in both of these cases the sample sizes were too small to allow any confidence in these findings, and they should be treated with extreme caution.

[9] The factor score valences have been orientated so that they refer directly to the 'amount' of a given factor, as worded in the tables and figures, throughout this report. Thus in this case those who intend to take training have attitudes that are more positive and less negative, have more self-reported violations and general errors, and more self-reported nervousness. While the scores have no absolute real-world correlate, the important thing to note is that in all cases the groups differ on the factor scores.

**Table 5: Those who expressed an intention to take 'experience' training compared with those who did not, on categorical variables**

| Variable | Categories | Percentage of respondents falling into each category on categorical variables[10] | |
|---|---|---|---|
| | | Respondents who intend to take 'experience' training (N=819) falling into each category | Respondents who do not (N=188) |
| **Miles driven since passing practical driving test** | No driving | 9% | 5% |
| | <100 | 19% | 6% |
| | 101–500 | 23% | 18% |
| | 201–1,000 | 17% | 16% |
| | 1,001–5,000 | 16% | 26% |
| | 5,001–10,000 | 9% | 13% |
| | >10,000 | 6% | 15% |
| **Attempts to pass practical driving test** | 1 | 56% | 48% |
| | 2 | 31% | 30% |
| | 3 | 9% | 15% |
| | 4+ | 5% | 6% |
| **How often driven in last 12 months** | Never | 7% | 5% |
| | Less than monthly | 13% | 5% |
| | 1–3 days a month | 12% | 10% |
| | About 1 day a week | 16% | 12% |
| | 2–4 days a week | 26% | 29% |
| | 5–7 days a week | 27% | 40% |
| **"If taking part in further training saved me money on my car insurance, I would definitely do it"** | Strongly disagree | 1% | 3% |
| | Disagree | 4% | 10% |
| | Neither | 17% | 30% |
| | Agree | 44% | 43% |
| | Strongly agree | 34% | 15% |
| **"All drivers should have to do further training after the driving test"** | Strongly disagree | 7% | 21% |
| | Disagree | 27% | 46% |
| | Neither | 34% | 26% |
| | Agree | 27% | 6% |
| | Strongly agree | 5% | 0% |

Figure 2 and Figure 3 show the 'miles driven' and 'insurance costs' variables by intention group, to illustrate the differences in distributions of those novice drivers who intend to take further 'experience' training, and those who do not, on these individual variables.

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[10] Note that percentages in this table do not always add to 100% due to rounding

The 'intend to take training' distribution is clearly shifted towards lower mileages, and towards more extreme agreement with the statement about reducing car insurance.
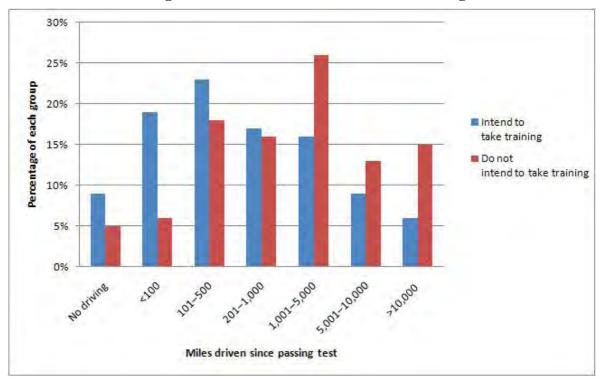


**Figure 2: Miles driven since passing practical driving test, by intention group, for 'experience' training**
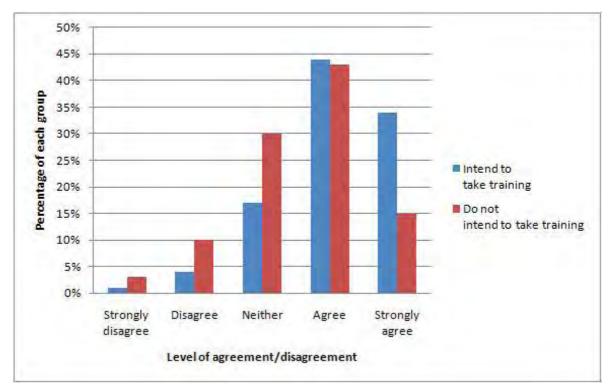


**Figure 3: Level of agreement with the statement "If taking part in further training saved me money on my car insurance, I would definitely do it", by intention group, for 'experience' training**

### 3.4.2    Training in vehicle control skills

The variables in Table 4 that had a significant association with the intention to take 'vehicle control' training (i.e. those variables with a cross in column '2') were entered into the discriminant analysis.

Nine variables were combined in the model that best discriminated between those intending to take 'vehicle control' training, and those who were not.  The model correctly classifies 84% of respondents.  Figure 4 and Table 6 show the differences between the groups.   The data show that when compared with those who do not intend to take 'vehicle control' training, those who intend to take such training:

- Were more likely to think that this type of training would be useful, and approved of by their peers (and less likely to think the opposite)

- Were more likely to report committing driving violations and general errors when driving

- Were more nervous about driving

- Were more likely to be worried by car running costs

- Were more motivated by saving money on their insurance through training

- Took fewer attempts to pass their practical driving test (more first time passers)

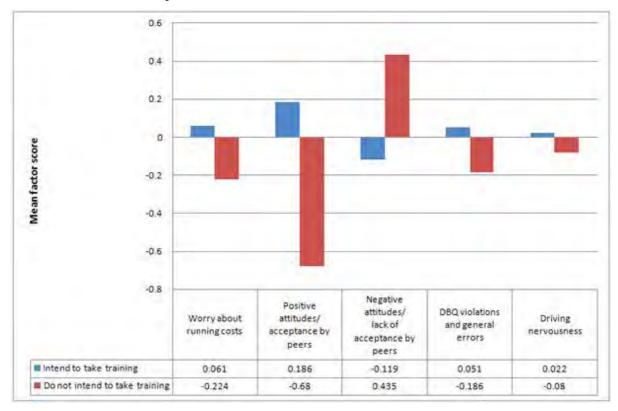- Had ridden a bicycle more often in the last 12 months[11]



| | Worry about running costs | Positive attitudes/ acceptance by peers | Negative attitudes/ lack of acceptance by peers | DBQ violations and general errors | Driving nervousness |
|---|---|---|---|---|---|
| Intend to take training | 0.061 | 0.186 | -0.119 | 0.051 | 0.022 |
| Do not intend to take training | -0.224 | -0.68 | 0.435 | -0.186 | -0.08 |

**Figure 4: Mean factor scores by 'vehicle control' training intention**

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[11] As with 'experience' training, again novices intending to take 'vehicle control' training were more likely to have taken previous IAM training, but again the small sample size precludes us having any confidence in this finding.

**Table 6: Those who expressed an intention to take 'vehicle control' training compared with those who did not, on categorical variables**

| Variable | Categories | Percentage of respondents falling into each category on categorical variables[12] | |
| --- | --- | --- | --- |
| | | Respondents who intend to take 'vehicle control' training (N=791) falling into each category | Respondents who do not (N=216) |
| **Attempts to pass practical driving test** | 1 | 56% | 48% |
| | 2 | 31% | 30% |
| | 3 | 9% | 14% |
| | 4+ | 4% | 7% |
| **How often ridden a bicycle in last 12 months** | Never | 38% | 54% |
| | Less than monthly | 24% | 23% |
| | 1–3 days a month | 14% | 8% |
| | About 1 day a week | 9% | 7% |
| | 2–4 days a week | 8% | 7% |
| | 5–7 days a week | 6% | 1% |
| **"If taking part in further training saved me money on my car insurance, I would definitely do it"** | Strongly disagree | 1% | 2% |
| | Disagree | 4% | 11% |
| | Neither | 16% | 31% |
| | Agree | 44% | 43% |
| | Strongly agree | 35% | 13% |

Figure 5 shows the 'insurance costs' variable by intention group, to illustrate the differences in distribution of those novice drivers who intend to take further 'vehicle control' training, and those who do not, on this variable. As with 'experience' training, the distribution for the 'intend to take training' group is shifted towards more extreme agreement with the statement about the importance of reducing insurance costs.

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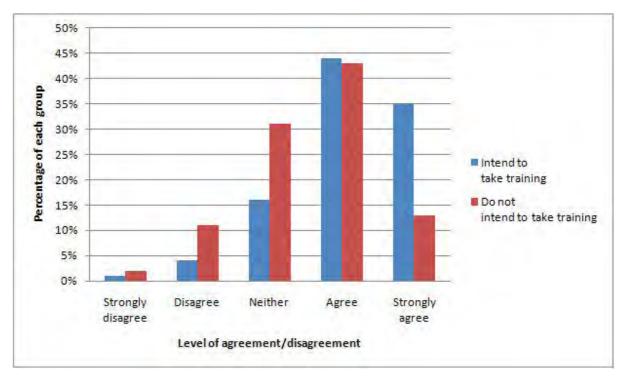[12] Note that percentages in this table do not always add to 100% due to rounding

**Figure 5: Level of agreement with the statement "If taking part in further training saved me money on my car insurance, I would definitely do it", by intention group, for 'vehicle control' training**

### 3.4.3 Training to develop anticipation and safer attitudes to driving

The variables in Table 4 that had a significant association with the intention to take 'anticipation and attitudes' training (i.e. those variables with a cross in column '3') were entered into the discriminant analysis. As with the previous discriminant analyses, the outcome variable was treated as dichotomous.

Eight variables were combined in the model that best discriminated between those intending to take 'anticipation and attitudes' training, and those who were not. The model correctly classifies 79% of respondents. Figure 6 and Table 7 show the differences between the groups. The data show that when compared with those who do not intend to take 'vehicle control' training, those who intend to take such training:

- Were more likely to think that this type of training would be useful, and approved of by their peers (and less likely to think the opposite)

- Were more likely to report committing driving violations and general errors when driving

- Were more nervous about driving

- Were more motivated by saving money on their insurance through training

- Had driven fewer miles since passing their practical driving test

- Had used a local bus, tram or tube train more often in the last 12 months
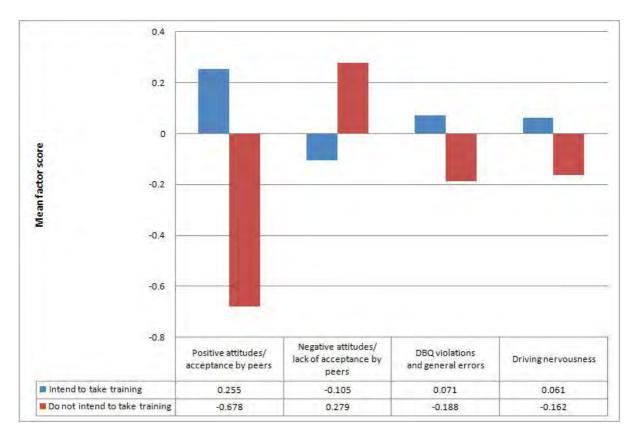
- Had a lower parental social grade

**Figure 6: Mean factor scores by 'anticipation and attitudes' training intention**

**Table 7: Those who expressed an intention to take 'anticipation and attitudes' training compared with those who did not, on categorical variables**

| Variable | Categories | Percentage of respondents falling into each category on categorical variables[13] | |
| --- | --- | --- | --- |
| | | Respondents who intend to take 'anticipation and attitudes' training (N=732) falling into each category | Respondents who do not (N=275) |
| **Miles driven since passing practical driving test** | No driving | 9% | 7% |
| | <100 | 19% | 9% |
| | 101–500 | 24% | 18% |
| | 201–1,000 | 15% | 22% |
| | 1,001–5,000 | 17% | 21% |
| | 5,001–10,000 | 9% | 11% |
| | >10,000 | 7% | 11% |

[13] Note that percentages in this table do not always add to 100% due to rounding

| Variable | Categories | Percentage of respondents falling into each category on categorical variables[13] | |
| --- | --- | --- | --- |
| | | Respondents who intend to take 'anticipation and attitudes' training (N=732) falling into each category | Respondents who do not (N=275) |
| **How often taken local bus, tram, or tube in last 12 months?** | Never | 10% | 14% |
| | Less than monthly | 23% | 28% |
| | 1–3 days a month | 17% | 20% |
| | About 1 day a week | 17% | 16% |
| | 2–4 days a week | 18% | 16% |
| | 5–7 days a week | 14% | 7% |
| **"If taking part in further training saved me money on my car insurance, I would definitely do it"** | Strongly disagree | 1% | 2% |
| | Disagree | 4% | 8% |
| | Neither | 16% | 29% |
| | Agree | 43% | 45% |
| | Strongly agree | 36% | 16% |
| **Parental social class[14]** | ABC1 | 72% | 77% |
| | C2DE | 28% | 23% |

Figure 7 and Figure 8 show the 'miles driven' and 'insurance costs' variables by intention group, to illustrate the differences in distributions of those novice drivers who intend to take further 'anticipation and attitudes' training, and those who do not, on these individual variables. The 'intend to take training' distribution is clearly shifted towards lower mileages, and towards more extreme agreement with the statement about reducing car insurance

[14] Ns for this variable (those who provided data) were 614 and 242 for those intending to take training and those not, respectively.
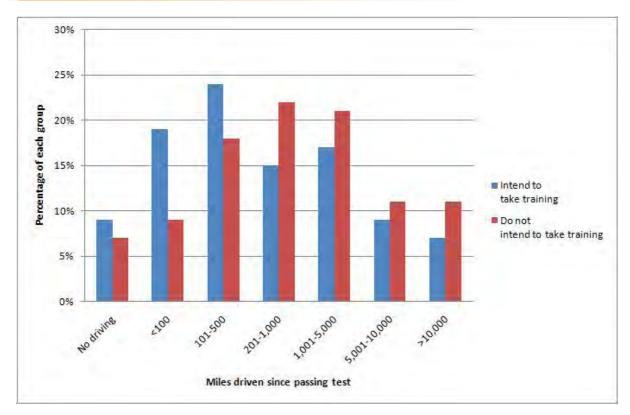
**Figure 7: Miles driven since passing practical driving test, by intention group, for 'anticipation and attitudes' training**
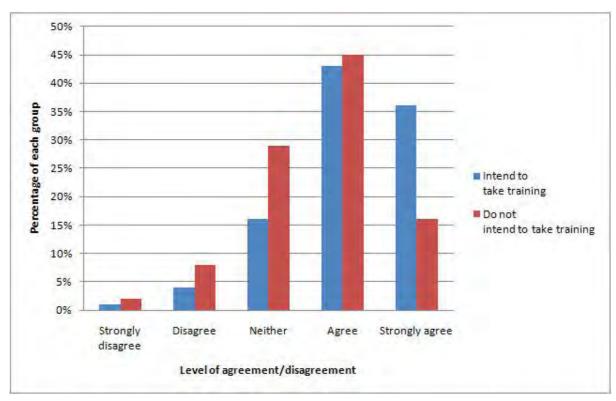


**Figure 8: Level of agreement with the statement "If taking part in further training saved me money on my car insurance, I would definitely do it", by intention group, for 'anticipation and attitudes' training**

## 3.5 Summary of findings

For the three types of training under investigation, a very similar pattern of findings emerged with regard to some underlying attitudinal and behavioural factors. When compared with those novice drivers who did not intend to take training, those who expressed an intention to take training tended to be more nervous about driving, had more positive attitudes towards the benefits of training (including its acceptance by their peers), were more motivated by insurance costs, and tended to report more violations and general errors in their driving.

Several differences did exist between the specific types of training, most obviously in those variables that were useful in discriminating groups for some types of training, but not for others. In the next section, these findings are discussed.

It is noteworthy that general demographic variables such as age, gender, and employment status did not appear in the set of variables that discriminated between those who intended to take training, and those who did not, once the core set of underlying attitudinal and behaviour factors mentioned above were taken into account. This was also the case for self-ratings of driver 'skill', and 'worry about accident involvement and consequences' – things that are often focused on by providers of post-licence training in marketing their products.

# 4 Discussion

This report describes analyses that were designed to understand novice drivers' stated intentions to engage with different types of driver training, so as to answer the following two research questions:

1. What types of novice driver intend to take part in post-licence driver training?

2. Do different types of post-licence driver training appeal to different types of novice driver?

Three types of training were investigated:

1. Training that provides experience of a wide range of road and traffic situations

2. Training in vehicle control skills

3. Training to develop anticipation and safer attitudes to driving

## 4.1 What types of novice driver intend to take part in post-licence training?

In terms of the first question, a series of analyses showed that in general, the factors that best discriminated those novice drivers who intend to engage with training from those who do not included:

1. More self-reported nervousness about driving

2. Tendency to report committing more driving violations and general driving errors

3. More positive attitudes about the benefits of training (including acceptance by peers)

4. More motivation to reduce insurance costs through training

5. Fewer miles driven since passing the practical driving test ('experience' training and 'anticipation and attitudes' training)[15]

6. Fewer attempts to pass the practical driving test (more likely to be a first time passer – 'experience' training and 'vehicle control' training)

Demographic variables such as age, gender and employment status did not tend to appear in the discriminate models, meaning that they did not add anything to the ability of the models to discriminate those novice drivers who intended to take further training, and those who did not, once the contributions of underlying attitudinal and behavioural variables were taken into account. This was also the case for 'skill' and 'worry about

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[15] It could be argued that this effect may have something to do with the fact that slightly over half the sample were in full-time education, and this group tended to drive less than the other majority group in the sample – those in full time employment. If students are simply more willing to take part in training, this could potentially explain the mileage effect. This does not seem to be the case however, since employment status did not appear in any of the discriminant models – whereas mileage driven since passing the practical driving test did, indicating that it was an important underlying factor explaining training intention, not only for those in full time education.

accident involvement and consequences'. This does not mean that such variables are not important in determining consumer preferences for driver training products generally; in this sample of young novice drivers however, such variables were not needed in order to discriminate between the two groups once the underlying variables mentioned above were taken into account. The benefit of understanding the underlying attitudinal and behavioural motivations to engage with training is that this can be used to refine the marketing of training products, and possibly the targeting of appropriate consumers. We explore possible implications for the IAM in the next two sections.

### 4.1.1 The marketing of IAM products

IAM products would (on the basis of the data presented here) seem likely to benefit from being marketed more directly on the basis of their potential to reduce errors and nervousness, and to reduce insurance costs (if applicable). This is in contrast to the marketing of the IAM Momentum training product for example, which focuses on improving driving skill and the ability to handle distracting situations with teenage passengers.

It is also noteworthy that novice driver training products often refer in detail to road safety statistics – specifically the well-documented increased risk to young novice drivers. It is debateable on the basis of our analyses whether a focus on the increased accident risk of new drivers in such marketing will influence consumer decisions; this is not least because worry about accidents did not prove to be an important predictor of training intentions once the important underlying attitudinal and behavioural variables had been taken into account.

Based on the observation that 'experience' training seemed the most popular of the three being investigated, IAM training for novice drivers might also be fruitfully marketed as simply providing experience of different road and traffic situations (in a similar vein to 'Pass Plus'), rather than having too much of a focus on increasing advanced 'driving skill' (something that again did not prove important in the discriminant analyses in this sample of novice drivers).

### 4.1.2 Targeting novice drivers

Another consideration that arises from this work is that in order to target those novices who may be more amenable to post-licence training generally, IAM may wish to find opportunities to survey novices for driving nervousness, tendency to commit violations and general errors, and attitudes towards post-licence training products in terms of their benefits, and peer acceptance. In addition ways might be found to identify those drivers who pass their test first time, and/or those drivers who drive very little after their test. These variables, combined, provide the best discrimination of those who intending to take further training and those do not.

It seems likely that novice drivers' intentions to take post-licence training exist in a small window of opportunity for post-licence training providers, given the importance of mileage since passing the practical driving test in discriminating between those who intend taking training and those who do not for the 'experience' and 'anticipation and attitudes' training types (see Section 4.2 for more detail on differences between the types of training). Therefore, IAM would seem to be well advised to move quickly to identify novices who fall into these categories post-licence, so that this opportunity is not missed.

## 4.2 Do different types of post-licence driver training appeal to different types of novice driver?

The findings were reasonably consistent across the three types of training, making it possible to draw some general conclusions as described in the last two sections. However, some differences between the training types are also worthy of note, and permit some more specific conclusions and things to consider for the future.

Firstly, the discriminant models for 'vehicle control' training and 'experience' training included test-attempts as a predictor (with fewer attempts being associated with a desire to take more training), but the model for 'anticipation and attitudes' training did not. One interpretation of this finding is that the former two types of training are very clearly based on being in the car, while the latter is described more as an 'awareness' intervention. If we assume that those drivers who pass their test early are simply craving more 'behind the wheel' experience (possibly because they are nervous – although see Sexton and Grayson, 2010 for a contrary finding about first-time passers) then this makes sense. If IAM are interested in having more classroom-based and e-learning products that focus more on awareness-raising and higher-order cognitive skills such as self-reflection, they may be advised to ignore test attempts as a predictor of potential up-take.

Mileage since passing the practical driving test was an important discriminator for 'experience' training and for 'anticipation and attitudes' training, but not for 'vehicle control' training. One plausible interpretation of this finding is that people who have driven more may have begun to overcome the need for what they may perceive as mere 'experience' or 'awareness of risks', but may still feel that they can improve their vehicle handling skills with advanced techniques. Although this picture is complicated somewhat by the fact that the underlying attitudinal and behavioural characteristics such as nervousness and self-reported violations and errors remain as predictors of intention for 'vehicle control' training, it is plausible that one exception to the advice to offer training to novice drivers very quickly before they have driven too much is the kind of training that focuses heavily on advanced techniques of vehicle control, which may be suited to drivers slightly later in their driving career.

Another way in which the 'anticipation and attitudes' training differed from the other two was that parental social class and the amount of local bus, tram or tube train use discriminated those who intend to take this training and those who do not. These findings are not easy to interpret; this is also the case for the fact that bicycle use discriminates intention for 'vehicle-control' training but not for others. One possible interpretation of this last finding is that people who enjoy cycling may enjoy physical activity and skills more generally and therefore may be more motivated to know how to control cars in more extreme situations. Alternatively, both bike use and public transport use may simply be inversely linked to the amount of driving. Any such interpretations of these less clear-cut results however are speculative, and they should not detract from the general theme of the findings throughout the analyses.

## 4.3 Potential limitations

One potential general limitation of the research that should be discussed is that stated intentions are not a perfect predictor of future behaviour. However they have been shown to be predictive of future behaviour to some degree. For example, Webb and Sheeran (2006) conducted a meta-analysis of 47 studies of the relationship between

intentions and subsequent behaviours (mostly health-related) and found that a medium-to-large change in intention could be expected to lead to a small–to-medium change in behaviour.  Therefore the authors feel that the approach taken in this report – to assess those factors that best discriminate groups differing in stated intention to engage with training – is a valid one.

One limitation of the analysis type used (discriminant analysis) is that it cannot take into account the likely inter-correlations between the variables that are in the discriminant models. For example, it is possible that the reason novices who want more training drive less is that they are nervous, and this in turn might be due to the errors they report making when driving.   Alternatively, driving less might itself lead to greater nervousness.  More complex statistical techniques can be used to delve further into such issues; however to help the IAM to understand how better to reach out to this potential audience, it is not necessary to have a detailed understanding of the inter-correlations between these variables when building a picture of post-licence driver training demand in novice drivers.

Another limitation is that we were unable to derive satisfactory models to discriminate between people who intended to take training earlier rather than later.  This was likely due to the fact that most respondents who stated an intention to take training said they would do so with 12 months, or within 1–3 years.  A much larger sample of respondents would permit more detailed models of the temporal proximity of intention to take training, and would potentially allow more detailed business planning by IAM as a result.

# 5 Summary of recommendations

On the basis of the data collected and analysed in this report, the following recommendations have been offered to IAM. Note that we have focused on the main body of the results in making these recommendations, and not on more specific and potentially 'one-off' findings, although these might be noted for future, more detailed work.

1. The first recommendation offered is that IAM would be advised to market its novice driver products as helping to reduce nervousness of driving, helping to reduce violations and errors committed when driving, and helping to reduce insurance costs (if this can be shown to be the case). Advertising the potential for such training to make people 'better' drivers would also be of use, but improving 'advanced skills' or avoiding accident risk seem not to be as important as motivations for novice drivers in seeking further training.

2. IAM might wish to seek opportunities to survey novice drivers to measure their positive attitudes towards the benefits (including insurance costs) and peer acceptance of training, driving nervousness, and tendency to commit violations and general errors when driving, in addition to measuring driving mileage since passing the practical test, and test attempts. People who score high on these variables (and low on mileage and test attempts) would appear to be more likely to take up training.

By marketing its novice driver training products (and identifying likely customers) on the basis of the key underlying attitudinal and behavioural factors identified in this research, TRL believes that IAM can achieve success in reaching out to novice drivers beyond that which is possible by relying on more traditional techniques.

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# Appendix A  Online survey

The online survey questionnaire included items measuring the following variables.

1. Months elapsed between starting learning to drive and passing practical driving test
2. Lessons taken with a driving instructor when learning to drive
3. Additional hours of driving with supervising drivers when learning
4. Attempts to pass the practical driving test
5. Attempts to pass the video hazard perception section of the theory test
6. Attempts to pass the multiple-choice section of the theory test
7. Miles driven since passing the practical driving test
8. Additional licences held (e.g. motorcycle licence)
9. Further training taken since passing the practical driving test
10. Whether regularly driving for work, or to and from work
11. Times flashed by a speed camera since passing the practical driving test
12. Times stopped by police since passing the practical driving test
13. Penalty points on driving licence
14. Accidents involved in since passing the practical driving test
15. Item on self-rated likelihood of being involved in accident compared to average driver (Horswill, Waylen & Tofield, 2004)
16. Item on self-rated driving skill compared to average driver (Horswill, Waylen & Tofield, 2004)
17. Items developed to measure attitudes to commonly reported experiences during initial post-test driving.
18. 'Worry about accidents' items – these items were designed for a previous study and sought to measure the degree to which respondents worry about involvement in, and consequences of, any accidents they may have in the future
19. Items measuring future intentions to take three types of post-licence driver training
    a. Training that provides experience of a wide range of road a traffic situations
    b. Training in vehicle control skills
    c. Training to develop anticipation and safer attitudes to driving
20. Items designed to measure attitudes towards the likely safety benefits of these types of training (same items repeated for each type)
21. Items designed to measure perceived availability of these types of training (same items repeated for each type)
22. Items designed to measure perceived peer-approval of these types of training (same items repeated for each type)
23. Perceived suitability of different delivery options (e.g. e-learning, in-car) for these types of training
24. Regular access to a car
25. Items designed to explore drivers' relationship with the car and the motivations and influences on their car use.
26. Driver Attitudes Questionnaire (DAQ) – a scale measuring attitudes towards speeding, drink driving, close-following, and overtaking (Parker, Stradling & Manstead, 1996)

27. Driver Behaviour Questionnaire (DBQ) violation items – a scale measuring self-reported frequency of committing various driving violations such as speeding and running red lights (Reason, Manstead, Stradling, Baxter & Campbell, 1990)

28. A measure of driver skill and safety motives (Lajunen & Summala, 1995)

29. Sensation seeking scale – a set of items measuring the psychological trait of sensation seeking (Arnett, 1994)

30. Thrill seeking items from the Driver Stress Inventory (DSI) – the items measure the extent to which drivers like to use driving as an outlet for their thrill-seeking tendencies (Matthews, Desmond, Joyner, Carcary, & Gilliland, 1997)

31. Attitudes towards risk scale – this scale measures general attitudes towards risk (Franken, Gibson, & Rowland, 1992)

32. Personality was measured using the 12 items of the Newcastle Personality Assessor (NPA – Nettle, 2007), which provides a simple measure of the five personality traits or "domains" in the widely accepted Five-Factor model of personality (Costa & McRae, 1995; McCrae & Costa, 2003)

33. Travel patterns in different modes of transport (car driver, passenger, bus/tram/tube, train, bike, walk, scooter/motorcycle)

34. Gender

35. Age (date of birth)

36. Highest educational qualification

37. Employment status

38. Income

39. Married/single status and living arrangements

40. Postcode

In addition, the survey panel companies provided data on parental social grade.

**TRL- New Driver Questionnaire**

*Instruction to DP – please put all words underlined in bold.*

| |
|---|
| **Panellist intro** |
| You've been chosen to take part in our latest questionnaire, which will take about 20 minutes and is worth £2 in Bonusbond vouchers [Amazon vouchers]. |
| As we're keen to hear from specific types of people, it's important that we start by asking you a few questions about yourself to see if you're eligible to take part. |
| Please click 'Next' to begin. |
| Our research is anonymous and confidential and in line with the Market Research Society (MRS) Code of Conduct. We are an MRS Company Partner. |
| **SSI sample intro** |
| Welcome, and thank you for agreeing to take part in this survey! |
| As we're keen to hear from specific types of people, it's important that we start by asking you a few questions about yourself to see if you're eligible to take part. |
| Please click 'Next' to begin. |
| Our research is anonymous and confidential and in line with the Market Research Society (MRS) Code of Conduct. We are an MRS Company Partner. |

| |
|---|
| **SCREENING QUESTIONS** |
| Ask all |
| **S1. Do you currently hold a valid UK driving licence?** |
|     1) Yes     → Go to A1 |
|     2) No     → Thank and end |
| Ask all |
| **A1. When did you pass your driving test?** |
| month_____ year_____ |
| *Instruction to DP: Please screen out all respondents that insert a date earlier than September 2008, if date is earlier please thank and end survey.* |
| Great, you're exactly the type of person we're keen to hear from! |
| This survey will take approximately 20 minutes to complete and is part of a project investigating drivers' experiences after passing their driving test. |
| Please note, all the information you provide in this survey will be kept strictly confidential. Furthermore, the information will not be used for anything other than this research. By clicking "next" you are agreeing to your responses in this survey being passed on to the client who will be named at the end of the survey. |
| We hope you find this survey interesting and we appreciate your input into this important study. |

1

## A. YOUR EXPERIENCE OF LEARNING TO DRIVE

Ask all

**A2. How much time elapsed between when you first started learning to drive and passing your driving test?**

Single response

1) Less than 1 month
2) 1-3 months
3) 4-6 months
4) 7-9 months
5) 10-12 months
6) 13-15 months
7) 16-18 months
8) More than 18 months

Ask all

**A2.1 During this time, how many lessons did you have with a driving instructor?**

1) None
2) 1-5
3) 6-10
4) 11-20
5) 21-30
6) 31-40
7) 41-50
8) More than 50

**A2.2 Also during this time, approximately how many hours additional driving did you do with supervising drivers (e.g. parents, other family, friends etc.)**

Text box

Ask all

**A3. How many attempts did you take to pass the practical driving test?**

Single response

1) 1
2) 2
3) 3
4) 4
5) 5+

Ask all

**A4. How many attempts did you take to pass the video hazard perception section of the theory test?**

Single response

1) 1
2) 2
3) 3
4) 4
5) 5+

2

Ask all

A5. How many attempts did you take to pass the <u>multiple-choice</u> section of the theory test?

Single response

1) 1
2) 2
3) 3
4) 4
5) 5+

Ask all

A6. Approximately how many miles have you driven since you passed your test?

Single response

1) Less than 100 miles
2) 101 - 500 miles
3) 501 - 1,000 miles
4) 1,001 – 5,000 miles
5) 5,001 - 10,000 miles
6) More than 10,000 miles

Ask all

A7. Do you also hold any of these licences?

Please tick all that apply

Multiple response

Yes

1) Provisional UK motorcycle licence
2) Full UK motorcycle licence
3) Foreign car licence
4) Foreign motorcycle licence
5) Licence for driving large vehicles (e.g. buses, HGVs)

No

6) I have none of these

## B. YOUR EXPERIENCE SINCE PASSING THE TEST

Thanks for your answers so far! This next section is about your experiences since passing your driving test.

Ask all

B1. Have you taken part in any further driver training since passing your test? Please indicate what further training you have taken, if any:

Please tick all that apply

Multiple response

Yes

1) Pass Plus
2) Any training with the IAM (e.g. Momentum, Skill for Life, Skills days)
3) Any training with the BSM (e.g. refresher course)
4) Any training with RoSPA (e.g. RoSPA Advanced Drivers and Riders)

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5) Any training with DIAmond (e.g. DIAmond advanced driving)

6) Other (please specify)

**No**

7) I have not taken part in any further driver training since passing my test

---

Ask all

**B2. Do you regularly drive for work, or to and from work?**

Single response

1) Yes, I am a professional driver (e.g. taxi driver)
2) Yes, I drive during work (e.g. sales person)
3) Yes, I drive to and from my place of work (e.g. commuting only) and/or occasionally driving for work
4) No, I do not use my car for work at all

---

Ask all

**B3. How many times have you been flashed by a speed camera since passing your test?**

Single response

1) 0
2) 1
3) 2
4) 3+

---

Ask all

**B4. How many times have you been stopped by the police since passing your test?**

Single response

1) 0
2) 1
3) 2
4) 3+

---

Ask all

**B5. How many penalty points do you have on your licence?**

Single response

1) 0
2) 1-3
3) 4-6
4) 7-9
5) 10+

---

Ask all

**B6. How many accidents, regardless of blame, have you been involved in as a driver since passing your test?**

Single response

1) 0
2) 1
3) 2
4) 3+

---

Ask all

B7. How likely do you think you are to be involved in accidents in the future, compared with the average

4

driver?

Single response

| Much less likely | | | | | About the same | | | | | Much more likely |
|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

Ask all

**B8.** How skilful do you think you are compared with the average driver?

Single response

| Much less skilful | | | | | About the same | | | | | Much more skilful |
|---|---|---|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

Ask all

**B9.** Please rate the extent to which you agree or disagree with each statement.

Single response

| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| B9a. | When I passed my driving test I felt fully prepared for driving on my own | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9b. | Passing the driving test was easy | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9c. | I was scared to drive on motorways after passing my test | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9d. | I find it stressful parking in busy car parks | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9e. | I get nervous when driving | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9f. | If taking part in further training saved me money on my car insurance, I would definitely do it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9g. | I don't like driving at night when it is dark | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9h. | I would enjoy driving a long distance journey | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9i. | I think new drivers should have to display 'P-plates' for 6 months after passing the driving test | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9j. | I get nervous about driving in bad weather | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9k. | All drivers should have to do further training after the driving test | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9l. | I don't need any further training as a driver | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| B9m, | As a car driver I worry that I will be in an accident | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

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| B9n. | As a car driver I worry that I will cause an accident | □1 | □2 | □3 | □4 | □5 |
|------|------|------|------|------|------|------|
| B9o. | As a car driver I worry about being injured in an accident | □1 | □2 | □3 | □4 | □5 |
| B9p. | As a car driver I worry that someone else may cause me to be involved in an accident | □1 | □2 | □3 | □4 | □5 |
| B9q. | As a car driver I worry about being killed in an accident | □1 | □2 | □3 | □4 | □5 |
| B9r. | As a car driver I worry that I will injure someone else in an accident | □1 | □2 | □3 | □4 | □5 |

## C. FURTHER DRIVER TRAINING

Thanks for your opinions so far, they're really important to us!

In this section, we would like you to answer some questions about different types of driver training.

The section is split into 3 sub-sections which focus on different types of driver training:

1. Training that provides experience of a wide range of road and traffic situations
2. Training of vehicle control skills
3. Training to develop anticipation and safer attitudes to driving

A description of each type of training is given in each section.

| | 1. Training that provides experience of a wide range of road and traffic situations |
|------|------|
| | This first sub-section refers to driver training that gives drivers experience of driving in situations that they may not have covered when learning to drive.<br><br>The focus of such training is on developing areas of driving that are not necessarily experienced before the driving test such as driving on motorways, at night and in bad weather. The training helps to introduce the driver to these situations so that key hazards can be highlighted. |
| C1. | Ask all<br><br>1. Training that provides experience of a wide range of road and traffic situations<br><br>If easily available and affordable I would take this kind of training within the next...<br><br>Single response<br><br>   1) 12 months<br>   2) 1-3 years<br>   3) 3-5 years<br>   4) 5+ years<br>   5) I would never take this type of training |
| C2. | Ask all<br><br>1. Training that provides experience of a wide range of road and traffic situations<br><br>Please state your level of agreement or disagreement with each of the following statements, in relation to the type of training described...<br><br>Single response |

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| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| C2a. | This type of training should be compulsory for all drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2b. | Finding this kind of training in my local area would be difficult | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2c. | This kind of training probably doesn't make drivers any safer, as they just use their skills to drive faster | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2d. | If I did this kind of training, my friends would think it was a waste of time | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2e. | Most drivers do not need this type of training, so it should be up to individual drivers if they take it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2f. | It would be easy for me to find training of this kind in my local area | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2g. | Most people who take this kind of training do not end up as better drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2h. | My friends would approve of me taking this type of training | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2i. | If all drivers had this kind of training after they passed their driving test, the roads would be safer | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C2j. | This type of training would make most people who took it better drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

| C3. | Ask all |
|---|---|

1. Training that provides experience of a wide range of road and traffic situations

If you were to take this type of training, how do you think it should be delivered?

Please rank in order of suitability with 1 being the most suitable and 4 being the least.

*Drag and drop the 4 types of training in to the boxes below.*

Options:

1) e-learning (e.g. online tools, video based tasks)
2) in car – off road (e.g. with an instructor on a track)
3) in car – on road (e.g. with an instructor in live traffic)
4) classroom (e.g. discussion groups led by a facilitator)

---

2. Training in vehicle control skills

This second sub-section refers to driver training that is designed to help you improve your general vehicle control skills such as cornering, accelerating, and braking. It may also involve training to control the vehicle in a skid.

In this type of training, drivers are taught various techniques to improve their ability to control the physical movement of the vehicle, such as cornering, accelerating and braking, and perhaps controlling the vehicle in specific critical situations such as controlling skids.

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| C4. | Ask all |
|---|---|
| | 2. Training in vehicle control skills |
| | If easily available and affordable I would take this kind of training within the next... |
| | Single response |
| | 1) 12 months |
| | 2) 1-3 years |
| | 3) 3-5 years |
| | 4) 5+ years |
| | 5) I would never take this type of training |

| C5 | Ask all |
|---|---|
| | 2. Training in vehicle control skills |
| | Please state your level of agreement or disagreement with each of the following statements, in relation to this type of training... |
| | Single response |

| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| C5a4. | This type of training should be compulsory for all drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5b. | Finding this kind of training in my local area would be difficult | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5c. | This kind of training probably doesn't make drivers any safer | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5d. | If I did this kind of training, my friends would think it was a waste of time | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5e. | Most drivers do not need this type of training, so it should be up to individual drivers if they take it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5. | It would be easy for me to find training of this kind in my local area | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5g. | Most people who take this kind of training do not end up as better drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5h. | My friends would approve of me taking this type of training | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5i. | If all drivers had this kind of training after they passed their driving test, the roads would be safer | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C5j. | This type of training would make most people who took it better drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

| C6. | Ask all |
|---|---|
| | 2. Training in vehicle control skills |
| | If you were to take this type of training, how do you think it should be delivered? |
| | Please rank in order of suitability with 1 being the most suitable and 4 being the least. |
| | Drag and drop the 4 types of training in to the boxes below. |
| | Options: |
| | 1) e-learning (e.g. online tools, video based tasks) |

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2) in car - off road (e.g. with an instructor on a track)
3) in car - on road (e.g. with an instructor in live traffic)
4) classroom (e.g. discussion groups led by a facilitator)

---

3. Training to develop anticipation and safer attitudes to driving

This third sub-section refers to driver training that seeks to improve your ability to anticipate hazards and teach you how to be safer as a driver by ensuring you understand risks on the road.

This type of training might focus on all or some of the following:

- Improving skills to anticipate hazards;
- Give drivers insight into their limitations;
- Highlight key dangers;
- Inform how to drive defensively to avoid dangerous situations developing.

| C7. | Ask all |
|---|---|

3. Training to develop anticipation and safer attitudes to driving

If easily available and affordable I would take this kind of training within the next...

Single response

1) 12 months
2) 1-3 years
3) 3-5 years
4) 5+ years
5) I would never take this type of training

| C8 | Ask all |
|---|---|

3. Training to develop anticipation and safer attitudes to driving

Please state your level of agreement or disagreement with each of the following statements, in relation to this type of training...

Single response

| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| C8a. | This type of training should be compulsory for all drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8b. | Finding this kind of training in my local area would be difficult | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8c. | This kind of training probably doesn't make drivers any safer | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8d. | If I did this kind of training, my friends would think it was a waste of time | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8e. | Most drivers do not need this type of training, so it should be up to individual drivers if they take it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8f. | It would be easy for me to find training of this kind in my local area | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8g. | Most people who take this kind of training do not end up as better drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8h. | My friends would approve of me taking this type of training | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C8i. | If all drivers had this kind of training after they | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

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| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| | passed their driving test, the roads would be safer | | | | | |
| C8j. | This type of training would make most people who took it better drivers | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| C9. | Ask all<br><br>3. Training to develop anticipation and safer attitudes to driving<br><br>If you were to take this type of training, how do you think it should be delivered?<br><br>Please rank in order of suitability with 1 being the most suitable and 4 being the least.<br><br>*Drag and drop the 4 types of training in to the boxes below.*<br><br>Options:<br><br>    1) e-learning (e.g. online tools, video based tasks)<br>    2) in car – off road (e.g. with an instructor on a track)<br>    3) in car – on road (e.g. with an instructor in live traffic)<br>    4) classroom (e.g. discussion groups led by a facilitator) | | | | | |

## D. OWNING AND DRIVING A CAR

You're over half way through now...

This next section is an interesting one all about owning and driving a car.

Although there are a lot of questions which ask you to think about different statements, please remember that every answer you give is important and will be used in the results of this research.

---

Ask all

**D1. Do you have regular access to a car?**

Single response

**Yes**

And, who owns the car you have regular access to?

1) I do
2) My partner
3) My parents
4) My employer
5) Other (please specify)

**No**

6) I do not have regular access to a car

---

Ask all those who ticked codes 1-5 at QD1

**D2. Please rate the extent to which you agree or disagree with each statement.**

Single response

| | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|
| | | | | | |

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| D2a. | If I could, I would gladly do without driving | □1 | □2 | □3 | □4 | □5 |
| D2b. | I couldn't manage without access to a car | □1 | □2 | □3 | □4 | □5 |
| D2c. | The car I drive says something about who I am | □1 | □2 | □3 | □4 | □5 |
| D2d. | I drive less in response to higher fuel prices | □1 | □2 | □3 | □4 | □5 |
| D2e. | I believe I am too dependent on the car | □1 | □2 | □3 | □4 | □5 |
| D2f. | My level of car use contributes to an unhealthy lifestyle | □1 | □2 | □3 | □4 | □5 |
| D2g. | A car is essential for the sort of life I lead | □1 | □2 | □3 | □4 | □5 |
| D2h. | I value the freedom that the car gives me | □1 | □2 | □3 | □4 | □5 |
| D2i. | I drive more carefully because of the cost of insurance | □1 | □2 | □3 | □4 | □5 |

Ask all

D3. Please rate the extent to which you agree or disagree with each statement.

Single response

| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|---|---|---|---|---|---|---|
| D2a. | A car provides status and prestige | □1 | □2 | □3 | □4 | □5 |
| D2b. | I would like to own a larger or faster car | □1 | □2 | □3 | □4 | □5 |
| D2c. | I generally find driving stressful | □1 | □2 | □3 | □4 | □5 |
| D2d. | The cost of insurance prevents me from driving the car I really want | □1 | □2 | □3 | □4 | □5 |
| D2e. | I don't like driving | □1 | □2 | □3 | □4 | □5 |
| D2f. | Driving gives me a chance to express myself | □1 | □2 | □3 | □4 | □5 |
| D2g. | I would pay more for a car with lower running costs | □1 | □2 | □3 | □4 | □5 |
| D2h. | I enjoy driving on my own | □1 | □2 | □3 | □4 | □5 |
| D2i. | It doesn't matter to me which type of car I drive | □1 | □2 | □3 | □4 | □5 |
| D2j. | The cost of insurance puts me off driving | □1 | □2 | □3 | □4 | □5 |
| D2k. | Getting good fuel economy when I drive gives me satisfaction | □1 | □2 | □3 | □4 | □5 |
| D2l. | You can tell something about a person by what car he/she has | □1 | □2 | □3 | □4 | □5 |

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| D2m. | I like to drive just for the fun of it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| --- | --- | --- | --- | --- | --- | --- |
| D2n. | I would love to drive in the newest sports car | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| D2o. | I feel entitled to choose to drive a car rather than use public transport | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| D2p. | I think it is bad to use a car for very short journeys | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

## E. YOUR ATTITUDES TOWARDS DRIVING

Ask all

E1. Below are some more statements about various things to do with driving. Please indicate how much you agree or disagree with each statement.

Please remember, your answers are anonymous.

Single response

| | | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
| --- | --- | --- | --- | --- | --- | --- |
| E1a. | It is quite acceptable to drive after only one or two drinks | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1b. | On the whole people aren't aware of the dangers involved in close-following | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1c. | Even overtaking in a slightly risky situation makes you less safe as a driver | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1d. | I would be happier if the speed limits were more strictly enforced | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1e. | The aim of the police should be to stop as many drink drivers as possible | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1f. | People stopped by the police for risky overtaking are unlucky because lots of people do it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1g. | Harsher penalties should be introduced for drivers who drive too close to the car in front | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1h. | It's OK to drive faster than the speed limit as long as you drive carefully | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1i. | I know exactly what risks I can take when I overtake | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1j. | Random breath testing of drivers should be introduced | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1k. | People stopped by the police for speeding are unlucky because lots of people do it | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1l. | I think the stopping distances in the Highway Code are too great for people to take notice of them | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| E1m. | I would be happier if there was a clamp down on dangerous overtaking | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

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| | | Never | | | | | Nearly all the time |
|---|---|---|---|---|---|---|---|
| E1n. | Speeding is one of the main causes of road accidents | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |
| E1o. | I think I know exactly how much I can drink and still be under the limit | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |
| E1p. | It is quite acceptable to drive closer to the car in front than is recommended | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |
| E1q. | Sometimes you have to drive in excess of the speed limit in order to keep up with the flow of traffic | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |
| E1r. | I would favour a clamp down on drivers who drive too close to the vehicle in front | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |
| E1s. | Risky overtaking isn't really a serious problem at the moment | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |
| E1t. | The amount of alcohol you're allowed to drink before driving is too high | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 | |

## F. YOUR DRIVING BEHAVIOUR

Ask all

F1. No one is perfect. Even the best drivers make mistakes, do foolish things, or bend the rules at some time or another. For each item below please indicate how often, if at all, this kind of thing has happened to you.

Please base your judgements on what you remember of your driving over the last year and indicate your judgments by clicking one of the columns next to each item.

Single response

| | | Never | | | | | Nearly all the time |
|---|---|---|---|---|---|---|---|
| F1a. | Attempt to overtake someone that you hadn't noticed to be signalling a right turn | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1b. | Get into the wrong lane when approaching a roundabout or a junction | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1c. | Miss 'Stop' or 'Give Way' signs and narrowly avoid colliding with traffic having right of way | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1d. | Misread the signs and exit from the roundabout on the wrong road | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1e. | Fail to notice that pedestrians are crossing when turning into a side street from a main road | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1f. | Drive especially close to the car in front as a signal to its driver to go faster or get out of the way | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1g. | Forget where you left your car in the car park | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1h. | Queuing to turn left onto a main road, you pay such close attention to the main stream of traffic that you nearly hit the car in front | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1i. | Hit something when reversing that you had not previously seen | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1j. | Cross a junction knowing that the traffic lights have already turned against you | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1k. | On turning left nearly hit a cyclist who has come up on your inside | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F1l. | Disregard the speed limits late at night or very early in the morning | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1m. | Attempt to drive away from the traffic lights in third gear | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1n. | Fail to check your rear-view mirror before pulling out, changing lanes, etc. | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1o. | Have an aversion to a particular class of road user, and indicate your hostility by whatever means you can | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1p. | Become impatient with a slow driver in the outer lane and overtake on the inside | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1q. | Underestimate the speed of an oncoming vehicle when overtaking | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1r. | Switch on one thing, such as the headlights, when you meant to switch on something else, such as the wipers | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1s. | Brake too quickly on a slippery road, or steer the wrong way in a skid | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1t. | Intending to drive to destination A, you 'wake up' to find yourself on the road to destination B, perhaps because the latter is your more usual destination | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1u. | Drive even though you realise you may be over the legal blood-alcohol limit | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1v. | Get involved in unofficial 'races' with other drivers | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1w | Realise that you have no clear recollection of the road along which you have just been travelling | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| F1x. | Angered by another driver's behaviour, you give chase with the intention of giving him/her a piece of your mind | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

## G. YOUR DRIVING SKILL

Ask all

G1. Please estimate how skilful you are in each of the following aspects of driving.

Single response

| | | Below Average | | | Above Average | |
|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 |
| G1a. | Fluent driving (management of your car in heavy traffic) | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1b. | Performance in a critical situation | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1c. | Perceiving hazards in traffic | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1d. | Driving in a strange city | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1e. | Conforming to the traffic rules | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1f. | Managing the car through a skid | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1g. | Prediction of traffic situations ahead | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |

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| | | | | | | |
|------|------------------------------------------------------|-----|-----|-----|-----|-----|
| G1h. | Driving carefully | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1i. | Knowing how to act in particular traffic situations | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1j. | Fluent lane-changing in heavy traffic | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1k. | Fast reactions | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1l. | Making firm decisions | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1m. | Paying attention to other road users | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1n. | Driving fast if necessary | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1o. | Driving in the dark | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1p. | Controlling the vehicle | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1q. | Avoiding getting into competition with other drivers in traffic | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1r. | Keeping sufficient following distance | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1s. | Adjusting your speed to the conditions | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1t. | Overtaking | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1u. | Giving up your right of way when necessary | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1v. | Conforming to the speed limits | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1w. | Avoiding unnecessary risks | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1x. | Tolerating other drivers' blunders calmly | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |
| G1y. | Obeying the traffic lights carefully | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 |

## H. ABOUT YOU

You're almost at the end.

This section is simply about you and your opinions. Please be honest and remember that there are no right or wrong answers!

We want to find out your opinions not someone else's.

Ask all

H1. Below are some statements that may or may not describe you. Please indicate how well each of the

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| | | Not like me | | | Very Like me | |
|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 |
| H1a. | When the water is very cold, I prefer not to swim even if it is a hot day | □0 | □1 | □2 | □3 | □4 |
| H1b. | When I listen to music, I like it to be loud | □0 | □1 | □2 | □3 | □4 |
| H1c. | I stay away from movies that are said to be frightening or highly suspenseful | □0 | □1 | □2 | □3 | □4 |
| H1d. | If I were to go to an amusement park, I would prefer to ride the rollercoaster or other fast rides | □0 | □1 | □2 | □3 | □4 |
| H1e. | I would never like to gamble with money, even if I could afford it | □0 | □1 | □2 | □3 | □4 |
| H1f. | I like a movie where there are a lot of explosions and car chases | □0 | □1 | □2 | □3 | □4 |
| H1g. | In general, I work better when I'm under pressure | □0 | □1 | □2 | □3 | □4 |
| H1h. | I would find it interesting to see a car accident happen | □0 | □1 | □2 | □3 | □4 |
| H1i. | I like the feeling of standing next to the edge on a high place and looking down | □0 | □1 | □2 | □3 | □4 |
| H1j. | I can see how it must be exciting to be in a battle during a war | □0 | □1 | □2 | □3 | □4 |
| H1k. | I often think about doing things that are illegal | □0 | □1 | □2 | □3 | □4 |
| H1l. | I like the feeling that comes with taking physical risks | □0 | □1 | □2 | □3 | □4 |
| H1m. | While I don't deliberately seek out situations or activities that society disapproves of, I find that I often end up doing things that society disapproves of | □0 | □1 | □2 | □3 | □4 |
| H1n. | I often do things that I know my parents would disapprove of | □0 | □1 | □2 | □3 | □4 |
| H1o. | I consider myself a risk-taker | □0 | □1 | □2 | □3 | □4 |
| H1p. | Being afraid of doing something new often makes it more fun in the end | □0 | □1 | □2 | □3 | □4 |
| H1q. | I find the greater the risk the more fun the activity | □0 | □1 | □2 | □3 | □4 |
| H1r. | I like to do things that almost paralyse me with fear | □0 | □1 | □2 | □3 | □4 |
| H1s. | I do not let the fact that something is considered immoral stop me from doing it | □0 | □1 | □2 | □3 | □4 |
| H1t. | I often think about doing things that I know my friends would disapprove of | □0 | □1 | □2 | □3 | □4 |

**I. MORE ABOUT YOU AND YOUR DRIVING**

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Ask all

I1. The following statements are about you and your driving.

Please rate the extent to which you agree with them by clicking the appropriate marker on the scale.

Single response

|  |  | not at all |  |  |  |  |  |  |  |  |  | very much |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| I1a. | I would like to risk my life as a racing driver | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1b. | I like to frighten myself a little while driving | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1c. | I get a real thrill out of driving fast | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1d. | I enjoy listening to loud, exciting music while driving | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1e. | I like to raise my adrenaline levels while driving | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1f. | I would enjoy driving a sports car on a road with no speed limit | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1g. | I enjoy the sensation of accelerating rapidly | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1h. | I enjoy cornering at high speed | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| I1i. | In general I enjoy driving | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

## J. MORE ABOUT YOU

Ask all

J1. The following statements aim to find out more about you as a person. Please answer them honestly; there are no right or wrong answers.

For each statement please indicate how characteristic it is of you by clicking the appropriate marker on the scale.
Single response

|  |  | Very uncharacteristic of me | Moderately uncharacteristic of me | Neither characteristic nor uncharacteristic of me | Moderately characteristic of me | Very characteristic of me |
|---|---|---|---|---|---|---|
| J1a. | Starting a conversation with a stranger | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1b. | Making sure others are comfortable and happy | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1c. | Creating an artwork, piece of writing or music | ☐ | ☐ | ☐ | ☐ | ☐ |

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| | | | | | | |
|---|---|---|---|---|---|---|
| J1d. | Preparing for things well in advance | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1e. | Feeling blue or depressed | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1f. | Planning social events or parties | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1g. | Insulting people | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1h. | Thinking about philosophical or spiritual questions | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1i. | Letting things get into a mess | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1j. | Feeling stressed or worried | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1k. | Using difficult words | ☐ | ☐ | ☐ | ☐ | ☐ |
| J1l. | Sympathising with others' feelings | ☐ | ☐ | ☐ | ☐ | ☐ |

## K. YOUR TRAVEL PATTERNS

Ask all

**K1. How often, within <u>the past 12 months,</u> have you used each of the following types of transport for any kind of journey?**

Single response

| | | Never | Less than once a month | 1-3 days/ month | About 1 day/week | 2-4 days/week | 5-7 days/week |
|---|---|---|---|---|---|---|---|
| K1a. | ...car as a driver | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| K1b. | ...car as a passenger | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| K1c. | ...local bus, tram, tube | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| K1d. | ... train | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| K1e. | ...bicycle | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| K1f. | ...walk to/from a destination | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |
| K1g. | ...scooter/motorcycle | ☐0 | ☐1 | ☐2 | ☐3 | ☐4 | ☐5 |

## L. DEMOGRAPHICS

Well done, you've reached the final section which has just a few questions about who you are and where you come from...

Ask all *SSI sample*

**L1. Are you...**

Single response

1) Male
2) Female

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**Ask all**

**L2. What is your date of birth?**

DD/MM/YYYY

---

**Ask all**

**L3. Please tell us your highest educational qualification**

Single response

1) University Higher Degree (e.g. MSc; PhD)
2) First degree level qualification (e.g. BA; BSc; PGCE)
3) Diploma in higher education; HNC, HND, Nursing or Teaching qualification (excluding PGCE)
4) A Level; AS Level; NVQ Level 3; GNVQ Advanced or equivalent
5) GCSE; CSE, NVQ levels 1&2; GNVQ Foundation & Intermediate or equivalent
6) None of the above

---

**Ask all**

**L4. What is your employment status?**

Single response

1) Employed
2) Self employed
3) Unemployed and seeking work
4) Looking after family or home / not seeking work
5) Long term sick or disabled
6) Retired
7) In full time education
8) Other

---

**Ask all**

**L5. Please tell us your TOTAL personal annual or weekly income from all sources BEFORE tax and other deductions.**

Single response

1) Up to £9,999 per annum (£199 per week)
2) £10,000 to £19,999 per annum (£200 - £389 per week)
3) £20,000 to £29,999 per annum (£390 - £579 per week)
4) £30,000 to £39,999 per annum (£580 - £769 per week)
5) £40,000 to £49,999 per annum (£770 - £969 per week)
6) £50,000 to £74,999 per annum (£970 - £1,449 per week)
7) £75,000 to £99,999 per annum (£1,450 - £1,959 per week)
8) £100,000 to £149,999 per annum (£1,960 - £2939 per week)
9) £150,000 or more per annum (£2,940 or more per week)
10) I would rather not answer

---

**Ask all**

**L6. Are you...**

Single response

1) Married/Civil partnership
2) Living with a partner
3) Separated/ Divorced
4) Widowed
5) Living alone
6) Living with parents

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7) Other

Ask all
**L7. And the final question.......**

And the final question....

**What is your home postcode?**

(e.g. AB25 3XB) _____ / _____

This is really important data for us because it allows us to ensure that we capture a good geographical spread. Please be assured that this information will ONLY be used for this research and will be kept strictly confidential.

*By filling in the box above you are agreeing to this information being forwarded on to the client, the Transport Research Laboratory, who will only use the data for analysis purposes. If you would rather not answer this question then please leave it blank and click "next" to continue.*

**Text box**

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# Appendix B  Detailed description of analyses and raw data tables

## B.1  Factor analysis

Sets of questions were defined for factor analysis based on the questionnaire structure as follows:

B9a-k, B9l-r, C2, C5, C8, D2&3, E1, F1, G1, H1a-j, H1k-t, I1, J1

Principal axis factor analysis was applied to each set of questions and selected an appropriate number of factors based on scree plots, eigenvalues and a sense check on the interpretation.  Where necessary, factor solutions were rotated to produce the most interpretable solution.

The reliability of each factor was tested using Cronbach's alpha for internal consistency. Factors which had an alpha value lower than 0.6 were removed and the questions were treated separately in the analysis.

## B.2  Variable reduction

The list of variables and factors after factor analysis remained too long for a robust discriminant analysis.  Therefore further tests were carried out to reduce the number of variables and factors. Chi-squared and Kruskal-Wallis tests were used to determine significant associations between each factor or variable and the variable of interest: Intention to take training.

## B.3  Discriminant analysis

Factors and variables which were significantly associated with the intention to take training variables were included in the discriminant analyses.  Initial discriminant functions were based on dichotomous versions of the 'Intention to take training' variables – subjects were classified as 'intend to take training' (in any timescale) or 'do not intend to take training'. These functions were tested using leave-one-out classification with prior probabilities computed from group sizes.

# A segmentation of novice drivers in Great Britain: Factors associated with intention to take advanced driver training

**TRL**

It is known that novice drivers find driving immediately after passing their practical driving test stressful, and that this presents an opportunity for those organisations who offer post-licence training. The Institute of Advanced Motorists commissioned TRL to carry out a segmentation of novice drivers in terms of their stated intentions to engage with post-test training. One thousand and seven novice drivers aged between 17 and 30 in Great Britain completed an online survey measuring various attitudinal, behavioural and demographic factors, as well as their stated intentions to engage in further training of three different types (training providing extra experience of a wide range of driving situations; training in vehicle control skills; training designed to encourage hazard anticipation skills and better attitudes). The analyses showed that compared to those novice drivers who have no intention to take further training, those who do are more nervous about driving, report more violations and general errors when driving, report positive attitudes towards the benefits and peer acceptance of training, and are more motivated by saving insurance costs through training. For 'experience' and 'anticipation and attitudes' training, those intending to engage had also driven less since passing their practical test; for 'experience' and 'vehicle control' training, those intending to engage had taken fewer attempts to pass their practical test. Recommendations made include changing the focus of marketing novice driver products to reducing nervousness, violations and errors, and reducing insurance costs (if possible). Ways of identifying likely customers are also recommended.

## Other titles from this subject area

INS005    How can we produce safer new drivers? S Helman, G B Grayson and A M Parkes. 2010

TRL673    Monitoring progress towards the 2010 casualty reduction target – 2008 data. J Broughton and J Knowles. 2010

PPR522    Cross-modal safety: risk and public perceptions – phase 2 report. D Lynam, J Kennedy, S Helman and T Taig. 2010

PPR513    Linking accidents in national statistics to in-depth accident data. D C Richards, R E Cookson and R W Cuerden. 2010

PPR498    Further analyses of driver licence records from DVLA. J Broughton and B Lawton. 2010

PPR446    The potential for cycle helmets to prevent injury – a review of the evidence. D Hynd, R Cuerden, S Reid and S Adams. 2009