

Passion, Performance, Practicality: Motorcyclists' Motivations and Attitudes to Safety

Abstract

Motorcyclists were segmented into seven groups based on their motivation for riding. This was on the basis of qualitative research with riders and a survey of riders. Clear patterns were established in different segments' understandings of risk, and their approaches to dealing with it. The study specifically focused on patterns in self-reported decisions about motorcycles, helmets and safety gear (both decisions to purchase and decisions about what to wear), and approaches to avoiding fatigue. However, the segmentation has potential application across a wide range of safety issues.

Main findings

Seven segments of riders were identified – groups of riders sharing characteristic patterns of motivation linked to clear ways of understanding and managing the risks associated with riding. A conceptual model was developed for the seven segments and the riders' passion for motorcycling and their relationship to performance were measured. This process was used to describe and quantify their riding behaviour.

- **Performance disciples** (8.3%). These are committed, all-year riders with a total focus on high performance riding – and a strong dislike for anything that gets in the way of it. Risk model: precautionary fatalism.
- **Performance hobbyists** (14.7%). These are solitary, summer-only riders, for whom riding is all about individual experiences and sensations – and who are not concerned about what other riders are doing. Risk model: cautious attraction.
- **Riding disciples** (16.3%). These are passionate riders for whom riding is a way of life, built on a strong relationship with the bike itself and membership of the wider fraternity of riders. Risk model: active management of risks.
- **Riding hobbyists** (14.5%). These are older, summer-only riders who enjoy the social interaction with other riders almost as much as the riding itself – and who like to look the part. Risk model: personal responsibility for avoiding risk.
- **Car rejecters** (10.1%). These are escapees (a higher proportion of women than in any other segment) from traffic jams, parking tickets, fuel costs and other problems associated with car use – who don't care for motorcycles, but do care for low-cost mobility. Risk model: high awareness and high unhappiness.
- **Car aspirants** (11.2%). These are young people looking forward to getting their first car when age/finances allow – but for the time being are happy to have got their own wheels. Risk model: low awareness but high educability.
- **Look-at-me enthusiasts** (24.8%). These are young (or never-grew-up) riders with limited experience but limitless enthusiasm, for whom riding is all about self-expression and looking cool. Risk model: blasé confidence.

Background

From the mid 1990s, motorcycling became increasingly popular in Great Britain, with motorcycle traffic increasing by approximately 50% between 1996 and 2003, although this has levelled off in more recent years. Comparing different road users' accident rates by kilometre travelled highlights that motorcyclists are at a much greater risk of being killed or seriously injured (KSI), approximately 50 times that for car drivers.

Motorcyclists constituted 19% of all road traffic deaths in Great Britain in 2008 and, as a result, motorcycle safety is one of the key areas of concern of the Department for Transport and others responsible for road safety.

This study was commissioned to provide a better understanding of the needs, motivations and perspectives of motorcyclists themselves with respect to road safety. The research programme set out: 'To gain an understanding of motorcyclists' attitudes to safety and the reasons behind the decisions that impact on their safety.'

More specifically, the objectives of the study were to explore:

- how riders choose their bikes
- how riders choose their protective clothing and helmets (including knowledge of and attitudes to SHARP)
- how riders plan/prepare for their journeys
- whether rider fatigue is perceived as an issue and if so in what circumstances
- what riders feel are contributors and countermeasures to rider fatigue
- where riders get their safety information from (websites, magazines, peers etc).

Research findings

The key output of this work is a segmentation of motorcyclists by motivation, based on qualitative and quantitative research.

Motorcyclists are a highly diverse group, with widely differing attitudes to safety and decision-making strategies. Unhelpful stereotypes of motorcyclists also exist, which often serve to cloud this diversity.

This project has developed a segmentation of riders based on their own descriptions of their motivations for riding and attitudes to risk. Seven segments (groups of riders sharing characteristic patterns of motivation) are described.

A division of the riding universe into seven evidence-based motivational segments is, of course, an imperfect simplification of the real world. But it is a considerably better simplification than anecdotally based stereotypes of those who ride. In order to frame and implement policies that will work for riders, policy-makers need some way of getting a handle on what riding and its associated risks mean to them.

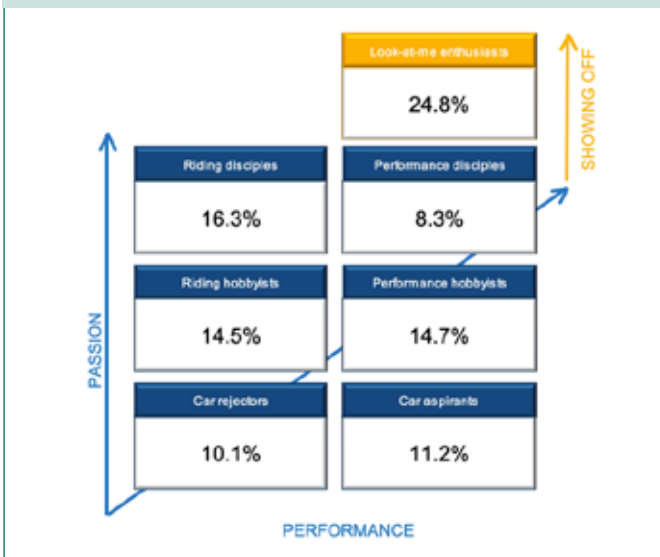
Segments

Seven groups of riders were identified, broadly distinguished by their differing levels of passion and their relationship to the performance aspects of riding (mechanical and personal):

- **Performance disciples.** These are committed, all-year riders with a total focus on high performance riding – and a strong dislike for anything that gets in the way of it.
- **Performance hobbyists.** These are solitary, summer-only riders, for whom riding is all about individual experiences and sensations – and who are not concerned about what other riders are doing.
- **Riding disciples.** These are passionate riders for whom riding is a way of life, built on a strong relationship with the bike itself and membership of the wider fraternity of riders.
- **Riding hobbyists.** These are older, summer-only riders who enjoy the social interaction with other riders almost as much as the riding itself – and who like to look the part.
- **Car rejecters.** These are escapees (a higher proportion of women than in any other segment) from traffic jams, parking tickets, fuel costs and other problems of car use – who don't care for motorcycles, but do care for low-cost mobility.
- **Car aspirants.** These are young people looking forward to getting their first car when age/finances allow – but for the time being just happy to have got their own wheels.
- **Look-at-me enthusiasts.** These are young (or never-grew-up) riders with limited experience but limitless enthusiasm, for whom riding is all about self-expression and looking cool.

While a seven segment solution may prove unwieldy, it reflects the real diversity of riders. It is possible to combine segments for specific purposes (policy development, communications etc.) – see Figure 1.

Figure 1: Riders classified into segments



- **Riding disciples: active management of risks:** highly conscious of potential risk in riding, take active steps to manage it by responsible riding behaviour and use of gear.
- **Riding hobbyists: personal responsibility for avoiding risk:** highly conscious of risk, tendency to avoid potentially risky situations altogether, and to emphasise rider’s responsibility for risks.
- **Car rejecters: high awareness and high unhappiness:** very sensitive to the risks of riding, and see this as a strong argument against riding.
- **Car aspirants: low awareness but high educability:** tend not to think about the risks of riding and as a result may not take steps to manage them; but signs that they will take steps when the risks are pointed out to them.
- **Look-at-me enthusiasts: blasé confidence:** recognise risks of riding in general, but see themselves as relatively safe; plus strong tendency to see risk as part of what makes riding fun, and to engage in risky behaviours.

Segments and accident propensity

Scores for accident propensity were calculated and some clear patterns were identified:

- On the two different measures (accidents-per-year or accidents-per-mile), Riding disciples and Riding hobbyists have a relatively low accident propensity. Both have mean accident propensity scores significantly lower than the overall mean.
- Performance disciples have a higher accident propensity, although in part this is because of a higher annual mileage.
- Car aspirants and Look-at-me enthusiasts have the highest accident propensity on either measure. Both have mean accident propensity scores significantly higher than the overall mean.
- While not as risky, Car rejectors and Performance hobbyists also have somewhat higher accident propensities – although lower annual mileages mean they may not have accidents as often as Performance disciples.

Models of risk

Patterns were apparent in the ways in which different segments thought about and managed the risks associated with riding. These can be summarised as follows:

- **Performance disciples: precautionary fatalism:** see risk as unavoidable negative of riding but tend not to think about it all the time – emphasis on personal skill and armour as responses to risk.
- **Performance hobbyists: cautious attraction:** see risk as part of what makes riding fun, but very circumspect about own abilities to deal with risks, leading to caution in behaviour.

Recommendations

The segmentation was used to explore specific areas of current policy interest. However, its potential application is far wider.

Safety features on motorcycles

With respect to rider motivation and risk perception associated with the choice of motorcycle, Car aspirants, Car rejectors and Riding hobbyists are the segments most open to considering safety features in their selection of a bike.

Safer helmets and gear

The real challenge in promoting safer helmets and gear is not to sell the importance of safety, but to influence perceptions of what is safe enough.

Car aspirants pose particular challenges in respect of their judgements of what is safe enough, not least because they are a transitory riding population with limited budgets and, we believe, a tendency not to think about the risks of riding.

Look-at-me enthusiasts, which represent nearly a quarter of the riding population, create unique challenges for the promotion of any safety messages. Although they do place great importance on safety in the selection of a helmet and safety gear, it is striking that looks rank highly in both choices as well.

The particular risk attitudes apparent in Look-at-me enthusiasts also might lead to concern

about whether they set the bar high enough when deciding what is safe enough: they remain the segment least likely to hesitate about riding in jeans and a T-shirt.

An approach to the promotion of safety which is not purely factual and utilitarian, but instead taps into the motivations and interests of this group may help to break through to this critical segment of riders.

Fatigue

The project identified fatigue as an issue facing Performance disciples, who are more likely to experience both fatigue by and fatigue before riding. Also affected are Performance hobbyists and Look-at-me enthusiasts, both of which appear to mirror the patterns of fatiguing behaviour found in Performance disciples but in a less extreme (and therefore not statistically significant with respect to the mean) way. (With regard to riding after too many drinks the night before, Look-at-me enthusiasts set the extreme and the other two segments follow close behind). When combined, these three segments account for 14 of the 18 reported accidents or near accidents due to fatigue.

The debate about whether using strong coffee or caffeine drinks to wake up is a good idea or not seems currently to be a debate between those who need to use such stimulants and those who don't. Given the relationship between fatigue and segments with a high interest in performance, the best way to disseminate best practices in fatigue management is almost certainly through training-based routes, which emphasise enhancing personal performance as much as increased safety.

Conclusions

The project has delivered a significant dataset, which has been interrogated successfully to describe motorcycle riders' characteristics, attitudes and self reported decisions with respect to choice of motorcycle, helmet and safety gear, and avoiding fatigue. The dataset contains significant amounts of other information which is available to future research projects if required.

About the project

The project comprised both qualitative and quantitative components. The qualitative phase was designed to yield an understanding of the motivations behind the decisions that have an impact on riders' safety. The insights gained in this phase were then validated by a quantitative study, using structured questionnaires, which helped give definition to the various user and attitudinal groups. A total sample of 1,019 riders were recruited and interviewed and form the basis for the core of the report's findings.

Thirty 'motivations to ride' statements from the questionnaire were factor analysed, and an eight factor solution selected, which best described the key motivations identified in the qualitative research. Using these factors, a seven segment solution was then selected, again guided by qualitative findings.

The qualitative evidence was critical in the selection of factors and segmentation solutions, and in the interpretation of segment profiles. The critical test here was whether constructs that made mathematical sense also made sense as a way of describing and differentiating the riders who had been engaged directly, and the many things they had said about their motivations and perceptions of risk.

Further information

The full report, **Passion, Performance, Practicality: Motorcyclists' Motivations and Attitudes to Safety** by S. Christmas, D. Young, R. Cookson and R. Cuerden, is published by TRL (PPR442). To order the full report as a priced publication, contact: TRL, enquiries@trl.co.uk, or download a free copy from www.trl.co.uk

If you would like to be informed in advance of forthcoming Road Safety Research Reports, please e-mail road.safety@dft.gsi.gov.uk

Although this research was commissioned by the Department for Transport, the findings and recommendations are those of the authors and do not necessarily represent the views of the DfT.