

Evaluation of the National RIDE Scheme

Final Report

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Executive Summary

Motorcycle riders are over-represented in road casualty statistics: it is estimated that they are 51 times more likely to be involved in a collision than car drivers. While this is partly due to riders facing different demands on their skills, there is evidence that many take inappropriate risks while riding. As the number of motorcycle riders is increasing, there is a growing need to address the “violational” riding styles that some riders display.

The National RIDE Scheme is a one-day course that involves presentations by instructors and group discussions around the risks they face on the road. It can be offered to riders as an alternative to prosecution for offences committed under Section 3, Section 39 and excess speed (non-camera) of the Road Traffic Act. The main RIDE objectives are to increase awareness of current riding behaviour and engender a positive and responsible approach to motorcycling. The course encourages clients to continue to ride their motorcycle, but to examine their individual attitudes and motivations, their approach to risk, to probe their beliefs surrounding inappropriate riding behaviour, to consider the positive effects and benefits of mindset change, and then to maintain these positive changes after course completion. The course employs a mix of information exchange, demonstrations and facilitated group discussion.

The evaluation has a mixed methods design, with both quantitative and qualitative components. The quantitative research is an online questionnaire survey, and has pre-course (T_1) and post-course (T_2) measures collected from RIDE course clients and compares them with those from a Control group who did not experience any formal intervention between the time points. A total of 551 riders participated in the quantitative research: 304

who had undertaken RIDE (the RIDE group) and 255 who had not (the Control group). In addition, the RIDE participants completed a brief follow-up questionnaire at the end of the riding season that asked about the changes they had made to their riding. The qualitative data were collected from interviews and focus groups with RIDE clients and tutors. A total of four focus groups and semi-structured interviews were held with RIDE clients. None of the tutors were present during discussions, and participants were encouraged to speak freely about their riding and about the course. One took place directly after a course, and the remaining three took place several months afterwards.

RIDE participants had very positive responses to the course, with nearly all reporting that it gave them a better understanding of the hazards riders face on the roads (92%), that it provided them with information and knowledge to help them ride more safely (96%), and that they are confident that they can apply what they have learned on the course (95%). They also agreed or strongly agreed that the course helped them to identify their own bad riding habits (80%) and that they had acquired new skills that will help them become a safer rider (75%). A total of 82% reported that the course will change their riding.

Three themes were identified in the qualitative data that describe riders' experiences of the course. The first was about how the atmosphere of the course facilitated learning from the tutors and from other clients. Clients were surprised that they were not chastised or patronised during the course, and they appreciated the knowledge and experience of the tutors. The second is about how the participants were expecting the course to focus on skills and techniques that would make them a safer rider, and that it would provide them with practical skills, and how this expectation was not met. They had assumed that any course to make them safer must be based around giving them practical skills, and had not considered that it is more important to explore their own attitudes and motivation for riding and how this influences the risks they are prepared to take. The third theme is about the extent to which clients found RIDE an acceptable alternative to points

and a fine. It includes their perceptions of the difficulties associated with the booking process, those aspects of the course that they felt were more and less appropriate, and their high level of appreciation of the course overall.

The RIDE course successfully moves clients along the Stages of Change, indicating that they are more receptive to the possibility that a change in their riding behaviour to become safer is required and this attitude is retained over the period between T_1 and T_2 . In contrast, Control respondents appear less receptive at T_1 and, although the initial intervention may have encouraged them to consider the possibility of change, this is largely dismissed and the respondents report slipping back into their old ways. Without the RIDE course to inform, encourage and reinforce the decision to ride more safely, the desire for change is short-lived.

In accordance with this, RIDE clients report greater appropriate changes in speed preference in general and specifically in 30mph areas. In 60mph areas, RIDE clients report more appropriate speed preferences following the course at T_2 than Controls over the same period. RIDE clients also report lower speeds in specific riding locations following course attendance and leave larger safety margins between their hypothetical maximum speed and their 'normal' riding speed on such stretches of road. In addition, RIDE clients report braking sharply less frequently, in both urban and rural areas, perhaps an indication that they ride more slowly or are now planning their riding better, are able to better anticipate the behaviour of other road users and/or leave larger safety margins and thus allow themselves more time to respond to prevailing road conditions.

RIDE clients also record more appropriate change in Deviant Beliefs and Norms scores at T_2 than do Control respondents. Differences in Motivation Volition scale scores were in the anticipated direction, though these approached but did not achieve statistical significance and so should be treated with caution. No reliable differences in Thrill Culture or Susceptibility Control scale scores were evident. In summary, attendance on the RIDE

course appears to have reinforced the belief that riding outside the law increases the risks involved in motorcycling. RIDE clients have modified their attitudes towards law-breaking, indicating that they are less likely after course attendance to behave in a deviant, high-risk manner.

At follow-up nearly all the RIDE participants (95% of responders) reported they had changed their riding, and examples they gave were around riding more slowly and more cautiously as they were more aware of potential hazards, and of how their behaviour affects others.

Results from the focus groups and interviews provide insight into how these changes may have been achieved. Three themes were identified in the data. The first theme describes how riders protest that they are not at risk on the road, and that their riding behaviour did not merit a course invitation. They feel that other road users misunderstand them, and that they are victimised by the police and the public. They believe that they are more skilled than car drivers, and so can legitimately ride in ways that others perceive as being risky, and that it is other riders, rather than themselves, who are the problem. The RIDE course clearly addresses these perceptions and encourages riders to question these beliefs. The second theme (Risk is the whole point!) describes how riders know that riding a motorcycle is risky, and that the thrill they experience as a result is one of the principal motivations for riding. As such it directly contradicts the previous theme. RIDE addresses these aspects by helping clients to examine their motivation for riding, and to make better decisions about risks. The third theme (Changed perceptions) describes the successes of the RIDE scheme: how it has achieved a change in riders' perceptions about risks, and their intentions to make small changes in their riding that have the potential to reduce their risk on the road. It describes how riders have gained insight into others' experiences and viewpoints, how it has given them a wake-up call, and how they have been able to apply what they learnt.

Interviews with RIDE tutors support riders' reports of the course and the changes that they have made to their riding. All the tutors believe that the RIDE scheme is effective in raising riders' awareness of the hazards they face on the roads. While they did not report that the course usually produces fundamental changes in the way that clients perceive risk or ride their bikes, they talked about relatively small changes that may nevertheless help riders to make better decisions about risks while they are riding. Tutors were aware that riders would always be tempted to speed, but believed RIDE provides clients with some protection from this.

1 Background

There is a current trend in the UK of increasing powered two-wheeler (PTW) ownership and use (Department for Transport, 2006; MCIA, 2007; Sexton, Hamilton, Baughan, Stradling & Broughton, P., 2006). During the period from 1996 to 2003, the number of PTWs on the UK's roads increased by almost 50% (Christmas, et al., 2008). Killed and serious injury (KSI) collisions rose from 5717 in 1996 to 6255 in 2004 (Department for Transport, 2006), a rise of nearly 10% at a time when there was a reduction in collisions for other road users (Department for Transport, 2004). In 2007, 24,381 riders of PTWs were injured in collisions on the UK's roads, and 588 were killed, representing 22% of all road traffic deaths in the UK (Department for Transport, 2008). Given that PTWs make up only 1-2% of traffic per 1,000 miles travelled (Sexton, et al., 2004), it is estimated that riders of PTWs are 51 times more likely to suffer a road traffic collision than car drivers per mile travelled (Christmas et al, 2008).

The profile of causation factors for collisions that involve PTWs differs from that for other motorised road vehicles (Clarke, Ward, Bartle & Truman, 2004). This is partly due to the types of manoeuvre that motorcyclists can perform which other vehicles cannot execute, such as overtaking without crossing the centre line and filtering through traffic. The acceleration and cornering characteristics of PTWs also differ from other road vehicles. Furthermore, PTWs in general are less visible than other road users. Preusser, Williams, and Ulmer (1995) estimated that these factors alone contributed to 85% of fatal PTW crashes.

Mannering and Grodsky (1995) suggested that riding a PTW might attract 'thrill seeking' individuals, as riding is considered riskier than other forms of transport (Broughton, 2005; Department for Transport, 2006). Evidence from car drivers confirms that 'thrill seeking' is related to unsafe high speed (e.g. Jonah, 1997; Fylan et al., 2005) and this may also hold for PTW use. Excessive speed has been implicated in a substantial proportion of KSI

crashes involving PTWs (e.g. Broughton, 2005; Clarke, et al., 2004; Clarke, et al., 2007), as has riding after drinking alcohol (Lynam et al., 2001).

A further difference between car driving and motorcycle riding lies in typical trip purpose. Transport joins up the places where people go to meet their obligations (Stradling, 2003). Most current safety initiatives are founded on the assumption that the goal of road users is to fulfil their trip purpose – work, shop, enjoy a social occasion and so on – safely. However a transport mode may serve an expressive as well as a practical function (Steg, Vlek & Slotegraaf, 2001; Stradling, Meadows & Beatty, 2001; Broughton & Stradling, 2005). Compared to driving, riding a PTW has a higher level of expressive functionality (Broughton & Stradling, 2005), with many recreational bikers going out “just for a run”, often without a specific destination in mind except eventually to arrive back home safely (Broughton, 2007). As a substantial number of riders ride as a leisure activity and as the profile of crashes suffered by leisure road users is different from functional road users (Broughton & Walker, 2009; Walker, 2007; Walker & Page, 2004), this is another factor that differentiates PTW riders from other road users. For this “A–A” rather than “A–B” riding, the goal of the trip is found in the manner of riding rather than the destination.

Table 1 (from Broughton, Fuller, Stradling, Gormley, Kinnear, O’Dolan & Hannigan, 2009) summarises some of the differences in task demand for car drivers and PTW riders that may contribute to their substantial differences in crash rate.

Thus both the motivation for mode use and the difficulty of doing so may be somewhat different for PTW riders and car drivers, and aberrant riding behaviour such as failing to pay due care and attention to the riding task, may require targeted methods of remediation akin to, but not exactly the same as, those employed in the educational remediation of drivers such as Speed Awareness courses and Driver Improvement (now Driver Alert) programmes.

Table 1: Task demand differences between PTW riders and car drivers

<i>Vehicle characteristics</i>	
1. PTW less stable when braking, especially hard braking and on bends	Fuller et al. (2007)
2. PTW poorer forward visibility under headlights	Perei, Olson, Sivak & Medlin (2005)
3. Easier for a PTW to modify speed and trajectory	Broughton & Walker (2009); Cossalter, 2006
<i>Road environment</i>	
4. PTW more vulnerable to deterioration in surface adhesion (wet, oil, ice, gravel)	Broughton (2007); Institute of Highway Incorporated Engineers (2005)
5. PTW more vulnerable to variable surface (drain, pot-hole, metal plate, road marking)	Broughton, P. (2007); Institute of Highway Incorporated Engineers (2005)
6. PTW more vulnerable to bad weather, e.g. high winds and cold conditions	Haworth & Rowden (2006); RoSPA (2006)
<i>Behaviour of other road users</i>	
7. PTW more vulnerable to being undetected (at junctions, overtaking)	ACEM (2004); Clarke, Ward, Truman & Bartle (2003)
<i>Human factors</i>	
8. PTW rider more vulnerable to effects of alcohol	Syner & Vegega (2001); Huang & Preston (2004)
9. PTW rider more vulnerable to effects of fatigue	Haworth & Rowden (2006)
<i>Immediate influences on risk threshold</i>	
10. Motivation for 'flow' state may imply narrow safety margin (demand level approaching upper capability level)	Fuller et al, (2007)
11. Flow state may delay attention switching initiated by changed conditions.	Broughton, P. (2007)
12. PTW rider more likely to be involved in expressive riding	Mannering & Grodsky (1995); Sexton, Baughan, Elliot & Maycock (2004); Jamson (2004)
<i>Decision and response</i>	
13. PTW may use change in road position in maintaining task difficulty	Coyne (1996)

Sexton et al (2004) suggest that the most important behavioural contribution to collision involvement, after miles travelled, is the reported frequency of errors, but these authors go on to note that:

“These errors occur in a context that suggests they may be closely linked with riding styles involving carelessness, inattention and excessive speed – i.e. styles that might be termed *violational*. ” (Sexton et al, 2004, p.1)

Confronting such violational riding styles could contribute to a reduction in motorcycle casualties and in order to tackle this issue, the UK government, local government and police agencies investigated alternatives to traditional prosecution for dealing with road traffic offenders riding PTWs.

Having been identified by a police officer as a result of their inappropriate riding behaviour, clients attending RIDE courses may be considered more behaviourally deviant than the “average” PTW rider and more likely to be involved in a collision resulting in injury. Therefore, it is likely that these are the most vulnerable PTW riders, the “crash magnets” most likely to contribute to future casualty statistics.

The RIDE diversion from prosecution scheme

Riders who have been involved in a road traffic incident in which there is good evidence that they have committed an offence under Section 3, 39 or excess speed (non camera) of the Road Traffic Act, 1988 (i.e. driving or riding without due care and attention or without reasonable consideration for other road users) are now often offered the option of attending an education course as an alternative to prosecution. The National RIDE Scheme is a one-day course that involves presentations by instructors and group discussions around the risks they face on the road. The main RIDE objectives are to increase awareness of current riding behaviour and engender a positive and responsible approach to motorcycling. The course

encourages clients to continue to ride their motorcycle, but to examine their individual attitudes and motivations, their approach to risk, to probe their beliefs surrounding inappropriate riding behaviour, to consider the positive effects and benefits of mindset change, and then to maintain these positive changes after course completion. The course employs a mix of information exchange, demonstrations and facilitated group discussion.

The RIDE course is structured using a stage of change model: Prochaska and DiClemente's (1983) "Transtheoretical Model", also known as the Stages of Change model. This was initially derived from the drug addiction literature, although many different behavioural change interventions to address a variety of problem behaviours have been based on this model (see Prochaska et al, 1992, for a review). The model proposes five stages through which the individual must pass if lasting behavioural change is to be achieved. The first, "**Precontemplation**", reflects the individual's ignorance of the problem; they have never considered that the problem exists. The second, "**Contemplation**" stage signals the individual's realisation that, not only is there a problem, but that they are a part of that problem and that it is likely to affect them in a significant way. In the "**Preparation**" stage, the individual decides whether or not they ought to do something to reduce the likelihood that they will become a part of the problem. The individual needs to be persuaded that it is in their personal best interests to do so. The "**Action**" stage describes how the individual takes action to avoid the problem behaviour, and the "**Maintenance**" stage offers ways to avoid slipping back into their old habits. A successful intervention must embrace each one of these stages or it is more likely to fail. While the model has been criticised for its lack of evidence (e.g. West, 1995) it nevertheless provides a valuable framework upon which to structure evidence-based behavioural change techniques.

The RIDE course is designed to cover each stage and to provide the offender with a personalised action plan, based on the material presented during the day. The aim of the course is to encourage riders to modify the way they ride, not because they feel they must, but because they want to.

Table 2: Stage of Change model

<i>Stage of Change</i>	<i>Attitude</i>	<i>Cognition</i>
Precontemplation	Unaware of issue	Maybe there's a problem
Contemplation	Unengaged by issue	Maybe I'm a part of that problem
Preparation	Deciding about acting	Maybe that's a bad thing
Deciding not to act	Deciding to act	How does it happen?
Action	Changing inappropriate behaviour	What can I do about it?
Maintenance	Maintaining new behaviour	How can I keep doing that?

The intention is to remove any justification by clients for continuing to ride their bikes in the way they were seen to by the police, and to give them every reason to change. Reflecting on whether or not an intervention has been successful it may be useful to bear in mind that, unless targeted individuals reach the 'Action' stage, no modification of inappropriate behaviour will have been achieved. The Stages of Change model is summarised in Table 2 (taken from Prochaska et al., 1992).

The main RIDE objectives are to:

- increase awareness of current riding behaviour and
- engender a positive and responsible approach to motorcycling.

Through a series of classroom-based theory sessions, the one-day course encourages clients to continue to ride their motorcycle, but to:

- examine their individual attitudes and motivations;
- examine their approach to risk;
- probe their beliefs surrounding inappropriate riding behaviour;
- consider the positive effects and benefits of mindset change; and then
- maintain these positive changes after course completion.

The course employs a mix of information exchange, demonstrations and facilitated group discussion to achieve these outcomes using psychological mechanisms, rather than the traditional skills-based training approach. It draws on the evidence-based procedures of Cognitive Behaviour Therapy to challenge the way course clients think, feel and behave when riding.

The National RIDE Scheme is based on a standardised course model and borrows course content and methods of delivery from two separate interventions:

1. The Rider Risk Reduction scheme, initiated by Devon County Council and Devon & Cornwall Police, and running in Devon since 2004.
2. An intervention commissioned by the DfT Casualty Reduction Forum and created through the Multi Agency Steering Group by Lancashire County Council Road Safety Group.

RIDE is now an ACPO-approved model for local authorities and police services that wish to offer a diversionary scheme for motorcycle offenders in their own areas. The National RIDE launch was in September 2007 and currently eight police services employ the scheme, making referrals to service providers, who deliver the courses.

This report describes the result of an independent evaluation of the RIDE scheme, investigating the effects of course attendance on motorcycle offenders attending RIDE courses in four police areas between 2008 and 2010: Devon and Cornwall; Humberside; Lancashire; and Kent. The study investigates changes in behavioural intentions, control beliefs, normative beliefs, knowledge and motivation to ride safely. Changes achieved in a sample of RIDE course clients are compared with a Control group who did not attend a course.

2 Methods

The study reported here is a mixed methods design, with both quantitative and qualitative components. The quantitative research is an online questionnaire survey, and has pre-course (T_1) and post-course (T_2) measures collected from RIDE course clients and compares them with those from a Control group who did not experience any formal intervention between the time points. Participants completed pre-course (T_1) and post-course (T_2) questionnaires between March 2008 and August 2010. For RIDE participants, T_1 was completed within two weeks prior to attending the RIDE course. Participants completed T_2 questionnaires 6-8 weeks after completing T_1 . A brief longer-term follow-up measure (T_3) collected data from only the RIDE group, contacting respondents at the end of the 'riding season' in October, usually several months after attendance on the RIDE course. Of the 55 RIDE clients responding to the invitation to complete the questionnaire, over 90% completed these measures between 7 and 13 months post-course.

The qualitative data were collected from interviews and focus groups with RIDE clients and tutors. A total of four focus groups and semi-structured interviews were held with RIDE clients. None of the tutors were present during discussions, and participants were encouraged to speak freely about their riding and about the course. One took place directly after a course, and the remaining three took place several months afterwards. Clients were recruited from three different providers. Semi-structured interviews were held with five RIDE tutors from four different providers. To protect participants' anonymity, demographic details are not provided for participants taking part in the qualitative research.

Focus groups and interviews were analysed thematically according to the methods of Braun and Clarke (2006). Our research questions were to understand riders' responses to the course, including how it might have achieved any changes in attitudes towards risks and intentions to ride more

safely and responsibly in the future, and any actual change in their riding that had occurred since the course. We also explored their engagement with the course and their perceptions of its acceptability as an alternative to prosecution. Text were broken down into units of meaning then grouped together into themes and sub-themes that explain their experiences of and responses to the course.

2.1 Participants

A total of 551 riders participated in the quantitative research: 304 who had undertaken RIDE (the RIDE group) and 255 who had not (the Control group). The RIDE group was recruited from four different course providers: Devon (116); Humberside (115); Kent (68); and Lancashire (5).

Identifying an appropriate control group can be problematic when working with driver and rider offender groups, as those riders willing to take part in road safety research are also likely to be more safety-oriented. The Control group was therefore recruited from several different sources, as shown in Table 3, overleaf.

Response rates to the T₂ questionnaire were higher in the Control group (51%) than in the RIDE group (33%). Responders tend to be older than non-responders (43.1 vs 40.2 yrs; $t = 3.13$, $df = 544$, $p = 0.002$), ride further each year (closer to 5-6,000 miles vs closer to 4-5,000 miles; $z = -2.26$, $p = 0.024$), have held their motorcycle licence for longer (median 10-14 yrs vs 5-9 yrs; $z = -3.64$, $p < 0.001$) and ride motorcycles with larger capacity engines (median 1000cc vs 900cc; $z = -2.59$, $p = 0.010$). However, no differences were found in crash involvement on a motorcycle or penalty points on the licence, either from motorcycle offences or whilst operating other vehicles.

Table 3: Details of the Control group

<i>Type of control group</i>	<i>Number</i>
Normal controls: recruited through bike forums, mailing lists, word of mouth, newspaper and magazine adverts.	145
Hearts and Minds: Had a casual conversation with a police officer or road safety professional.	44
Fixed penalty notice: issues with a fixed penalty ticket as a result of an offence committed while on a motorcycle.	28
Skills-based course: participated in a skills-based course offered by Somerset County Council at Castle Combe racetrack.	30
Refusers: had been offered a place on a RIDE course and chosen not to attend.	5
Informal warning: given an informal warning by a police officer who had observed their riding.	3

In addition, there were several differences between RIDE and Control participants:

- RIDE participants were slightly younger (mean age of 38.4 years) than Control participants (mean age of 45.6 years).
- Fewer of the RIDE group were female (3%) than the Control group (12%).
- RIDE participants were more likely to report having penalty points on their licence (48.0%) than the Control group (37.5%).
- RIDE participants were twice as likely to report having a conviction in the previous two years (20.6%) than the Control group (10.4%). For those who reported a conviction there were no differences in whether the offence was committed on a bike, car, or another vehicle.
- RIDE participants were more likely to have crashed in the past two years (16.7%) than the Control group (11.1%).

- There was a trend for RIDE group participants to be slightly less experienced than the Control group, having passed their bike test more recently.
- There was a trend for the RIDE group to be more likely to have smaller engines as found in sports bikes than the Control group, who were more likely to report having larger engine bikes, such as found in cruisers.

However, there were no differences between the groups in the number of miles travelled annually, or whether they had ever been involved in a crash (RIDE group 40.4%, Control group 39.6%). There were no differences in the number who knew someone who has died in a bike crash (RIDE group 55.9%, Control group 55.1%) or has been seriously injured in a bike crash (RIDE group 71.3%, Control group 67.0%).

These differences between the RIDE and the Control groups suggest that the RIDE group has a less positive attitude towards safe and responsible riding than the Control group. It is therefore important to track the change in responses over time, rather than to make a direct comparison between groups.

Response rates to the T₃ measures were predictably low (18.1 %). However, there were no reliable differences between responders and non-responders for any of the recorded personal information or riding history variables.

2.2 Procedure

All measures were completed using an online survey, with respondents using their driving licence number to login to the system, thereby allowing T₁ and T₂ measures to be linked. All respondents were invited by email or post to complete the measures, though completion was presented to RIDE

clients as a condition of course attendance, so response rates for this group at the pre-course (T_1) time-point was 100%. An email request to complete the follow-up (T_2) measures was sent to RIDE clients four weeks after confirmation from service providers of successful course completion, while Control respondents were asked to complete the T_2 measures six-to-eight weeks after completion of the T_1 measures. Thus, the period between measures was approximately six to eight weeks for both groups.

2.3 Measures

Responses to the course

At T_2 RIDE participants were asked about their perceptions of the course, including the extent to which it provided them with information that will help them stay safe on the road, and gave them a better understanding of the hazards riders face on the road.

Self-reported behaviour

Riding behaviour measures included preferred speeds, maximum speed that would be travelled on different types of road, and margins for exceeding the speed limit.

Stages of Change

Based on the Stages of Change model, a single item asked respondents to what extent they had changed their behaviour or, if not, whether they intended to do so in the future.

Behavioural predictors

The questionnaires contained a series of items developed for this study assessing respondents' motorcycling-related attitudes and motivations, as described below.

- behavioural beliefs (four items; e.g. "obeying all speed limits and traffic laws is a sign of a good rider");
- motivation to ride safely (4 items; e.g. "I want to stay safe on the roads");
- knowledge (ten items; e.g. "poor weather conditions contribute to most bike crashes", such items are recoded so that higher score is safety-appropriate), control beliefs (4 items; e.g. "I could ride safely if I wanted to");
- susceptibility to collision involvement (6 items; e.g. "I can break a few road traffic laws and still stay safe on the road");
- norms (4 items; e.g. "my mates expect me to break a few road traffic laws");
- thrill-seeking (3 items; e.g. "I sometimes like to frighten myself a little when I'm riding")

Because the internal reliabilities of these attitudinal scales tended to be unacceptably low, a factor analysis of the combined group data at T₁ (n=547) was carried out, using principal axis factoring and a varimax (orthogonal) rotation. The scree test suggested a five-factor solution, accounting for 47.4% of the variance in the data. Internal reliabilities for the scales derived from these factors are substantially higher than the original scales reported above and so it is these measures that are employed in the later analyses. These are described below.

Deviant Beliefs

This scale has nine items and accounts for 17.4% of the variance. It reflects beliefs about riding styles, and higher scores indicate a greater tendency to ride in a high-risk manner.

Motivation volition

This scale has four items and accounts for 10.7% of the variance. It reflects motivation around staying safe, and higher scores indicate a greater motivation to ride safely.

Thrill culture

This scale has three items and accounts for 8.3% of the variance. It reflects the personal and social influences on the individual relating to risk, and higher scores indicate a greater tendency for thrill-seeking.

Susceptibility control

This factor has four items and accounts for 6.3% of the variance. It reflects perceptions of being in control of the risks associated with riding. Higher scores indicate a greater sense of control.

Norms

This factor contains three items, and accounts for 4.6% of the variance. It reflects perceptions of how other people expect you to ride. Higher scores on this measure indicate that other people have greater influence over the rider for high-risk riding.

Results

The results are presented in six sections. The first section explores clients' responses to the RIDE course, and it combines data from both qualitative and quantitative components. The second section describes clients' self-reported behaviour, and how it has changed since the course. The third section identifies changes in Stage of Change of clients and controls. The fourth section reports changes in behavioural beliefs. The fifth section explores clients' responses to RIDE. The final section reports RIDE tutors' views on the course.

3.1 Responses to the course

RIDE participants had very positive responses to the course, with nearly all reporting that it gave them a better understanding of the hazards riders face on the roads (92%), that it provided them with information and knowledge to help them ride more safely (96%), and that they are confident that they can apply what they have learned on the course (95%).

Slightly fewer agreed or strongly agreed that the course helped them to identify their own bad riding habits (80%) or that they had acquired new skills that will help them become a safer rider (75%).

A total of 82% reported that the course will change their riding.

Participants also had very positive perceptions of the instructors, with 98% agreeing or strongly agreeing that the instructors were very knowledgeable, and 94% that the instructors cared about their future wellbeing. The majority (61%) believed the course provided good value for money.

Three themes were identified in the qualitative data that describe riders' experiences of the course: that there was a very positive atmosphere during the course; that there was an unmet desire for practical skills training; and that RIDE is an acceptable alternative to points and a fine. These are

described in detail below, and are illustrated with quotes from the interviews and focus groups.

3.1.1 Positive atmosphere

This theme is about how the atmosphere of the course facilitated learning from the tutors and from other clients. Clients were surprised that they were not chastised or patronised during the course, and they appreciated the knowledge and experience of the tutors. It comprises three sub-themes: exchange of views; not patronising; and knowledgeable tutors.

Exchange of views

Participants discussed how the course had provided an atmosphere that was positive and enabled them to exchange views and share experiences. Several discussed how they believed this to be the most valuable aspect of the course. Rather than this being “swapping tales” it was a forum in which they learned from one another, and through their exchanges they gained insight into how others ride. The tutors were central to this process as they were able to create an environment in which the riders felt able to share their thoughts and experiences.

The guys in the discussion were comfortable enough to share. There were plenty of personal stories, and things that they said. Nobody was embarrassed or offended, and the tutors were really good.

This exchange of views gave riders insight into their own motivations for riding, and why they ride in a particular way.

It was interesting to hear the guys’ attitudes, opinions, and to have an opportunity to think about it for a whole day was really good.

Participants identified that the instructors were central to developing and maintaining the very positive atmosphere, and unobtrusively managed to reign clients back in when the conversations became less constructive.

The course leaders easily managed to bring it back to the topic without ever needing to be authoritarian or demonstrate an ability to wield the big stick.

Female clients described how the discussions were very inclusive, and even those who were the only female on the course were made to feel that their input was important.

It wasn't specifically aimed at men or women. It felt inclusive even though I was the only female. It was aimed at everyone.

Engaging, not patronising

Participants discussed how they had assumed that the day would consist primarily of them being told off, told that they were wrong, and that their behaviour was unacceptable. They were therefore pleasantly surprised that they were not continually chastised over the course of the day. They had anticipated that the tutors would patronise them, and they would be expected to adopt the role of a badly behaved school child.

I went on the course expecting to be told I'd been a bad boy.

I expected the tutors to be headmaster-like, wielding a big stick, stereotypical things.

Instead, they described an open atmosphere in which they were able to express their views without fear of being judged or told off. The tutors

successfully engaged clients, and did not make them feel they were being patronised, harangued, or victimised.

It's been pretty good: they haven't victimised us, which is good

Yes, they didn't speak down to us.

Participants were pleased that they did not feel patronised at all throughout the course.

They certainly weren't patronising, which I came here thinking that somebody might be patronising towards me and they weren't.

This has resulted in clients being more open to learning new things and to examining their attitudes and behaviours. In some cases participants described how they had been initially resistant, but the tutors were able to overcome this. While a more authoritarian approach would have been unlikely to achieve any learning, the openness of the course enabled clients to reconsider their riding behaviour.

In fairness, the course has been better than I thought it would have been. I came really angry this morning, thinking they were just harassing on us and picking on us, etc, etc, but to be fair they have come across a bit more friendly and yes I will take something away for me.

Knowledgeable tutors

Riders noted that the course tutors were very knowledgeable, and had experiences of riding themselves. This gave them credibility, so that the clients were more open to listen to what they had to say. Participants also

appreciated their use of humour to lighten some of the discussions and learning points.

They engaged us like humans. One was a rider himself and the other used to be a rider so they knew where we were coming from. They used humour and personal experience. They were comfortable and knowledgeable in what they were delivering.

However, one of the participants questioned whether it was necessary to have two tutors to deliver the course. They assumed that the cost of the course could have been lower if there were only one tutor, and since there were only a few clients on the course, they believed that one tutor would have been sufficient.

Both of the tutors were very good. I did have a complaint: one of my complaints was that there were two tutors for seven people. Why did we need two tutors? If I were going on a work-related course and there were two tutors for seven people, the first thing I'd be saying is hang on, as a business man, you're charging me too much money, you don't need two tutors on a course like that.

The need for such experienced and highly qualified tutors was also questioned. While the participant noted that this added credibility to the course, they suggested that any experienced rider could have delivered the material.

I respect the backgrounds they come from, but I don't think you needed the backgrounds they came from to go over the content of that course. Any suitable outsider could have delivered the same course content. For example one of the tutors was an ex crash-scene investigator, worked for the police for so many years, and the other was an ex advanced motorcycle rider instructor. I don't think you needed to be as qualified as those people are to deliver the course. It does have credibility to have a crash scene investigator to give you examples of where crashes have happened, but it doesn't need that: a normal person could give the same examples.

3.1.2 Desire for practical skills training

This theme is about how the participants were expecting the course to focus on skills and techniques that would make them a safer rider, and that it would provide them with practical skills, and how this expectation was not met. It comprises two sub-themes: skills to be safer; and practical tips.

Skills to be safer

Some of the participants described how they had expected the focus of the course to be giving them riding skills that would make them safer. Several had attended previous courses that had involved a practical element, and talked about how they had enjoyed this. For example, in the following quote the participant is discussing a Driver Improvement Scheme that he had attended, which had involved a ride with an instructor.

Part of it was showing us a video, and it wasn't as good as this [RIDE] actually, and the second part of it, in the morning, was actually I was the only rider and I came out on my bike with somebody, like an advanced driver for half a day and he followed me and just gave me advice. It was quite good, actually.

Other clients had attended voluntary practical training, and discussed how it was very useful, and wondered if the RIDE course would be better with a practical assessment. This quote is from a client discussing their ideas for how to improve the course. This client clearly believes that a practical assessment is the best way for him to improve his riding.

A practical thing, without a doubt. I AM run a course, I did it about two months ago, a three quarters of a day course, spent the morning in the classroom and in the afternoon it was a skills assessment when you ride for about 20 minutes and then an instructor

critiques your riding, and then you ride for another 20 minutes to apply what you've learnt. I came away from that course, all run by volunteers, and I learnt more in one hour, any one of those hours on that course, than the who eight or nine hours of the RIDE course..... I could be a much safer rider by doing that IAM course.

Some clients would choose a course that includes a practical element over the RIDE course, although only in the summer when the weather is likely to be suited to riding. They wanted feedback on their riding, as illustrated in the following exchange.

In the summer for me if they had said to me "Right I will give you an option to go on a course and it's a bike safe course with riding skills" that would have been preferable to me than this.

Yes I agree.

Yes, getting you out there and actually seeing you riding.

Yes, and getting some advice on what bad habits you have got.

Clients discussed how the RIDE course could have included a practical ride on their bikes in the afternoon, although some noted that this would have increased the cost of the course. They also went on to discuss that feedback on riding would not be acceptable to all clients as some find it difficult to respond constructively to criticism.

This absence of practical training is therefore rather confusing to many of the clients, as they had associated safe riding with practical riding skills. These clients have not previously considered the importance of attitudes in the decisions that they make while riding.

Practical tips

Participant riders also described how they had expected to be given more practical tips than they had received. While they noted that the course included scenarios that involved the dangers of not being seen by drivers, they wanted practical tips on how they can increase their visibility, and to have more control over how drivers behave.

I think there's a lot of standard scenarios they could put in, approaching a T-junction. What do look out for.

They were also unsure how they could apply some of what they learnt. The following quote illustrates that not all clients recognised that the information on the course was to encourage them to reassess the risks that they face on the road and the decisions that they make while riding.

There's a lot on the brain can only process so many pieces of information. You don't need to know that, you're always continually assessing the risks and what's going to happen next. If there's seven risks you don't think I can only process five of them.

3.1.3 Acceptability

This theme is about the extent to which clients found RIDE an acceptable alternative to points and a fine. It includes their perceptions of the booking process, those aspects of the course that they did not feel were appropriate, and their appreciation of the course overall.

Booking onto the course

While riders were pleasantly surprised at how the tutors engaged with them, treated them as "real human beings" and did not treat them as

criminals, they did not experience this approach when booking the course. They found the process inflexible, and found it difficult to contact the providers. Some described how they had been transferred several times before getting through to the appropriate person. They also wanted a choice of course dates. Some riders noted that it would be useful to have courses running at weekends, as they have to take a day off work, and for those who are self-employed this has financial implications. They thought the course was quite expensive, particularly as the fee does not include lunch.

For £85 we might have been fed at lunchtime, maybe, even a sandwich. I know it may sound petty, but why not.

Plus having to take time off work, some of us have had to take a days' holiday, so it is a very expensive day isn't it.

Content

Apart from the debate about including practical training on the course, riders also discussed the appropriateness of different sections. Overall, there was support for the course content, and most riders recognised that the aim was to remind them of the risks and hazards they face. However, some identified sections of the course that were less useful. Most commonly, this was the section on clothing, as illustrated in the following quote.

There were six or seven sessions on the course, and one was on safety clothing, what sort of things you should look for when buying helmets, that sort of thing. There were seven experienced motorcyclists on the course and they gave some examples of what you should and shouldn't wear, like you shouldn't go out riding shorts and T-shirts. The sort of person who goes out riding wearing shorts and T-shirts is the 17, 18 year old scooter rider as opposed to a grown adult. There was a lot on what to look for when buying a helmet but the sort of person who goes on that course doesn't go down the market and buy a cheap helmet. If you're spending £8000 on a motorcycle you're going to buy a helmet with a credible make. I don't expect to look for the kite mark because

I'm buying a reputable make from a reputable retailer. So you don't need to look for the kite mark. I just felt the whole 45 minute session on safety clothing was unnecessary.

Appreciation

Overall, most clients appreciated the course and believed that they had benefited from it. There was a lot of discussion around the impact that licence points have, and most clients agreed that points are not an effective means of changing their riding.

I don't think points and a fine have a lasting impression. You get the points and you carry on exactly as you were so you are not going to change us doing that. I have been done for speeding before, and I have still got caught speeding again.

The only time clients thought points would have an effect is if they have accumulated so many points they are at risk of losing their licence. Some noted that they need their licence for their work, so they face a big financial loss if they were to be banned. Others discussed how they really enjoy riding, and wouldn't want to be in a situation where they could not ride.

I have got to the point now where I have been nicked three times and it hasn't affected me, it hasn't stopped me speeding. But now that I know the next time that I get stopped they are going to take the car or the bike off me, that is the point where it makes a difference.

Some discussed how even if they had received the points, the day would still have been useful.

Even if I'd still got the points, the day would still have been valuable.

One of the focus group participants summed up the feeling of their group. The RIDE course is clearly an acceptable alternative to points and a fine.

I just want to say thanks for giving us the opportunity of this course rather than the three points.

3.2 Stages of Change

The rider's self-reported Stage of Change is an indication of their readiness to change their risky behaviour for less risky alternatives. It is anticipated that clients attending the RIDE course will move further along the Stages of Change than those in the control group.

However, it should be noted that an intervention has already taken place by the time respondents complete the T_1 measures. The RIDE group had encountered the police officer who referred them to the course. The control group participants have had a variety of contact: some participants (the Hearts and Minds group) had the friendly chat with a police officer, the skills-based course attendees had been in contact with course instructors, control group participants recruited via biker forums will have heard about the course but not had any contact with a police officer, and control group participants who received a fixed penalty will have discussed the incident with the attending police officer. This initial intervention may have influenced respondents' motivation to change their riding style to become safer. We have termed this the ' T_0 effect'.

Figure 1: Stage of Change at T₁, by group

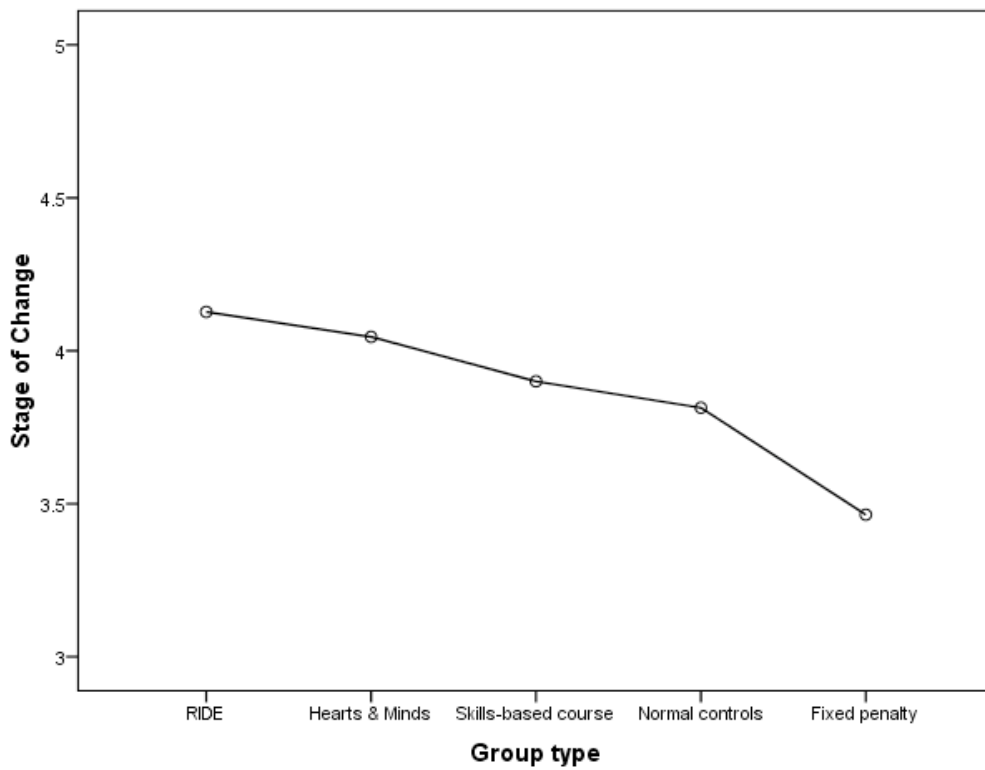


Figure 1 shows the stage of change at T₁, demonstrating significant differences in respondents' willingness to consider the need to change his/her riding style to become more safe (main group effect, $F_{4,541}=3.19$, $p=.013$). It should be noted that a score of 4 indicates the 'Action' stage, suggesting that respondents recording this score have already started trying to change their riding style and wish to continue to change over the next six months. A comparison of the 'positive' intervention groups (RIDE, Hearts & Minds, skills-based course) against no intervention or negative intervention groups (normal controls, fixed penalty) reveals a significant difference, with the former firmly in the Action stage and the latter, particularly the Fixed Penalty group, less willing to consider changing their riding style to become safer ($F_{1,540}=6.56$, $p=.011$).

These data suggest that an initial encounter that is positive initiates a greater willingness to change than a negative encounter or none at all. In order for change to occur, the rider must be willing to accept that change is required. Once riders have accepted that change is required and have initiated the process of changing their riding behaviour, the opportunities for guiding those changes are substantially increased.

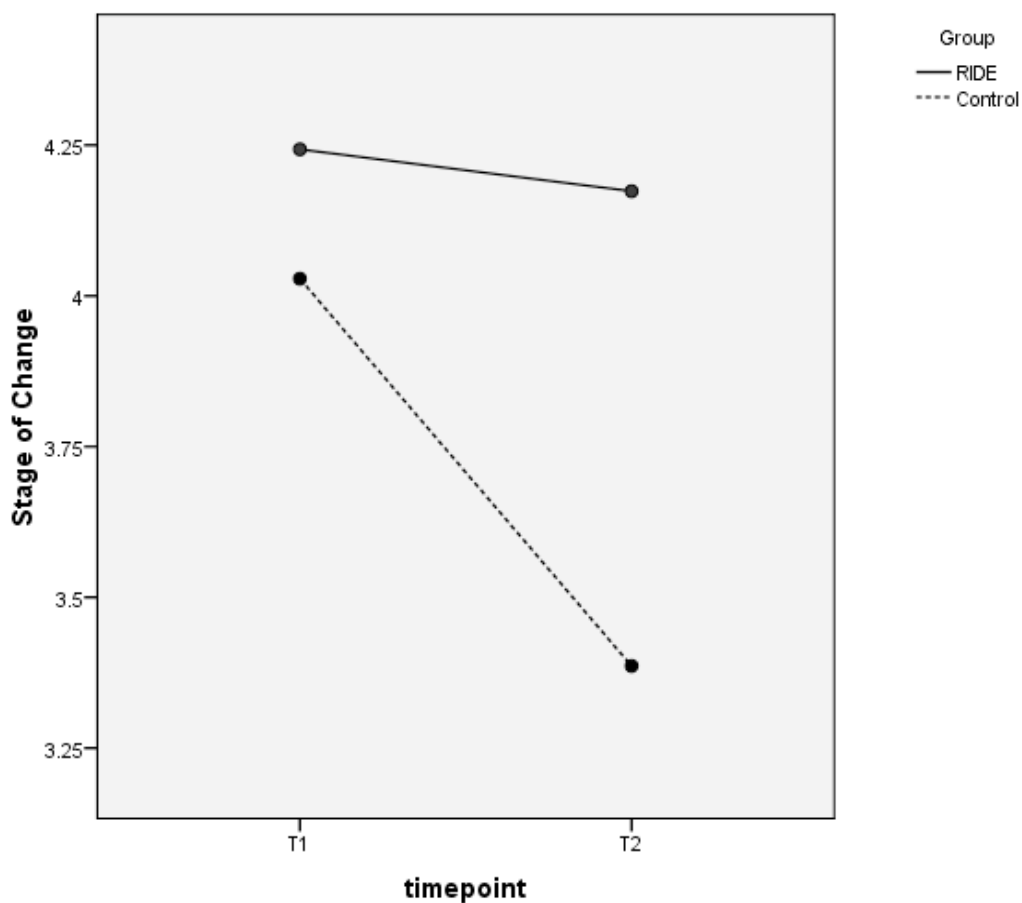
Table 4 shows the number of respondents in each Stage of Change at T_1 and T_2 , comparing RIDE clients against Control respondents. Control group respondents have been grouped together, as response rates for certain groups was poor (e.g. Fixed penalty group, only 1 of 28 respondents completed the T_2 measures). Of those Control respondents contributing to the following analyses, most were 'normal' controls (n=69), with some 'Hearts & Minds' respondents (n=26) and one 'Fixed penalty' respondent.

Table 4: Comparisons of RIDE and Control participants (T_1 and T_2)

<i>Stage of Change</i>	<i>RIDE N (%)</i>		<i>Control N (%)</i>	
	T_1	T_2	T_1	T_2
Precontemplation	1 (1.1)	0 (-)	6 (6.3)	9 (9.4)
Contemplation	2 (2.2)	0 (-)	2 (2.1)	4 (4.2)
Preparation	16 (17.4)	19 (20.7)	19 (19.8)	25 (26.0)
Action	41 (44.6)	43 (46.7)	48 (50.0)	46 (47.9)
Maintenance	14 (15.2)	25 (27.2)	11 (11.5)	8 (8.3)
Don't know	18 (19.6)	5 (5.4)	10 (10.4)	4 (4.2)
Total	92	92	96	96

The table shows that no RIDE clients remain in the Precontemplation or Contemplation stages following the RIDE course, and 27% report being in the Maintenance stage at this point compared with 15% at T_1 .

Figure 2: Stages of Change for RIDE and Control participants at T1 and T2



In contrast, Control respondents have slipped back towards the earlier stages of the model in the intervening period during which no intervention was performed.

Figure 2 shows the mean Stage of Change score for RIDE clients and Control respondents, while controlling for age and the time between T₁ and T₂ (this takes into account that the effects of the course are likely to decrease over time). An ANCOVA reveals a significant interaction effect ($F_{1,145}=4.13, p=.044$). As indicated in Figure 2, the Control respondents regress from the Action stage (score of 4) to the earlier Preparation stage (score of 3), whilst the RIDE clients remain relatively stable in the Action stage.

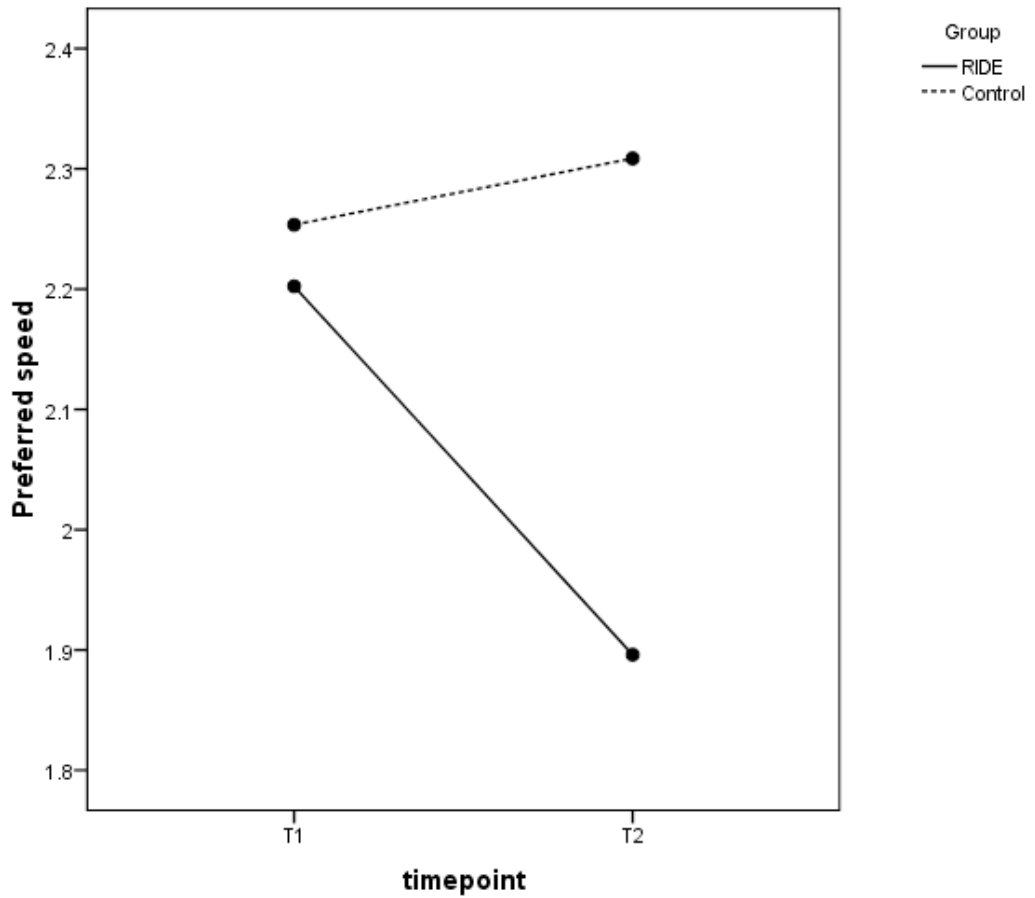
In summary, RIDE clients appear to be more receptive to the possibility that a change in their riding behaviour to become safer is required and this attitude is retained over the period between T₁ and T₂. In contrast, Control respondents appear less receptive at T₁ and, although the initial intervention may have encouraged them to consider the possibility of change, this is largely dismissed and the respondents report slipping back into their old ways. Without the RIDE course to inform, encourage and reinforce the decision to ride more safely, the desire for change is short-lived.

3.3 Speed preference

Participants were asked a general question how often they travel above the speed limit. RIDE participants show a significantly greater decrease in self-reported speeding: $F(1, 142) = 5.48, p = 0.021$.

More specifically, respondents were also asked how often they travelled at different speeds in specified restricted speed limit areas. Figure 3 (overleaf) shows how often they report travelling above, at, or below the speed limit in a 30mph zone. Higher scores indicate higher speeds where 1 = under the limit, 2 = on the limit, 3 = +5mph, 4 = +10mph and 5 = +15mph. There is no change between T₁ and T₂ for the Control group, whereas the RIDE group shows a significant decrease, indicating that they are more likely to report travelling below the speed limit: $F(1, 180) = 7.88, p = 0.006$.

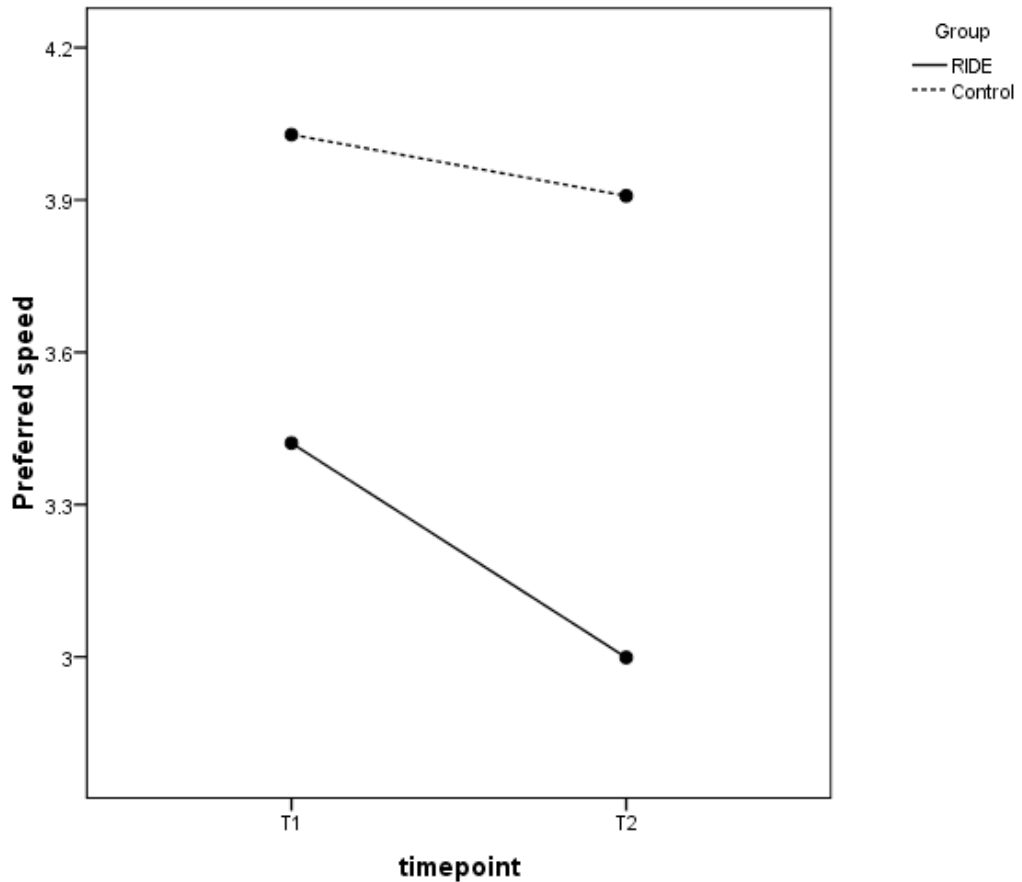
Figure 3: Preferred speed in a 30mph zone.



Key: 1 = under the limit, 2 = on the limit, 3 = +5mph, 4 = +10mph and 5 = +15mph

A less marked pattern is seen in self-reported riding behaviour in a 60mph zone. This time both groups show a decrease in speed, although the decrease is greater in the RIDE group than in the Control group. In Figure 4 (overleaf) higher scores indicate higher speeds where 1 = under the limit, 2 = on the limit, 3 = +5mph, 4 = +10mph and 5 = +15mph. There is a non-significant interaction between group and time: $F(1, 180) = 1.54$, $p = 0.217$.

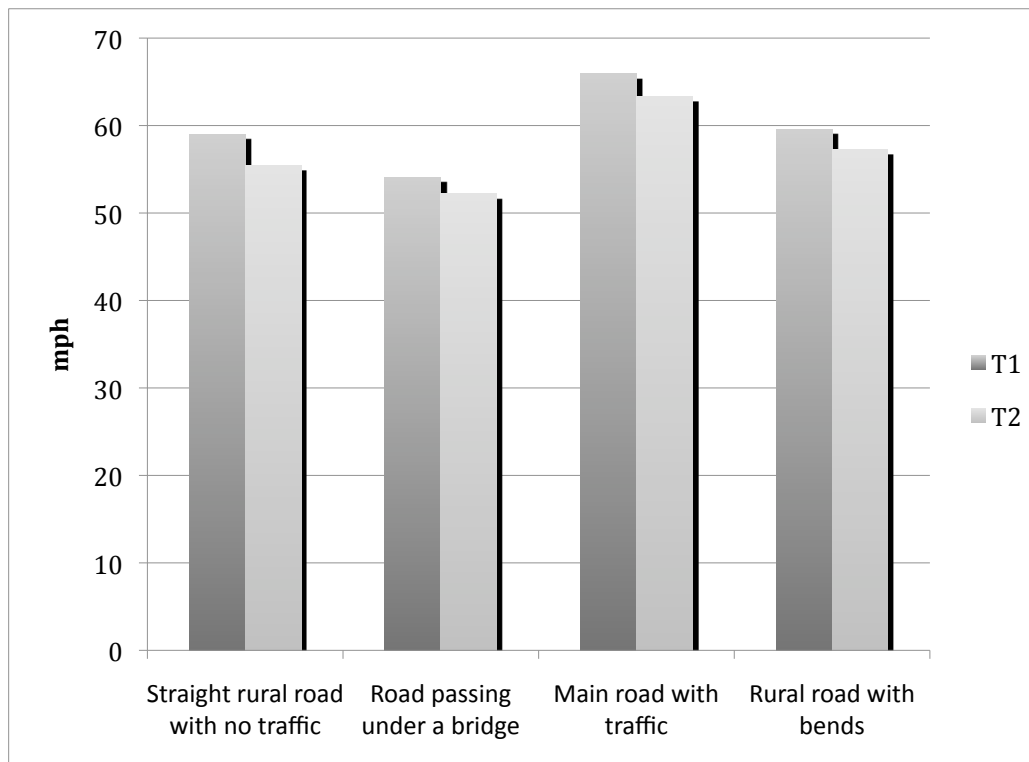
Figure 4: Preferred speed in a 60mph zone.



Key: 1 = under the limit, 2 = on the limit, 3 = +5mph, 4 = +10mph and 5 = +15mph

RIDE participants were asked about the maximum speeds they would travel along different road situations. They were asked about several different road types, such as on a straight rural road with no traffic, and a main road with traffic. The maximum speeds they reported they would travel at are shown in Figure 5. Across each road type the mean maximum score decreases, indicating that participants are riding more cautiously after the course. The decrease is statistically significant on two road types: the straight rural road with no traffic ($t(94) = 3.27, p = 0.002$), and the rural road with bends ($t(94) = 2.11, p = 0.038$). The effect size – which indicates how big a change there has been – for both of these changes is small to medium ($r = 0.32$ and $r = 0.21$ respectively).

Figure 5: Mean maximum speeds that RIDE participants reported they would travel at on different types of roads.



The difference between the hypothetical maximum speed that a rider might estimate for negotiating particular stretches of road and their preferred 'normal' speed at those locations indicates the degree of risk an individual is willing to take at such locations, the 'safety margin' they are willing to allow. For two of the road types – the straight rural road with no traffic, and the road passing under a bridge – the safety margins that RIDE clients report increase significantly ($t(94) = 9.98, p < 0.001$ for the straight road, and $t(94) = 8.79, p < 0.001$). The effect sizes for these changes are very large ($r = 0.72$, and $r = 0.67$).

RIDE group participants also show a significantly greater reduction in how often they report braking hard in town: $F(1,142) = 4.05, p = 0.046$, and braking hard out of town ($p = 0.01$). They also show a significantly greater decrease than Controls in how often they run wide on a right-hand bend ($p = 0.012$).

Summary

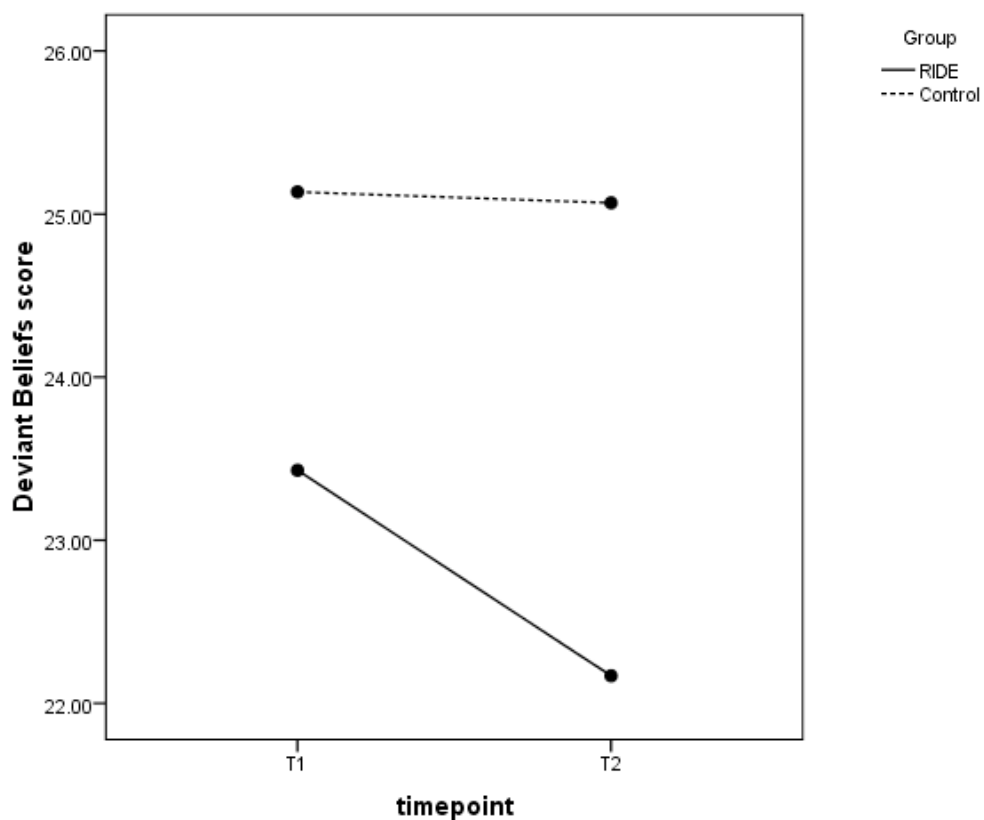
RIDE clients report greater appropriate change in speed preference in general and specifically in 30mph areas. In 60mph areas, RIDE clients report more appropriate speed preferences following the course at T₂ than Controls over the same period. RIDE clients also report lower speeds in specific riding locations following course attendance and leave larger safety margins between their hypothetical maximum speed and their 'normal' riding speed on such stretches of road. In addition, RIDE clients report braking sharply less frequently, in both urban and rural areas, perhaps an indication that they ride more slowly, are able to better anticipate the behaviour of other road users and/or leave larger safety margins and thus allow themselves more time to respond to prevailing road conditions.

3.4 Behavioural predictors

Deviant Beliefs

The Deviant Beliefs scale has nine items and accounts for 17.4% of the variance. It reflects beliefs about riding styles, with higher scores indicating a greater tendency to ride in a high-risk manner. When comparing the RIDE clients (n=88) against the Control respondents (n=90) and controlling for age, ANCOVA reveals a significant interaction between scores at T₁ vs T₂ for the RIDE vs Control respondents ($F_{1,175}=4.14, p=.043$). As shown in Figure 6, the RIDE group report lower Deviant Belief scores following the course, compared with the Control respondents whose scores remain stable.

Figure 6: Deviant Beliefs scale scores, T₁ vs T₂ for the RIDE vs Control groups, controlling for age.

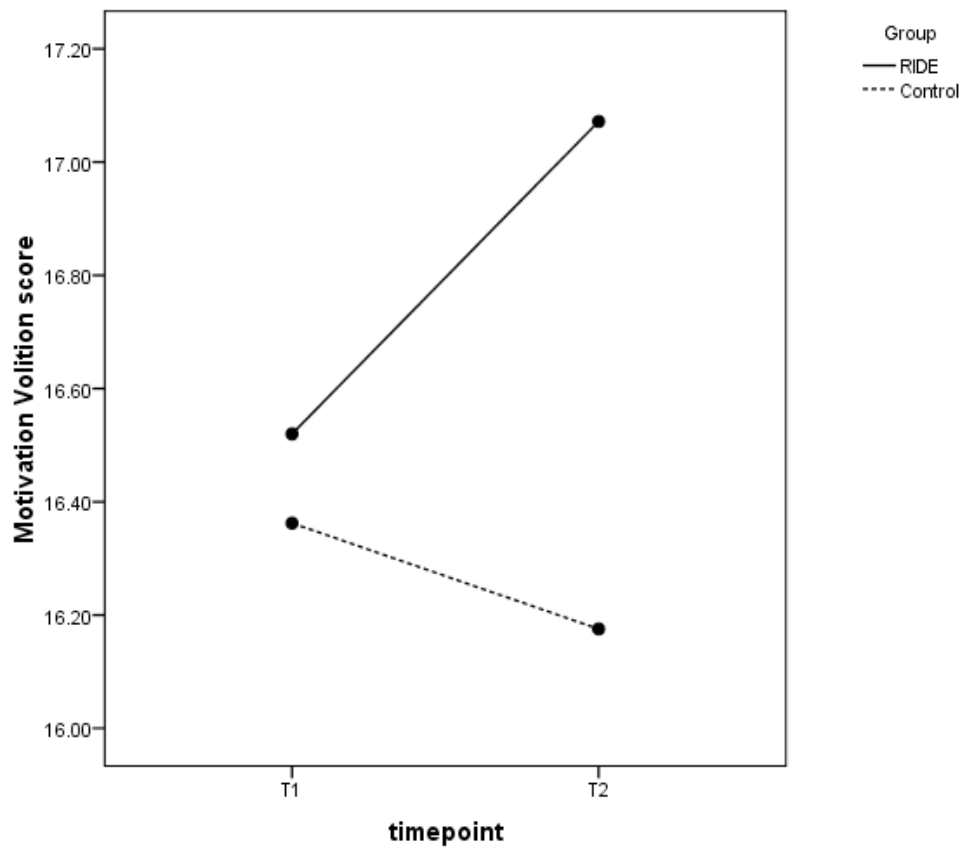


Motivation Volition

The Motivation Volition scale has four items and accounts for 10.7% of the variance. It reflects motivation around staying safe, with higher scores indicating a greater motivation to ride safely. Comparing RIDE clients (n=86) against Control respondents (n=56) and controlling for age, ANCOVA reveals no significant interaction between scores at T₁ vs T₂ for the RIDE vs Control respondents ($F_{1,138}=2.88, p=.092$).

It should be noted that although the RIDE group report higher Motivation Volition scores following the course and the Control respondents report lower scores at T₂ these results do not achieve statistical significance and so should be treated with caution.

Figure 7: Motivation Volition scale scores, T₁ vs T₂ for the RIDE vs Control groups, controlling for age.



Thrill Culture

The Thrill Culture scale has three items and accounts for 8.3% of the variance. It reflects the personal and social influences on the individual relating to risk, with higher scores indicating a greater tendency for thrill-seeking. Although there are small differences in the anticipated direction between the RIDE clients (n=89) and Control respondents (n=94) across the time-points and controlling for age, ANCOVA reveals no significant interaction between scores at T₁ vs T₂ for the RIDE vs Control respondents ($F_{1,180}=0.45, p=.506$).

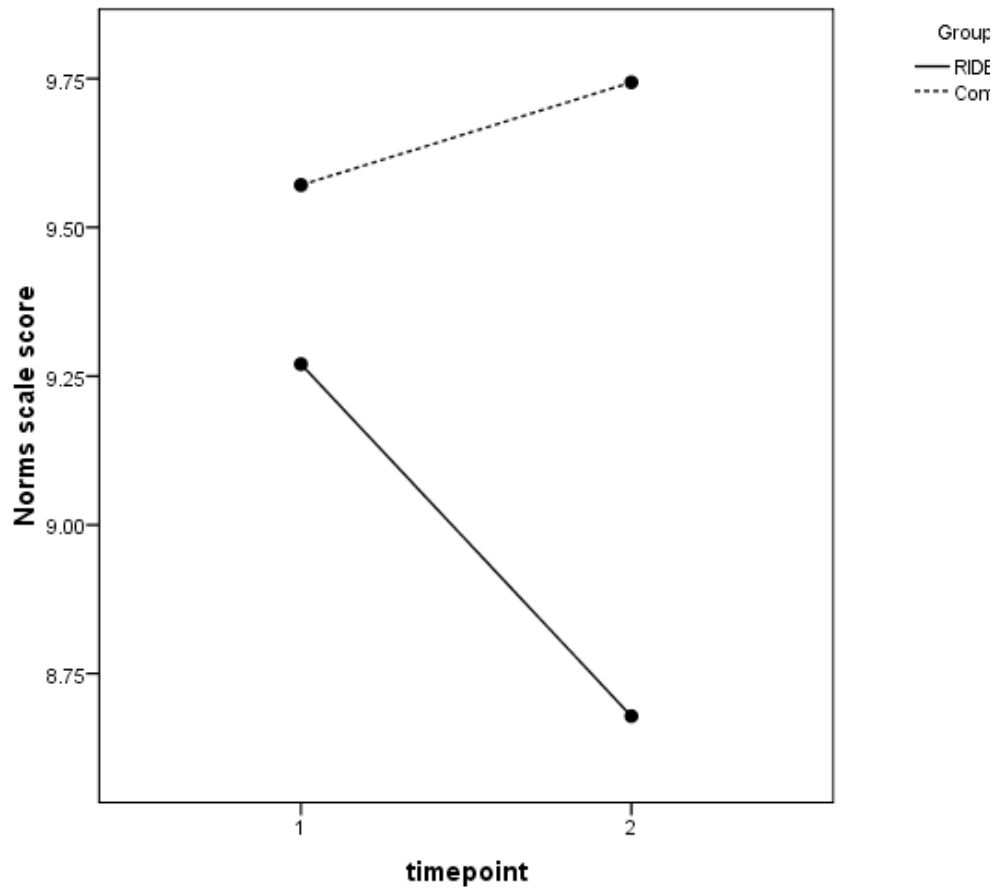
Susceptibility Control

The Susceptibility Control scale has four items and accounts for 6.3% of the variance. It reflects perceptions of being in control of the risks associated with riding. Higher scores indicate a greater sense of control. However, no differences between the RIDE clients (n=88) and Control respondents (n=95) across the time-points in Susceptibility Control scale scores were found ($F_{1,180}=0.02, p=.894$).

Norms

The Norms scale contains three items, and accounts for 4.6% of the variance. It reflects perceptions of how other people expect you to ride. Higher scores on this measure indicate that other people have greater influence over the rider for high-risk riding. When comparing the RIDE clients (n=90) against the Control respondents (n=94) and controlling for age, ANCOVA reveals a significant interaction between scores at T₁ vs T₂ for the RIDE vs Control respondents ($F_{1,181}=4.72, p=.031$). As shown in Figure 8, the RIDE group report lower Norms scores following the course, compared with the Control respondents whose scores increase slightly.

Figure 8: Norms scale scores for the RIDE and Control groups at T₁ and T₂, controlling for age.



Summary

RIDE clients also record more appropriate change in Deviant Beliefs and Norms scores at T₂ than do Control respondents. Differences in Motivation Volition scale scores were in the anticipated direction, though these approached but did not achieve statistical significance and so should be treated with caution. No reliable differences in Thrill Culture or Susceptibility Control scale scores were evident.

In summary, attendance on the RIDE course appears to have reinforced the belief that riding outside the law increases the risks involved in motorcycling. RIDE clients have modified their attitudes towards law-breaking, indicating that they are less likely after course attendance to behave in a deviant, high risk manner. This evidence supports the statement used by some RIDE instructors at the start of the course, "We understand that we all take a calculated risk when riding, but we want you to put the right numbers into those calculations". It appears that RIDE clients are more likely to modify their behaviour in view of the increased perceived risk of riding in a deviant manner. RIDE clients are also more likely to report a change in their perceptions of the pressure from their peers to ride in a risky manner, with this influence reducing following course attendance. Although RIDE clients report a greater motivation to ride safely following the course, this effect is not statistically reliable.

3.5 Long-term follow-up

Of the 55 RIDE clients responding at T3, 60% report riding their motorcycle about the same as they had before taking the course. 9.1% (n=5) reported riding less and 11% (n=11) reported riding more since the course, with 10.9% (n=6) not having ridden at all. Of these, two-thirds intended to do so in the future. Only 2 riders reported having stopped riding altogether.

Table 5 reports the Stage of Change results at T₃, with 94.5% (n=52) reported having made changes to their riding style since the course. Of these, 30.8% (n=16) report that they are in the Maintenance stage, having made appropriate changes and are now trying to maintain those changes. A further 36.5% (n=19) report that they are in the Action stage, having been made some appropriate changes and intending to make some more, and 25% (n=13) report having made an effort to change and planning to

continue trying in the future. Of some concern are the two respondents who suggest that they have at least partly reverted to their old, risky. Pre-RIDE riding style.

Table 5: Stages of Change at T₃

<i>Stage of change</i>	<i>Number</i>
I never tried to change the way I rode after RIDE, and I am not thinking of doing so in the next 6 months	1
Since RIDE, I have tried in small ways to change, and I am now planning to continue to do so over the next 6 months	13
Since RIDE, I have tried to change the way I ride, and I will be trying to become even safer over the next 6 months	19
Since RIDE, I have changed the way I ride, but this is as much as I can do and I am now trying to keep it that way	16
Don't know/can't say	2
I made changes after RIDE course, Now ride in a more risky way than straight after RIDE, but safer than Pre-ride. I need to think about this	2
Total	53*

* Excludes the two respondents who had given up riding

The remainder of the follow-up measure asked respondents to comment on the nature of the changes that they had made, to report which parts of the RIDE course they remembered and to make any further comments. These data may be found in Appendices I, II and III (p.71 on). Although the course has persuaded only a small number of riders to give up riding, the comments in Appendix I suggest that several have changed the style of motorcycle they ride for a less 'sporty' type. Many report a greater awareness for speed and speed limits, and a generally more cautious approach to riding. RIDE clients remember a range of elements of the course content and delivery, indicating that most components of the course are effective as means of persuasion.

3.6 How RIDE affects how clients think about riding

This section explores the qualitative results in more detail to understand how the course might impact on the way in which clients ride. Three themes were identified in the data. "We're not at risk" describes clients' perceptions of risk while they're riding, and their responses to being stopped by the police. "Risk is the whole point" describes a contradictory set of perceptions in which clients discuss how risk and thrill is their motivation to ride. The third theme "Changed perceptions" addresses the changes in clients' perceptions that have resulted from attending RIDE.

3.6.1 We're not at risk

This theme describes how riders protest that they are not at risk on the road, and that their riding behaviour did not merit a course invitation. They feel that other road users misunderstand them, and that they are victimised by the police and the public. They believe that they are more skilled than car drivers, and so can legitimately ride in ways that others perceive as being risky, and that it is other riders, rather than themselves, who are the problem. There are three sub-themes, described in detail below: victimised; we're skilled; and other people are the problem. RIDE addresses these by enabling clients to gain insight into the risks that they take, the extent to which they are acceptable, and whether those risks are worth it.

Victimised

Participants discussed that their behaviour is not a problem, and that they represent an easy target for both the police and the public to vilify. They discussed how car drivers misunderstand the way in which they ride, as they assume that a rider who accelerates past them is being irresponsible, whereas this is not necessarily the case. They don't believe that their behaviour was wrong.

I was doing nothing wrong in respect of the way I was riding and the safety. I was doing 85 but I was totally safe and I was in a safe situation.

Even when admitting that they have the occasional “blip” in terms of responsible riding, participants protest that they do not set out to ride unsafely, and that the way in which the public believes that they “set out to cause chaos” is unjustified. Their discussions indicate that they blame their bikes, rather than themselves, for the times in which they might speed excessively, or take risks. They use terms such as “mad moments” to distance their normal sensible riding selves from the ones who ride sensibly. This might enable them to hold two contradictory discourses about riding: that we’re skilled and safe, and that feeling the thrill from being at risk is the whole point of riding.

My machine is certainly well beyond my capabilities if I wanted to push it, but occasionally we might all have a little mad moment, which could be seen as being idiots, but we are not generally, but just occasionally we

None of us want to go out there to cause anybody any danger or harm, none of us are like that and we all have families at home, but like you say we have got these machines that are capable of it, and we do have our blips but we are not out there to cause chaos on the roads, which is what people seem to think we are.

Some of the participants discussed how they were very surprised to have been stopped as they had been riding more sensibly than usual, and how the police officers had complimented them on their safe riding.

On the day [I was stopped] I thought I was riding ok. When he stopped us he complimented us on our safe riding, but we had exceeded the limit. It’s crazy! I thought I was riding in a reasonable manner compared to what I normally do – we were taking it steady to what we normally do.

Some riders discussed how they believe that speed limits are set too low, and they are outdated as modern vehicles are better able to handle higher speeds more safely. They talked about how the police often have “target

bikers" days when they go to places where bikers tend to congregate specifically to catch bikers who may be speeding. This is widely perceived as being unfair.

They are sitting in biker areas, that is why we feel victimised, because they are sitting in biker areas ... they are actually victimising us because they actually come and sit at places they know where bikers go.

It's like Wednesdays and Sundays at Blackburn.

They know where we are and what we do so they are victimising us.

Overall, riders believe that they are a victimised group, as shown in the following exchange.

The police are just targeting bikes; that's how I feel.

They are.

It's like victimisation.

Participants were often incredulous about the effort that the Police make in order to catch them. This adds to their sense of victimisation as they do not believe that their riding merits this degree of attention from the Police.

The day I got stopped the guy pulled me said "When you get to the café, tell all your mates there are five of us out today in this area. Five! Just to catch bikers! Now are you telling me that we not victimised!"

We're skilled

Participants' discussions highlighted how they believe that they are more skilled than car drivers, and so can legitimately ride in ways that others might perceive as being risky. Some talked about how they had taken more recent training than car drivers. In some cases this is because they have learnt to ride a bike subsequent to passing their driving test. They talked about how this means that they have more recent knowledge of the Highway Code, and are more knowledgeable about risks on the road.

I think car drivers are less aware of fatalities on the road than motorcyclists because I think your typical car driver has passed his test at 18, 19 years of age and not done any sort of course, unless you do an advanced course. I see myself as a motorcyclist. I passed my driving test and then I made a conscious decision to go back and read the highway code to do my theory test to take my motorcycle test, so while I don't automatically put myself as a better car driver than everybody else, I'm more aware of the risks, what could happen to me.

Participants clearly believed that their skills and hazard awareness means that they can ride fast. They consider themselves a different breed from young and inexperienced car drivers, who don't know how to respond to hazards, and how this makes them safe and "little boy car drivers" unsafe. In contrast, they are safe because they recognise hazards developing and can avoid them.

You get your car drivers, the little boys in the Corsas and Novas and your Saxos, and when the shit hits the fan they don't know how to react and they can't drive in the conditions, and they can't see the hazards coming at them, whereas the likes of us will see it.

Discussions also highlighted how riders emphasised their age and experience as a way of demonstrating their greater skill and responsibility. They considered themselves as "serious" about safety and responsibility.

We are all serious riders and some of us have had crashes, and some of us haven't, but biking is unfortunately one of those things that is thought of as stupid. You don't get older experienced stupid riders, we are careful riders, we are good riders.

Other people are the problem

Participants frequently highlighted other groups of riders who cause problems on the roads. They discussed how they are not the "worst riders" and that they were unfortunate to be caught. The "problem riders" were described as being typically young, and riders of sports bikes. Riders' discussions demonstrate that they believe these problem riders are not part of their own riding culture, but belong to a different type of rider. Many

participants talked about how the police had “got the wrong guy” when they were stopped, and how they should be targeting the other “problem” type of “idiot” or “lunatic” rider.

It was more than apparent that they had got the wrong guy. You need to stop some of those Herberts that are flying around like lunatics. There is an argument about our culture, our age group, that they are targeting the wrong people. I would say that the majority of guys that are using safe ways and the like, they are all out on Sundays for a bit of fun, for a day out. Biking is a passion and most people are passionate about it, but sadly there are idiots. Well go and get them!

Other groups of riders highlighted as being a problem were those who don't need their driving licence for work, and so it is assumed they are open to taking more risks. As well as the physical consequences of crashing, participants also identified the financial consequences as being something that deters them from taking risks.

Some people are a bit braver, I suppose, to overtake. I need my driving licence for work, and with being self-employed I'm aware that if I have an accident I don't work and I don't get paid. So there's the sort of things that make me take less risk than others.

Drivers were also identified as more of a problem on the roads than bikers, and young males were singled out as being particularly dangerous. Participants frequently talked about how the Police should be targeting young drivers speeding in urban areas.

Why don't they go and sit in a village or a town where there is loads of boy racers riding around at 45 in a 30.... they are all idiots.

Yes, why don't they just concentrate on the boy racers?

As well as young drivers, many participants described how the Police had stopped them in preference to car drivers who were engaged in even more risky behaviour. They gave examples of older drivers who were not using

their mirrors, and this is done to position themselves as the safe, responsible, yet victimised road user.

When I got pulled I overtook four cars coming off the roundabout, now one of the cars was an old dear in a really old Fiesta with both her mirrors folded in, and he still pulled me. So which is the most dangerous? She can't see nowt, can she.

Examples were also given of speeding drivers who participants highlighted as representing more of a risk on the roads.

I was behind a car, an Audi, he was doing about 120, and a copper came back the other way following a bike, and he looked straight at the Audi, and he just carried on following the bike.

Hence by contrasting their safe and responsible riding with other "problem" riders, "boy racers", and unsafe drivers such as "old dears" and "Audi drivers", participants positioned themselves as being misunderstood and maligned.

3.6.2 We know it's risky

This theme describes how riders know that riding a motorcycle is risky, and that the thrill they experience as a result is one of the principal motivations for riding. As such it directly contradicts the previous theme. There are two sub-themes: risk is the whole point!; and we already know it's risky. RIDE addresses these aspects by helping clients to examine their motivation for riding, and to make better decisions about risks.

Risk is the whole point!

Riders discussed how one of the most enjoyable aspects of being riding is to experience the thrill of doing something that is risky. They talked about enjoying the adrenaline rush, or buzz, when riding fast. This was integral to riding, and participants did not want to ride without feeling this thrill. They achieved this from pushing the boundaries of their bike or their own skills. They compared these feelings with those that people get from taking part in extreme sports such as parachuting, and described that the risks they take while riding is what they enjoy.

I am aware that getting on a motorcycle is a risk, but that's part of the attraction, like the parachutist, it's the old adrenaline buzz. Like a downhill mountain biker, you know if you crash into that tree it's going to hurt, but you still do it. The upshot to it is that you get the adrenaline rush all the way down that hill when you don't crash into the tree, and you've got the sense of achievement what you get to the bottom of the hill and you haven't crashed into the tree.

Some participants talked about how part of the thrill comes from interacting with other riders, and being competitive within a group setting. They often recognise that this involves riding in a way that is not sensible, but this is usually dismissed. The following quote highlights that taking risks, and pushing oneself is simply part of riding. However, this participant's discussions also indicates that she recognises when she has passed a certain line, and will make a conscious decision to pull over if she thinks that her behaviour is becoming too dangerous.

I apparently ride fast. Occasionally I will catch up another biker and they will put a spurt on and then I'm like "I'm not having that!" and I need to catch up. Sometimes I'm riding ahead and I've overtaken somebody and they try to keep up, and I've found myself doing silly things to try to stay ahead so I've had to take myself off the road because I know it's getting stupid.

Other participants described how they tend to take fewer risks when they are riding with others, and it is only when they ride by themselves that they really push themselves. This is illustrated in the following focus group exchange.

I just stick with the lads when I go out, but when I go out on my own I take more risks. Every time I have been pulled up I have always been on my own.

I just don't look in the mirrors.

I don't have time for that!

Participants also talked about how – as adults – they should be able to make individual decisions about how they ride. They recognised that they take risks while riding, but viewed this as something that is personal to them, and does not affect others. They objected to “the state” governing how they ride, and those risks that are acceptable and those that are not. Their discussions indicate that they believe that every rider should make their own decisions about how far they are willing to “push it”.

I'm of the opinion of when you're an adult getting on a motorcycle, you're aware of the risks, and that's part of the attraction.

Participants discussed how they would not enjoy riding if they were not able to take risks. They talked about how they anticipate that it would be boring to ride entirely legally, and used terms such as “sanitised” to explain what they would feel about riding if they weren't able to take risks. It simply wouldn't be fun.

Taking risks is part of the thrill. Say if it were sanitised, and there no risks whatsoever, I don't think any of us in this room would really bother with it.

You would have a very boring life if you didn't do things you shouldn't.

There wouldn't be any fun in it, none whatsoever.

However, their discussions reveal that the threat of losing their licence is a strong incentive to comply with traffic laws. Some participants talked about how they couldn't imagine not being able to ride their bikes. Others identified how they need their driving licence for work.

When you are on nine points it does change the way your ride.

If you are on nine points and you rely on your car, you can't speed, can you?

I have got to the stage now where I have been nicked three times, and it hasn't stopped me, but now I know that the next time I get stopped they are going to take the car off me, or the bike off me, that is the point where it makes a difference.

We already know it's risky

Participants' discussions highlighted that they recognise that riding is inherently risky. Once again, they used analogies of people who undertake extreme sports to explain how knowing about the risks does not deter them from riding.

I think if you're one of those who are willing to take those risks, regardless of whether you're made aware of them, you're still going to take them.

You don't need to tell a parachutist when he jumps out of a plane that the parachute might not open. He already know that. But he's still going to jump out of the plane.

Some described how their friends have been injured or have died while riding, or that they have been involved in incidents in the past, but this had not deterred them from riding. The way they described riding as being "always in your blood" highlights that they perceive it as integral to who they are, and not something that they can switch off if they receive information about risk.

I have had friends die, people I know die on bikes but it has never ever put me off riding a bike, I have had a few accidents myself, I had one a few months back with a lass on the back due to a piece of scrap metal in the road made my rear tyre blow out and I couldn't do anything about it, but it still hasn't put me off, it hasn't put my lass off. Once you've got the bike in your blood you have always got it in your blood.

They discussed how they already knew which aspects of their riding are more risky than others. Participants discussed how riding is all about

balancing risks. They noted that getting on a bike is risky in itself regardless of how it is ridden, and that riding is always going to be riskier than driving.

I like to consider myself to be fairly risk aware on the road but just getting on a motorcycle is a risk in itself. If you've got to make a 100 mile journey in a car and a 100 mile journey on a motorcycle then the journey on the motorcycle is going to be more of a risk because you've only got two wheels.

Some of the discussions indicated that riders perceive the risks that they take on their bikes as different in some way to the other risks that they take. Somehow, the risks they take while riding are not real risks. Their discussions highlight that they behave differently on a bike than how they behave in other aspects of their lives, and they are prepared to take more risks on a bike than they would in other aspects of their lives.

For some reason I just seem to switch off when I get on the bike, to a certain extent. I personally take more risks on the bike than I would in any other area of my life. I wouldn't poke a lion with a sharp stick, but I would gladly get on my bike and do 100.

3.6.3 Changed perceptions

This theme describes the successes of the RIDE scheme: how it has achieved a change in riders' perceptions about risks, and their intentions to make small changes in their riding, that have the potential to reduce their risk on the road. It comprises three themes: insight into others' experiences and viewpoints; a wake-up call; and applying RIDE. These are detailed below.

Insight into others' experiences and viewpoints

Participants discussed how a really valuable aspect of the course was to gain insight into the way in which other people ride, including the reasons they give for speeding. Many participants discussed how this was a really

interesting and useful part of the course. Some noted that by hearing other people's experiences and the reasons they gave for speeding enabled them to recognise that they had not actually had a valid reason for speeding, and they needed to accept that the Police had been justified for stopping them.

I hadn't expected to be quite so involved. We had discussions, videos, and got involved and learnt from each other and our different experiences. ... I could see other people's reasons for speeding, and got insight into their speeding experiences. This meant that I was able to take more responsibility for the fact that I'd been caught speeding.

They also gained insight into their own motivation for riding, and also their motivation to stay safe. They discussed how for some riders this was their wife or children, and for others it was simply the joy of riding. Many participants identified that this had helped them to recognise that they had become complacent.

Some participants also discussed how the course had enabled them to better understand car drivers' viewpoints, and to see themselves the way that car drivers do. It helped them to understand why car drivers behave in certain ways. The course encouraged them to address their own stereotypes of car driver and other riders.

Drivers are expecting you to drive in a certain way, in a predictable way. It explains why he's doing something stupid in front of you. It makes you look at others and how they act and why. It makes you look at how you look at others, and how they perceive you.

In this way the course challenged participants' views that the "problem riders" are exclusively young riders on sports bikes.

There is a good cross section of ages, and it is good to get other people's opinions from different age groups.

A wake-up call

The discussions indicated that the RIDE course has acted as a wake-up call for many of the participants. In part, this has arisen from being stopped by the Police. Many participants were surprised at being stopped, and this surprise was due to two reasons. First, they hadn't considered what they were doing as particularly unsafe. Second, they had assumed that Police riders were "on their side" and wouldn't stop them for behaving in a way that, while not legal, was not what they considered to be excessive. They now realise that the Police will stop them if they speed. While it could be argued that this effect is due to the threat of prosecution rather than the RIDE course itself, it may be that the Police are more likely to stop motorcyclists if there is an appropriate and effective diversionary course to offer them.

I was naïve to think that police bikers think the same as we all think, that providing you are riding safely in a safe situation you can speed, but obviously we can't.

It is kind of a reminder that I am not untouchable, that I will get caught.

This alone has led to several participants changing their behaviour, and riding more slowly, as shown in the following quote.

It has slowed me down a bit. I am just a bit more aware of what is behind me, and cars as they go past. It is a kind of a reminder that I am not untouchable, that I will get caught.

In addition to the experience of being stopped by the Police, RIDE has helped riders to realise that they are not invulnerable on the roads, and that if they take risks they could end up seriously injured or dead. Some participants described how it had made them reconsider the way in which they ride. Some of the participants described how the course has opened their eyes to risks in the same way that being involved in a minor accident does.

The course has been good in that it will probably slow me down for a while, like crashing a bike as I did a few years ago.

When you have been riding a long time you get really complacent, and it's just like a refresher really. I had an accident three years go, just going too quick, and you go faster and faster and faster and think you are indestructible and obviously when you do fall off it sort of knocks you back down again. So this has also given me just more awareness. Sort of looking around a bit more, observation, seeing what is going on a bit more.

This aspect of RIDE has clear advantages: it enables riders to recognise their vulnerability and to do something about it without them being involved in a crash.

Applying RIDE

Nearly all of the participants gave examples of things that they had learnt during RIDE that would help them to stay safe on the road. For some of them, the most useful aspect was simply to refresh their knowledge, rather than anything entirely new. Nevertheless, they described how this is useful and they think that other riders and drivers would benefit from something similar.

Never say never in terms of having more knowledge.

It was more like a refresher course. I think that every once in a while it would do a lot of people who are driving or riding on the roads to come on a refresher course.

Some participants pointed out that there is a difference between knowing something and actually doing it, and RIDE would remind them that they need to put their safe riding skills into practice.

I have already done a lot of the things that we did on the course, but the main thing I will take away is that it's no good if you don't remember to use it. That is my main thing, just to remember to use the system.

At the end of the day I have done my Advanced Riding, and I am not scared of riding bikes, but it only works if you choose to use it; if you switch off it is all over.

Others talked about how RIDE had made them recognise that they had become complacent, and that they need to be a lot more careful.

It's reminded me of things that I should do that I have got a bit lax with, and I will just be more careful in the future.

Many participants identified the hazard perception skills they had covered as part of the course as being the most useful. Participants highlighted several sections of the course that they were applying or intending to apply. They clearly understood the relevance of what they had covered during RIDE. Several different participants identified Space and Time as being something they will definitely apply

The Space and Time concept he was drawing on the board there. If you can give yourself time, you are giving yourself a fighting chance all the time.

A key thing for me would be Space and Time. When we were doing the example of the bikes and the accidents, and the perception and what was going on, you need to change because if people had given themselves that Space and time the results would have been completely different, so it will make me think. I will take that away.

Participants also talked about how RIDE helped them understand why they need to make sure that they are visible to drivers, and how they could do so.

It's changed the way I ride. I always make sure that if I'm behind a lorry they can always see me in their mirror. I try to think further ahead and make sure I'm actually taking notice and assessing what I'm looking for. Taking things in and planning ahead so that you have longer to take evasive action.

Finally, participants discussed how they would be making changes to their riding. While these were often small changes, they identified that in many cases, a small change is all it takes to keep you safe.

People might not slow down, but if you take more observation into consideration, some of the things like looking through car windows, that for other people is just completely alien, if somebody just takes that away and a little one doesn't get flattened, then it is going to be worth it.

Participants agreed that even if they made small changes to their riding, or remembered a few things from it, the course is worthwhile.

3.7 Tutors' experiences of delivering the course

Five tutors (from four different providers) were interviewed about their experiences of delivering the RIDE course. The main points they made are as follows. Where appropriate, they are supported by quotes from the tutors.

- Tutors reported that while RIDE clients often arrived feeling defensive and angry about having been stopped by the Police, they were nearly always able to overcome these barriers, and engage with clients so that they open their minds to the course.

They do come in with fear of what's going to happen on the course. There's uncertainty there, restraint and suspicion of what's going to happen in the course. It does take a while to break down these barriers. But they're new to it and for many it's the first time they've been to anything like this, or in contact with the Police. A lot of them are thinking "Are we going to be lectured to?" They come around, Some tend to be more defensive and thinking that they don't need to be here. Those issues need to be addressed.

The tutors had a good grasp of the theory underpinning the course, and believed that RIDE can be effective in moving clients along the Stages of Change.

The course is based on the TTM model, stage of change model, going through a series of five stages: pre-contemplation, contemplation, deciding what to do, and then finally taking action to maintain that so that they don't fall back into their own habits, and I think the course is positive in that respect. Some of the drivers come along unaware that there is a problem, so they are at the pre-contemplation stage. What we found was that we actually achieved some aims where clients in the pre-contemplation stage felt more motivated to do something about it. And with the information that they took away they can develop a personal plan to stop them falling back into old habits.

- All the tutors believe that the RIDE scheme is effective in raising riders' awareness of the hazards they face on the roads. While they did not report that the course usually produces fundamental changes in the way that clients perceive risk or ride their bikes, they talked about relatively small changes that may nevertheless help riders to make better decisions about risks while they are riding.

At the end of RIDE, their body language, if you look into their eyes you could tell they were asking themselves questions and reality they will be looking to act differently. You could see they were more conscious of the consequences and the ripple effect if riding dangerously, others becoming affected in an irreversible way.

- Tutors were aware that riders would always be tempted to speed, but believed RIDE provides clients with some protection from this.

In most cases it will change the way they ride, but there is always the possibility for a relapse. With motorcycling you have this big attraction with the thrill of having 125bhp, tremendous performance in such a small thing. It's the adrenaline rush and the G-forces: with those conditions there is always a possibility that an individual will succumb and relapse. But those that go through the programme the chances of a relapse are far less. My gut feeling is that

most of them will alter their riding permanently and their approach to riding, but you could get the odd one that might relapse and succumb to the adrenalin rush of taking more risks.

- While instructors also gave examples of clients they did not appear to influence, these were described as being a minority of clients.
- Instructors suggested that it would be useful to be able to signpost riders to practical training courses. Instructors discussed how most riders are engaged by the course, and experience – to differing degrees – a change in mindset during the course. They identified that it would be valuable to capitalise on this by inviting riders to join some form of networking group. They suggested that this might be a regular meeting, or perhaps an annual event.
- Some of the instructors noted that there were problems in the referral process for the course. In one area instructors described how there had been a change in referral policy that had meant that the higher speeding riders were no longer referred, despite the instructors believing that it is the high-end speeders who potentially benefit most from the course.
- All the tutors identified components of the course that they believed were more or less valuable. The most common section they identified as not always being relevant to the clients is the one on protective clothing.
- The tutors identified that there is a lot of repetition in the course, and that most of the “recap” slides are not required. They described how clients find the final section difficult to get through, and suggested that this might be easier if some of the repetition were removed.

- The tutors had tailored the course to the needs of their own riders, such as including information on local crash statistics. They described how it is important to be able to do this as it helps clients understand the relevance and importance of RIDE to their own riding.

4. Conclusions and Recommendations

The research gives rise to the following conclusions and recommendations.

1. Riders who received an invitation to a RIDE course or a “hearts and minds chat” with a police officer are more ready to change their riding to become safer and more responsible than those who received a fixed penalty. Discussions during focus groups suggest that this is because a fixed penalty does not encourage riders to reconsider their riding but rather adds to their sense of being victimised.
2. Attending the RIDE course produces further movement along the Stages of Change, so that after the course clients are more ready to change their riding to become safer and more responsible. In contrast, the Control group regress and become less open to change.
3. Clients have a very positive response to the course, and believe that it gives them a better understanding of hazards on the roads and that it will help them ride more safely, and they intend to do so in the future.
4. The approach taken by the tutors is fundamental to the success of the course. Rather than patronise or chastise clients they engage with them and facilitate discussions through which clients gain insight into their own and others riding, and re-evaluate the way that they ride and the risks that they take. Questionnaire results show that RIDE course clients have significantly lower deviant beliefs after the course than before.

5. Participants who attended RIDE reported significantly greater decreases in self-reported speed than those in the Control group. The change was most marked in 30mph speed limit zones. Their reports indicate that they ride more slowly, are able to better anticipate the behaviour of other road users and/or leave larger safety margins and thus allow themselves more time to respond to prevailing road conditions.

6. RIDE tutors fully support the course, and believe that it is effective in raising riders' awareness of the hazards they face on the roads, and that it will help them to make better decisions about risks while they are riding. They identified that in places the slides could become a little repetitive. Some of these "recap" slides should therefore be removed.

7. The evaluation provides evidence that the RIDE course successfully challenges deviant beliefs, and that riders slow down and leave themselves greater safety margins while riding. The course is suitable for riders who have been riding in ways that could be perceived as being very (rather than slightly) irresponsible. All Section 3 riders should therefore be eligible for the course.

8. There are large differences in the likelihood that the RIDE course is offered to motorcyclists as an alternative to prosecution or a fixed penalty. The results of this evaluation provide clear evidence that the RIDE scheme is the more effective option, and so the course should be offered to all riders who are eligible.

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Appendix 1: 'What changes have you made to your riding?'

RIDE clients at T₃ (n=55)

A lot more aware of hazards and the consequences that speed can cause.

Admittedly riding slower. Been on the bike safe rider assessment course. Consciously being more observant and looking for hazards.

Basically not having a sports bike anymore I am no longer tempted to go fast.

Being trained by my friend who is a police motorcycle rider.

Better forward planning - which has made my riding style more focused and less stressful.

Don't own a bike at present.

First I have slowed down - and I am thinking more about what goes on around me when I am riding.

Generally more cautious.

Generally slowed down - I haven't gone out on the bike 'just for fun' since.

Have sold road bike and bought an enduro bike and started to enter meetings and joined a motorcycle club.

I am more aware of the speeds that I travel at. I have also enrolled with the institute of advanced motorcyclists and am training to gain the proficiency certificate.

I am much more aware of the dangers around me and I am more careful to check my speed.

I check my mirrors more.

I filter less and if I do I do so much more slowly than before

I have changed my bike for a less sporty model. The new bike encourages me to drive more safely. After taking the course I am a lot more aware of the inherent dangers.

I have changed my bike to something a bit more 'sedate' to resist the urge to go too fast sometimes.

I have slowed down and I am even thinking of changing my bike for something less sporty.

I have sold the ZXR750 and bought a BMW750 - changed from a race replica or supersport bike to a touring bike which has changed my riding style.

I have tried to be more aware of things going on around me. I have tried to be more patient with other road users. I have tried to give myself more time for travel so I don't feel the need to make up time during riding. I try to be a safer rider in general as in not taking unnecessary risks.

I now do track days so I feel no need to ride fast on the road.

I pay a lot more attention to the speed limit for the area I am in and try to be more aware of potential hazards before they become an actual problem.

I ride a lot more slower and I take more care riding i.e. using my mirrors more riding with my lights on and taking longer to look for approaching traffic

I ride much more defensively and tend to ride slower than the speed limit - which was not like me before the course - also making sure I make a space that is safe to ride in - unfortunately this didn't stop me getting knocked off my bike in traffic by a hit and run driver at about 15 mph breaking my collar bone two ribs and my little toe.

I ride with a little more caution and patience.

I ride with more awareness

I stick to speed limits

I take more time to be aware of the other road users. I think I ride more slowly!

I understand the results of going too fast and now stick to the speed limits.

I would like to think that my riding is continually improving and making progress only when conditions are conducive to such riding

I'm more aware and considerate towards other road users.

I'm more aware of my speed. I watch out for other motorists - because I use my bike everyday - I tend to read the road a lot more - I'm not saying I'm perfect - but I do look a lot more than before.

Improved 360 degree awareness.

Joined Rotherham Advanced Motorcyclists with the intention of passing the test.

Less complacent - ensuring 100% concentration at all times.

Less speed.

Loads.

More aware of dangers and more respectful for traffic conditions including other vehicles - and road condition.

More aware of roads that look safe that are in fact not safe.

More careful - slower.

More cautious in police hotspots.

More speed aware - much safer rider

My riding was good before - so I believe there is nothing to change

Observation and speed/safety assessment. Weather and road conditions

Slowed down.

Slowed down - look more ahead - ride more to the right of cars to give an escape route.

Slowed down look at other road users more.

Slower - more observant.

Sticking to speed limits.

Watching the speed limits and being more patient.

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Appendix II: 'What do remember about the RIDE course?'

RIDE clients at T₃ (n=55)

Accident statistics - hazard perception - statistics on protective clothing.

All of it and it was an interesting day.

All the skills and safer ways of riding I use every time when I ride at the correct places to use speed aka motorway but at the limit.

Awareness of other drivers' bad driving and for that matter bike riders' poor machine control.

Be safe.

Being reminded just how aware you need to be – and the reference to the accidents witnessed by the emergency services.

Bits and Bobs

Concentrate on better observations of vehicles.

Death

Discussion of other riders' incidents.

Driving in hazardous conditions.

Everything.

Group discussions and questionnaires about various aspects of riding - safety equipment - rider attitudes - road safety statistics - responsibility etc.

Having the right/positive Mindset - understanding your bike performance - having an awareness of road perception - knowing your riding ability - having an awareness and predicting other road users. Understanding why there are rules - and how collisions/accidents occur.

Hazard awareness - importance of good clothing.

How accidents impact upon families and friends.

How good bikers are.

How others perceive motorcyclists and how to better interact with other motorists in a safer manner.

I am vulnerable!

I remember it showed us how vulnerable we all are on bike - no matter what speed you are going! And there were some stats on how many bikers are killed and injured per year. Of course speed kills on a bike or a car.

I remember most of it - the dangers/hazards of the roads etc. I decided to sell my bike... I only did the test and had one for a while to say I have done it.... my bike is now sold. I might pick it up in later life and then have a refresher course.

I remember most of the course content - however the over-riding thing that I took away was to ensure I always have plenty of time when riding so I never have to rush or put myself under pressure.

I remember that danger lurks around every corner so I must be far more aware of the speed that I ride because you never know what might jump out in front of you!!!

I thought the two instructors were very good - and were able to get their points across without a preachy 'holier than thou' attitude

It made me think about how important my driving licence is for my work.

It was a good eye opener - taught me to think more when riding and when to open her up and when not too! Friendly informative day course.

it was a useful experience and i purchased a days course for my son

It was very interesting to meet other people on the same course and learn from their mistakes. It was also suprisingly informal and relaxed - which iIfeel enabled people to talk more openly about their own experiences. The course was well presented and well delivered which I feel encouraged people to learn from it.

Key points were positioning on the road.

Lots

Lots! Main points that we are not the sole arbiter of safety - 3rd party accidents. Contribution of speed to accidents. Most accidents take place in summer - shocker that one!

Most of it really - but mainly the affect it would have on my family in the event of an accident.

Most of the people attending had crashed - reasons why I ride fast and where it is appropriate to ride fast for example on a race track.

Nearly all of it. Unfortunately one of the main memories is just how many idiots attended the course.

Personal responsibility

Pretty much of it - ie hazards other road user's and so on

Realising how dumb some bikers are.

Safety

Statistics about the hazards. The gorilla video. Likelihood of having a crash if continue speeding.

Still think it was a good course and the information about being aware of all aspects of other road users and what they might or might not do. Being able to read the road - being ready for hidden hazards.

That my actions on the road affect other road users as well as myself.

That the instructors definitely knew their stuff - pointed out a lot of errors that riders with less experience and training commonly make - made you try and approach your riding with a different attitude to make you and other road users safer.

The cold hard facts!

The cost of an accident - observation reaction times.

The faster you go increases Tunnel Vision which makes it more likely to have an accident. Hit a solid object at speed gives a high chance of been fatal despite the rider wearing protective clothing.

The hazard perception side of the course rest was a bit boring

The thing that struck me the most was how our brains pick out certain things and how easily we miss things that happen in front of us. Also finding out how fragile we are even at slower speeds.

There were people there who liked to scare themselves while riding - not me. Ineffective motorcycle clothing can be ambulance costs to the rate-payer - me.

To be aware of hazards

To be more careful on a roundabout - because of diesel spills. to drive more safely.

Well first the monkey walking in the little clip of film (it was funny), the thing about leather - it is only a fancy body bag.

Appendix III: 'Any other comments?'

RIDE clients at T3 (n=55)

Course team were good blokes – could have preached to us but they did not.

Friendly informative day course.

I am also aware that I now spend much more time trying to 'read' other road users actions so that I have time to react safely.

I appreciate how lucky I was to be offered the chance to attend. Nobody I know feels that points and fines work other than eventually the nutters will get so many points that they get banned.

I ride less on the road and intend (finances willing) to commit more time to track riding. At least everyone is travelling in the same direction.

I think that all riders should attend this course as part of ongoing training.

I think there should be some compulsory training for the over 40s returning to riding and free training for those buying larger bikes

I thought overall the course was excellent - it was informative and presented in a very friendly understanding manner. I think that after being on the course it has influenced my riding in a positive way - and has also made it more enjoyable.

I thought the course to be highly positive

I've come to the conclusion that its a bit of a waste of time owning a sports bike - when the only place you can ride it safely is a race track. A bit like owning a Ferrari I suppose.

It has changed the way I ride.

More awareness of other drivers

My riding has improved as a result of this course - more than I expected.

Only ride in dry/daytime unless absolutely forced otherwise which is difficult with regards to rain!!

Thanks for the opportunity to attend the course as i feel it is a much better way of dealing with some offences - rather than just giving out fines and penalty points which teaches people nothing.

The course gave me a 'wake up call' to be more sensible.

The course made me start thinking about how to be a safer rider by leaving any aggression at home before riding my bike. above all I am now more thoughtful and considerate as a road user - both on the bike and in the car.

the facilitator of the course was very good - he aimed the course at people learning to be safe not just punishment or shock tactics

There's an argument for a much more advanced type of driving test - though this would need to be applied equally to all forms of motorists

thinking that everyone should do this course before bike/car lessons

this course should be made available to young drivers & riders on completion of their test
