

Assisted Rides - A large-scale trial of a motorcycle coaching program

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Abstract

VicRide, Victoria's Assisted Rides research program, is a major case-control study intended to guide policy decision making on the benefits of training as a strategy for improving motorcyclists' safety in the early years of their riding career.

Novice motorcyclists in their learner permit and restricted licence stages are significantly over-represented in casualty crashes. Rider advocates have suggested that this is an exposure effect brought about by novice riders riding more often than their more experienced counterparts.

The Victorian Motorcycle Advisory Council, an advisory body to the Victorian Minister for Roads, had called for some time for VicRoads to undertake research into whether additional training would assist in reducing novice rider crashes. The general community has a strong view that improved rider training will deliver better road safety outcomes. This belief seems even more strongly entrenched amongst motorcyclists, perhaps because motorcycling in Australia is largely recreational and the development of high-level braking and cornering skills are seen as indicators of expertise.

Community pressure for training has also increased as Governments have sought to introduce behavioural countermeasures such as the Learner Approved Motorcycle Scheme, 0.0 BAC for riders who hold a full car licence but a restricted motorcycle licence and a Graduated Licensing System which requires more stringent testing. The argument most commonly put is that the road safety benefits achieved by these initiatives could equally be obtained with better training.

Planning for “Assisted Rides” began in 2006, when the then Minister for Roads approved funds to investigate and develop an instructor-led on-road riding course.

VicRoads identified that the key success measures for a pilot novice rider course were:

- the development of safer riding attitudes,
- reduced engagement in risk taking behaviours, and
- reduced crash involvement.

At the time, there were a number of on-road novice rider courses offered in the United Kingdom and in other Australian jurisdictions. Dr Ron Christie, who examined a number of these for VicRoads, concluded that none had been evaluated to the extent that they could be shown to meet the criteria, and nor could be immediately implemented to meet Victoria's needs without modification.

Based on Christie's work, the project reference group developed a list of key features that should be included in a pilot training program. This was refined through market testing to gauge the appeal a program of this type would have for motorcyclists.

A priority for the reference group was that each participant should be given as much feedback as possible, and at the earliest opportunity. This suggested that VicRoads not adopt a rigid curriculum,

but rely instead on experienced riders with high-level coaching skills to provide some common core components with a strong emphasis on personalised feedback to each participant. Another important factor was that the program should provide on-road experience in the participant's normal urban riding environment.

Having established a broad outline of the preferred model, VicRoads began developing the detail of the pilot program. In late 2008, the project forked into two distinct streams – the creation of the program content and delivery methodology, and the development of the evaluation strategy.

Curriculum Development

In 2009, VicRoads awarded a contract to the Monash University Accident Research Centre (MUARC) to undertake the development of the program content and the manner in which it was to be delivered. The early work included a literature review to identify newly licensed riders' development needs. The development needs identified in the review highlighted the importance of higher order cognitive skills, particularly hazard perception and responding, and on helping riders to recognise and manage potentially unsafe riding attitudes and behaviours.

Working with Honda Advanced Rider Training (HART) and Learning Systems Analysis (LSA), MUARC began development of an outline curriculum, to be piloted initially and then rolled out as part of the VicRide project.

Drawing on the findings of the literature review, the draft curriculum focussed on higher order cognitive skills, attitudes and behaviours. With a heavy emphasis on practical riding and personalised feedback, the curriculum set a limit of 60 minutes of classroom discussion in a 4-hour session. The role of the coach was to draw on rider's personal experiences – particularly around successful and less successful approaches to managing risk – in order to allow the riders to analyse their own beliefs. Peer discussion with the other participants allows riders to compare their experiences. Key features of the coaching program are

- a focus on self-reflective analysis of the participant's riding behaviours,
- a facilitator-led rather than didactic educative model, and
- prioritisation of behavioural reflection over skill development.

Coaching novice motorcyclists, particularly on the road, is not a simple matter. In a high-risk environment, it is easy to adopt a didactic instructional approach in order to ensure that riders are not tempted to engage in high-risk behaviour. However, the project model called for a coaching approach which relies far more on drawing on the experiences of the participants, rather than the riding expertise of the instructor. It was very clear that the ride leaders, most of whom were motorcycling instructors, would need assistance to develop their coaching skills. To address this, MUARC and its partners created an 8-day coaching course with a pass/fail assessment, which would be a pre-requisite for ride coaches. Because the coaches were expected to demonstrate safe and competent riding behaviours as well as coaching skills, the coaches' course covered topics including:

- OHS and administrative requirements,
- Roadcraft and road rules,
- Basic motorcycle handling skills,

- The differences between coaching and instructing, and when each approach is appropriate,
- The role of motivation in riding behaviour decisions,
- Effective coaching techniques, and
- Conducting coaching during the on-road ride.

The program relied heavily on role-plays to help prospective coaches to develop their listening and questioning skills, and to assist them to overcome the temptation to fall back into an instructional mode.

Coaching delivery began in 2010, and concluded in early 2014.

Evaluation

In October 2009, the George Institute for Global Health was engaged to undertake the evaluation of the VicRide pilot. Given the number of coaches available, the number of new licences issued each year and the requirement to obtain a sufficiently large sample to provide adequate statistical power, it was estimated that a sample size of around 2400 riders would be required. While a long-term crash based evaluation often provides the best measure of a safety intervention's effectiveness, the many years required to collect post-program data and the small number of trial participants meant that the evaluation would need to use proxy measures of behavioural effects.

VicRoads wrote to 15,000 recently licensed motorcyclists, and, with MUARC and The George Institute for Global Health, established an online application process to Using a monthly extract from VicRoad's licensing database, MUARC contacted potential candidates and, where the candidate consented to participate, their details were securely passed to The George Institute who, in turn, worked with Edith Cowan University's Survey Research Centre to conduct baseline interviews and then randomised the candidates into treatment and control groups. Controls were assured that, after 12 months, they would be offered the same coaching program as their treatment group counterparts.

The interview results and the group allocations were then sent back to MUARC so that they could schedule the coaching sessions. At every opportunity, the various parties were blinded as to the identity and allocation of the participants.

Risk management

Sitting alongside the evaluation and delivery strategies was a risk management program. Early on, a number of issues had been identified, most obviously, the challenges associated with taking novice riders on the road. While many of the initial concerns could be managed through existing insurance arrangements, the project identified three areas that required cover:

- Motor vehicle insurance for both third party property and comprehensive cover for riders ,
- Injury liability to cover participants whilst participating in the program but not riding on the road at the time and therefore not covered by the Transport Accident Commission insurance,
- Volunteer workers insurance to provide some cover for loss of wages for participants if they are injured.

Millers and Associates Insurance Broking Pty Limited were engaged to provide cover for each of these risks.

Challenges

Over the course of the project, a variety of challenges were encountered. These included:

- The political context of the project,
- Managing data security,
- Protecting intellectual property,
- Lower than expected recruitment and retention rates,
- Participant scheduling, and
- Dealing with challenging participants.

Addressing these has not always been straightforward. In the course of the presentation, we will explore how the issues came about, their effect on the program and how we have managed them.

See also paper titled *Development and Evaluation of an On-ride Motorcycle Coaching Program in Victoria: How well was it implemented and received by the target novice motorcycle riders?*, by Chika Sakashita, Rebecca Ivers, Teresa Senserrick, Serigne Loa, Liz De Rome, Jane Elkington and Boufous Soufiane