Motorist Awareness for Motorcyclist Safety: A Failing Strategy
A U.K. Expert's Perspective
SMARTER – www.smarter-usa.org
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Introduction

The Skilled Motorcyclist Association – Responsible, Trained and Educated Riders, Inc. believes motorcycle riders, motorcyclist safety advocates and policy decision makers make better decisions when the decisions are based on factual knowledge and the conclusions of quality research. Our mission, therefore, is to gather, examine, catalogue, share, post and distribute motorcyclist safety factual information and research and to advocate for the use of such knowledge as the basis of decisions.

In the case of motorist awareness for motorcyclist safety there is no research and no data to support traditional motorist awareness as an effective countermeasure. As posted in the introduction to the motorist awareness section on our website (https://smarter-usa.org/research/motorist-awareness/)

> Given how frequent these types of programs take a leading role in motorcyclist safety efforts and how expensive they can be to implement, one would assume there is abundant clear evidence of the effectiveness of such programs. Not so. There are no direct evaluations of the effectiveness of motorist awareness campaigns to increase driver awareness of motorcyclists and therefore reduce crash rates.
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> Traditional motorist awareness campaigns (such as Look Twice – Save a Life) are based on two incorrect assumptions. The first incorrect assumption is that motorists (car drivers) are not aware that motorcyclists are on the road and/or motorists do not look. The second incorrect assumption is that if drivers were told ("it is the month of May, motorcyclists are on the road" or "Look for Motorcycles" that drivers would change their behavior.
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> The NHTSA report **Countermeasures that Work** (11th edition, 2023, p 1-2) slightly edited puts it this way: "*Education and awareness-raising campaigns are common approaches used to encourage behavior change. They are often seen as low-hanging fruits, easy, and low cost to implement but they rarely work in isolation. The goal of an awareness-raising campaign is to influence the attitudes, beliefs, or behavior of people through information and education. This strategy presumes that the audience lacks key information and that simply learning the information will be sufficient to change behavior."*

A Failing Strategy

SMARTER is not alone in the recognition that traditional motorist awareness campaigns lack of evidence for the effectiveness. Kevin Williams is a UK rider trainer and researcher. He is the author of the Science of Being Seen (https://smarter-usa.org/wp-content/uploads/2021/01/The-Sceince-of-Being-Seen-Edited-by-SMARTER.docx.pdf) which serves as the basis for the Four Chances for Error (http://smarter-usa.org/wp-content/uploads/2020/09/The-Four-Chances-for-

Error-with-pics-1.pdf) which in turn is the foundation for the SMARTER developed driver search system (https://smarter-usa.org/wp-content/uploads/2021/10/SAR-x-2.pdf) and the Inattentional Blindness video developed by the Michigan Department of State for use in driver education courses (https://vimeo.com/792435535/82812f9373)

As part of Mr. William's advocacy and efforts to educate riders, he produces regular webcasts. At the end of his Elevenses 433 which aired June 2, 2024 (https://www.youtube.com/watch?v=e_2Mpi9RIDU) he posed the question "*"What does Scotland have planned to reduce bike crashes?"* and he published his comments on Facebook a day later and very soon received a response from a motorcycle accident claims specialist called Motorcycle Law Scotland. Kevin has shared some specifics of the response he received but the short version is Scotland's new plan is to attempt to educate drivers as to where to expect motorcyclists with a campaign they are calling "take another look" (https://roadtrafficaccidentlaw.co.uk/takeanotherlook)

Kevin comments:

Unfortunately, when campaigns like this are created in response to the deaths of motorcyclists it's hard … to be critical and tough to say it might be going down the wrong path without upsetting the people behind it who have lost loved ones.

Nevertheless, I'm going to say it anyway. Brutally put, a campaign like this can't 'ensure' anything - it can aim to inform and maybe guide future behaviour, but it can't guarantee any change. And the fact is, we've been having these campaigns for years, as the 'Take Another Look' admits when they use the phrase saying the campaign is "echoing the 'think bike' initiative of the 1970s".

The original 'Think Once, Think Twice, Think Bike!' video went out in the mid-70s, and it's no coincidence that I show that fifty-year-old video at the beginning of my Science Of Being Seen presentations - I use it to make the point that we've been running 'Think Bike' campaigns with barely a break in one part of the UK or another.

That's HALF A CENTURY, and - as I have said before - if these campaigns had worked, we would have expected to see a change in the pattern of motorcycle crashes, with a reduction in collisions happening at intersections.

Unfortunately, as our accumulated motorcycle crash data clearly shows, these previous campaigns haven't managed to reduce the prevalence of the SMIDSY (Sorry Mate, I Didn't See You, what, in the US, we often refer to as Looked But Failed to See) *on our roads. It's unfortunately also a fact that the collision at a junction between a turning car and a motorcycle remains the most common crash involving a PTW* (Powered Two-Wheeler) .

So rather than deliver more of the same, my own belief is that we should be asking why despite the obvious efforts to change driver behaviour, we have made so little progress on banishing the SMIDSY to the pages of history.

Kevin goes on to list a number of other points he thinks riders and motorcyclist safety advocates should be considering. We have added some headings to Kevin' comments.

Two to Tangle' Crashes

The first is this - junction collisions are 'Two to Tangle' crashes - that is, if the driver sets up the collision, it still needs the unwitting rider to ride into it to make it happen. In many cases evasive action IS possible. But unfortunately, all too often the rider fails to react quickly enough. Police crash investigations frequently conclude the rider DID have time to stay out of trouble.

Not Just Low-Speed Failed to See Crashes

Here's my second point. In my Science Of Being Seen (SOBS) *presentation I have also talked about how the SMIDSY is not just a low-speed collision that takes place on busy urban roads. Many of the fatal crashes happen on faster roads and this creates a different problem - around one in three fatal crashes are linked to the 'looked, saw and misjudged speed and distance' issue. What causes this? Firstly, it's notoriously hard to judge the speed of a motorcycle - something I cover in SOBS. Put a van and a bike side-by-side at the same distance and speed, and ask an observer "which will arrive first", they invariably judge the van to be the one to get there - they believe they have more time before the bike arrives. Another, related, factor is that we all tend to estimate the speed of vehicles on a particular road by watching cars approaching and passing. So, if we are riding more rapidly than other traffic on the same road, we're making it doubly-likely a driver will see us, misjudge our speed and turn into our path. Telling someone to 'look again' is unlikely to affect this issue.*

Couldn't See

My third point is that there's another issue - around one in five fatal crashes happen when the driver 'looked but could not see'. On rural roads, it's not uncommon that drivers began their turning manoeuvre when the rider was still out of sight over a crest or round a corner. Given that, then the driver taking another look won't make any difference, because the bike will only appear when the vehicle is part-way through the manoeuvre. The ONLY one who can fix this version of the crash is the rider, by being aware that there's a junction ahead.

Where Should We Target our Efforts Based on the Numbers

My fourth point addresses a different part of the problem - relative numbers and where we target our efforts. Here's the numbers - there are around 100 fatal junction collisions in the UK each year, and roughly ten times that many leaving riders seriously injured. That's a total of 1100. There are around 40 million drivers. Do the math. It's a simple subtraction - the overwhelming majority of drivers - around 39,998,900 of the total - will never, EVER, put a motorcyclist at risk in a year. Do the reverse sum - there are only around 1.2 million active riders and when the 1100 drivers get it badly wrong, it involved 1100 riders out of that 1.2 million. From our perspective as riders, things are far more likely to go wrong for us, even before we consider the risks from the crash itself, where the rider is far more likely to be the one who comes off badly.

Riders Need to Proactively Plan for Right-of-Way Violations

Here's a fifth point. As riders, we should know where we are likely to crash so we can adjust OUR behaviour to moderate the threat. When we look at where riders crash, the 2021 DfT (U.K. road safety data source) *data shows that T, Y or staggered junctions remain the most common locations of motorcyclist casualties, representing 34.7% of combined fatalities and injuries. What we're NOT told about junction collisions is that whilst many of the less-serious collisions involve vehicles EMERGING from a turning, most of the more-serious crashes happen when an ONCOMING vehicle turns ACROSS the rider's path and INTO a side road or other entrance. Whilst we need to be on high alert every time we approach an intersection, driveway or farm track where a vehicle can pull out, we also need to be educated to look out for the collision with the vehicle that TURNS IN!*

Motorcyclist Speeding is a Big Issue

And finally, here's a very uncomfortable fact - and this is not 'victim-blaming', it's simply me telling you about the results of police investigations into fatal junction crashes. The sad fact is that many of the riders actually killed in collisions with cars were exceeding the speed limit in the moments before the crash. I have data from a Met Police investigation into motorcycle junction crashes, and at in the 20, 30 and 40 limits, most of the fatal crashes involved riders estimated to be travelling over the limit, sometimes way over it.

Why is speed such a factor? It's down to the physics of deceleration.

If we're travelling more quickly, it's far more difficult to shed speed. Roughly speaking, if we double our speed, our stopping distance is four times longer. That means even a few extra mph add significantly to the distance we need to come to a halt, or swerve, come to that.

But it gets worse. because of the kinetic energy involved, we only lose around one-quarter of our speed in three-quarters of our braking distance. The math paints a pretty stark picture. Take two riders side by side, with one travelling at 30 mph and the other at 40 mph when a car pulls out. If they react equally rapidly, and brake at the same efficiency, and if the rider at 30 mph can JUST stop, the rider who was riding at 40 mph will still be moving at approximately 25 mph at the moment of impact. And in an impact like this, we're little better protected than a pedestrian, helmets and body armour notwithstanding. That's why riders die in collisions.

Many Don’t Get It

I'm sorry to have to cover this again, but it's clear that many riders - and the people looking to influence rider safety - simply don't get this.