







#### **SESSION**



- Short presentations from the panel
- Questions from the floor on the presentations
- Share your experiences of 'things that didn't work'
- Discussion on what we can do differently across the sector

#### WHY EVALUATE?



- Demonstrate success (or not)
- Inform policy decisions
- Improve the delivery of an intervention
- To share best practice
- Show value for money
- Be sure of "doing no harm"

#### WHY SHARE EVALUATION RESULTS?



Regardless of the findings, we should share to:

- Allow others to replicate economies of scale
- Allow others to innovate improve on what is already delivered
- Prevent others from repeating mistakes
- Do No Harm

# QUICK EXAMPLE — UNINTENTIONALLY DOING HARM



- Day long pre-driver intervention presentations on learning to drive process and road safety (consequences) plus car park drive
- 'Basic' evaluation (pre and post questionnaires):
  - Some positive results
- 'In-depth' evaluation (pre and post questionnaires plus focus groups):
  - Pre group work positive attitudes towards road safety
  - After focus groups "excusing" risky behaviour
  - Post questionnaires increases in perceived proportions of drivers engaged in risky behaviours
- Despite best intentions, normalised bad behaviour through the intervention
- Intervention revised and re-evaluated (better results!)

## Deirdre O'Reilly – Learning Lessons





## **Learning lessons**

Deirdre O'Reilly







Samuel Beckett





1. INAPPROPRIATE SPEED



2.
DRIVER
DISTRACTIONS
Most commonly
mobile phones



3. LACK OF SEAT BELT



4.
ALCOHOL OR
DRUG IMPAIRMENT







## Steven Barber - First Go Scooter project





# How it all began.....

- In 2008, whilst compiling data for the Motor Cycle
  Forum within the Casualty Reduction Partnership we
  noticed an alarming rise in the number of 16 yr olds
  involved in collisions whilst riding mopeds/scooters.
- Chief Causation factors were "Panic" and "Lack of Experience"
- Current CBT training was insufficient to give the experience needed. (Too short, one off etc)

### So What did we do?



# How did it go?

- All Secondary Schools in Northampton contacted, 7 replied requesting to attend.
- 5 were offered training in the Pilot Scheme, and
   2 attended, with 29 students and observers in total.
- With one exception, all reports rated from good to excellent from students and observers.

#### What Fell Off?

- Partners, other interested parties, failed to engage.
- Schools failed to show an interest.
- Schools engaged and expected, just failed to attend.
- Conflicting Programs were given as a reason, or simply plain forgot.
- Capacity for 160 take up 29.

### Lessons Learnt.....



#### Points to Ponder.....

- Run away and hide, or find the positives?
- Money Saving Face Competency to run future projects.
- Salvage what you can from the wreckage.
- If this was your baby, who do you talk to?
- What is your structure to debrief?
- Demoralise or Inspire.
- Did we achieve anything?

## Dr Helen Keyes- Look-But-Fail-To-See Errors







#### **Look-But-Fail-To-See Errors**

- Common, especially for experienced drivers
- Rely on schemas when searching for approaching traffic
- Schemas could inform eye scan pattern







Stimuli from Crundall, Humphrey and Clarke (2008)





## **Cognitive Conspicuity?**

- Dual drivers make fewer LBFTS errors
- Can we put drivers "in mind" of motorcycles
- Increase cognitive conspicuity of motorcycles
  - Reduction in LBFTS errors for motorcycles?





# **Training**







#### Results

- Replicated Crundall et al.'s findings
- No effect of training
- Using training to raise the cognitive conspicuity of motorcycles is not effective from a single delivery
- Visual rather than cognitive effect
  - motorcycles harder to see because they are smaller than cars





#### **Lessons Learned**

- Not all training works useful pilot
- What we knew beforehand Vs what we know now
  - Seems the same, but...
- Back on message: Focus on increasing motorcyclist visibility
- Methodological: definition of "experienced" driver

## Paul Copeland- Piloting rural 40mph zones

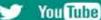




# "It's all gone very well"

Rural 40mph speed limit zones How useful are they, then?





# We liked it so much

We did a formal evaluation



traffic engineering and transport planning

East Riding of Yorkshire Council

Pilot Rural 40mph Speed Limit Zones -A Review of their Effectiveness

August 2016







# What did we do?

Four locations – three evaluated

Alignment

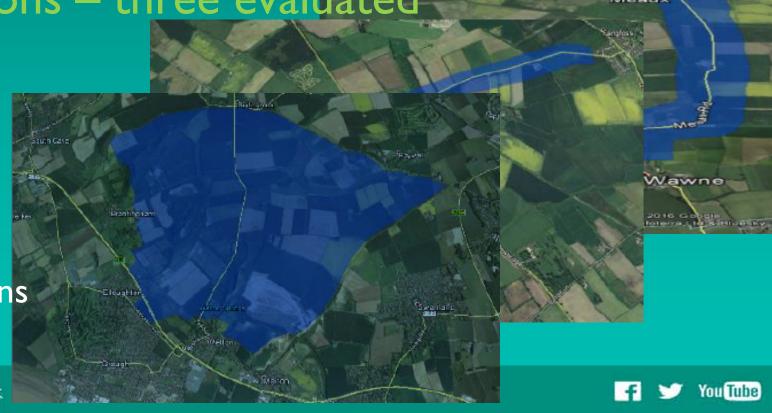
Width

Flows

Speeds

Traffic Mix

Injury Collisions



www.eastriding.gov.uk

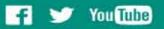












# So how effective was it?

Long Lane

Meaux Road

Ling Lane

Elloughton Dale

Injuries









Speed









Flows









• Effectiveness ?













Dr Shaun Helman – When findings are not what we hoped for...





When findings are not what we hoped for...

Shaun Helman 27<sup>th</sup> November 2018

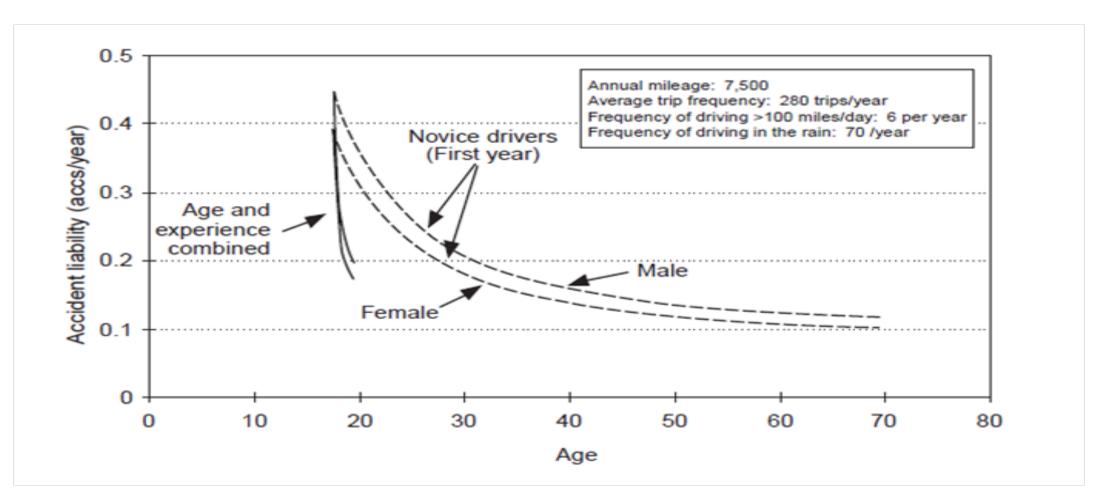
#### Some philosophy...



"The...scientist who mutters sadly, 'The experiment is a failure; we have failed to achieve what we had hoped for' is suffering mainly from a bad script writer. An experiment is never a failure solely because it fails to achieve predicted results. An experiment is a failure only when it also fails adequately to test the hypothesis in question, when the data it produces don't prove anything one way or another."

Pirsig, R. M. (1999). Zen and the art of motorcycle maintenance: An inquiry into values. Random House.



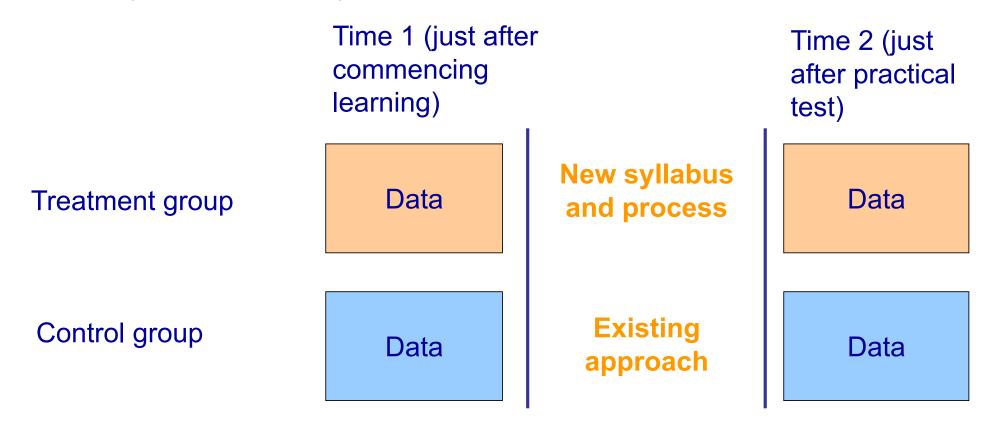


Forsyth et al.(1995)

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### New syllabus study (2011-2012)





### Quantitative measures



- Age and gender
- Number of hours of driving lessons with driving instructor
- Number of hours of driving practice with friends and family
- Sensation seeking scale (Arnett, 1994)
- Attitudes towards risk scale (Franken, Gibson, & Rowland, 1992)
- Item on self-rated likelihood of being involved in accident compared with average driver (Horswill, Waylen & Tofield, 2004)
- Item on self-rated driving skill compared with average driver (Horswill, Waylen & Tofield, 2004)

#### ...continued



- Driver Attitudes Questionnaire (DAQ) (Parker, Stradling & Manstead, 1996)
- Driver Behaviour Questionnaire (DBQ) violation items (Reason, Manstead, Stradling, Baxter & Campbell, 1990)
- DAQ-style Items on seat-belt wearing and mobile phone use
- Thrill seeking items from the Driver Stress Inventory (DSI) (Matthews, Desmond, Joyner, Carcary, & Gilliland, 1997)
- 'Worry about accidents' items
- HP scores and MC scores from the theory test

### ...continued



- Picture speed test a set of four pictures measuring self-reported speed in certain traffic situations (Horswill & Coster, 2002)
- Photo-animation measures of gap acceptance, close following, and overtaking (Horswill & Coster, 2001; 2002)

### **Speed ratings**









### Photo-animation risk measures – close following

Below is a series of pictures. Each picture depicts you getting closer to the car in front.

Q16 Imagine that you have passed your driving test, and that you are following the car depicted below. Please tick the picture that indicates the distance from the car in front that you feel you would choose to drive at. Assume that you are blocked from overtaking, and that the vehicle in front is travelling at 60mph.



### Photo-animation risk measures – close following





















#### Photo-animation risk measures – overtaking

Below is a series of pictures. Each picture depicts an oncoming vehicle getting closer to you.

Q36 Imagine that you have passed your driving test, and you have been behind the car depicted below for 15 minutes, driving at 20mph, and want to overtake. The oncoming vehicle speed is 35mph. Please tick the picture that indicates the MOST RISKY overtaking situation you think you would tolerate.



### Photo-animation risk measures – overtaking







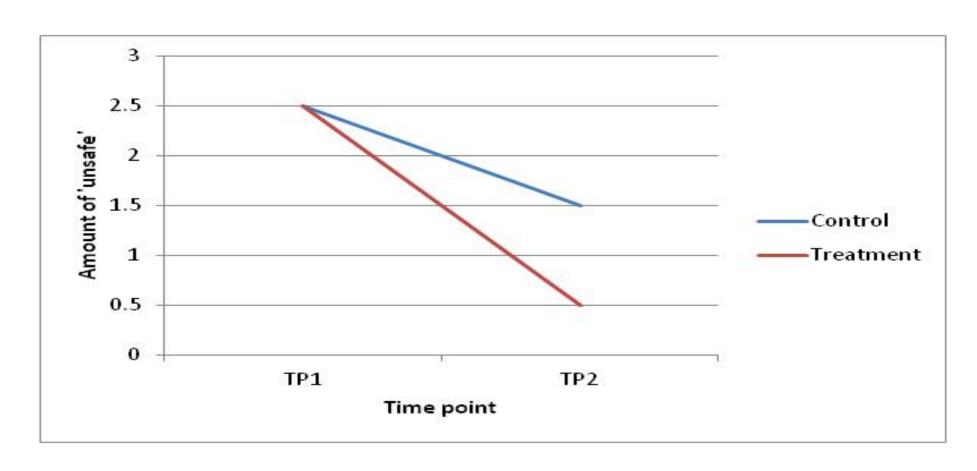






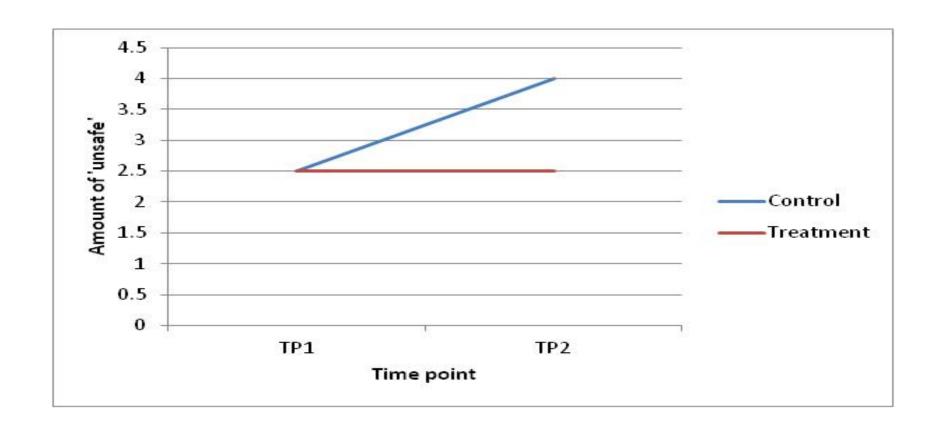


## What would we LIKE to see? Measures where high score = unsafe



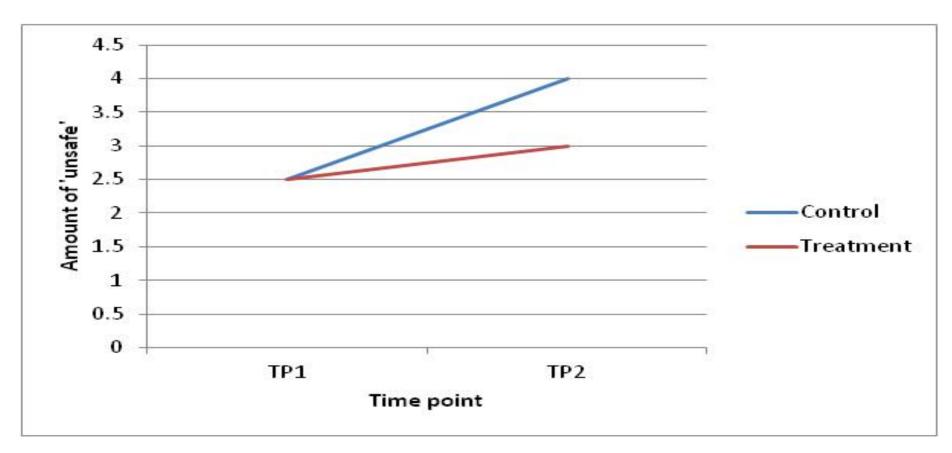


## What would we LIKE to see? Measures where high score = unsafe





## What would we LIKE to see? Measures where high score = unsafe



### What we actually found



Measure	Change in treatment group relative to control group over learning period	Safety effect
DAQ (drink driving)	Slight decrease compared with no change	Favourable
Worry about accidents	No change compared with slight decrease	Favourable

Self-rated skill Larger increase Unfavourable

Slight decrease compared with slight increase Self-rated likelihood of accident Unfavourable

Unfavourable Thrill-seeking (DSI) Larger increase

Slight decrease compared with slight increase Attitudes to risk (disapproval) **Favourable** 

Overtaking photo animation Larger decrease **Favourable** 

Close following photo animation Smaller decrease Unfavourable

Small increase compared with larger decrease Gap acceptance photo animation Unfavourable

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### Importantly...

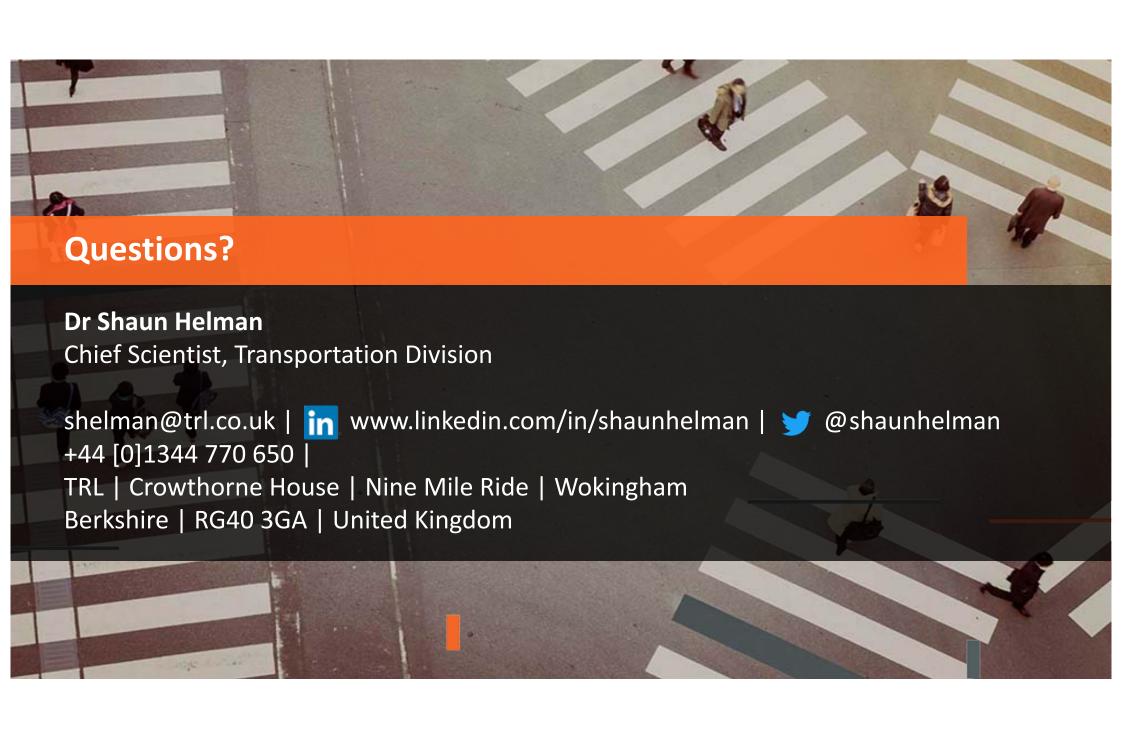
- DVSA were able to rethink the roll-out of the new syllabus, and ultimately abandon it
- Also, when combined into one dataset, we did find something interesting regarding the risk-taking measures
  - The change observed in risk-taking from the beginning of learning and test pass depends on the measure

Measure	Time point		
	TP1	TP2	
Speed	43.65	45.30**	



	TP1	TP2
Speed	43.65	45.30
	(5.41)	(4.70)
Close following	7.3	6.57
	(3.06)	(2.96)
Overtaking	7.69	6.20
	(3.86)	(3.78)
Gap acceptance	8.32	8.23
	(2.50)	(2.32)
Accident Likelihood	4.91	4.75
	(2.02)	(1.91)
Skilla	5.01	5.80
	(2.12)	(1.72)
DBQ violations <sup>b</sup>	1.40	1.37
	(.51)	(.46)
Thrill-seeking <sup>c</sup>	2.71	3.05
	(2.22)	(2.44)

Helman S., Kinnear N. A. D., McKenna F. P., Allsop R. E., and Horswill M. S. (2013). Changes in self-reported driving intentions and attitudes while learning to drive in Great Britain. Accident Analysis and Prevention, 59, 425-431.



### Over to you... Questions for presenters

Think more about the process of learning from what didn't work than the intervention itself.



## Your projects and evaluations



# Which of the following programmes were effective? – Frank McKenna

- Bicycle training to reduce injury
- High school driver training to reduce crashes
- Deter juvenile delinquents by taking them to prisons
- Toughened pint glass to reduce injuries in bars
- Infant simulator to prevent teenage pregnancy



### Other examples

- Graham Compton Fatal4 enforcement clinics
- Ruth Gore the use of virtual reality

## Questions for you....

- What are the barriers to sharing unexpected results?
- How can we overcome these barriers?
- What are the barriers to evaluating?
- Where do you currently share results and how can we share amongst larger audiences?

Road Safety **GB** 



