

# Driver and Instructor Competency



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## DRG's mission:

To develop educational interventions designed to reduce the risk of road traffic accidents by improving driver and trainer competency

# Three methods

Driver self evaluation

Simulator-based training

Continuing Professional Development (CPD)

# A complex interaction

- Driver behaviour issues neglected
  - focus on skill acquisition
- Advanced vehicle control skills
  - PROMOTES unrealistic optimism and increase the risk of collisions



# EU GADGET

## Aims:

Level 1: Vehicle manoeuvring

Level 2: Mastery of traffic situations

Level 3: Goals and context of driving

Level 4: Goals for life & skills for living

The 3 competencies

The key to crash reduction is to ensure drivers self evaluate their risk



Images courtesy a<sup>2</sup>om

# Self assessment



- Associations between self-assessment and risk
- Driver education = raising awareness of strengths and weaknesses
- Self-report measure of beliefs, feelings and behaviour
- Construction of scales
- on-line completion

# Fleet driver research

- Fleet drivers at increased risk even when exposure controlled for
  - Fatigue
  - Time pressure



Image courtesy a<sup>2</sup>om



# **Driver** Metrics

Driving standards higher

- Established in 2005
- The Driver Risk Index: A brief background
- Profiling and feedback

# Fleet Driver Risk Index



Image courtesy a<sup>2</sup>om

Aggression

Dislike of Driving

Driving Excitement

Hazard Monitoring

Driving Fatigue

Work Related Risk

# Fleet Driver Risk Index

## Coping factors:

Confrontation

Driving Focus

Self-evaluation

Driving Concerns

## Correction factors:

Impression Management

Confidence

# Validity



**Violators score higher on:**

Driving Excitement

Work Related Risk

**2+ crash involved drivers**

Aggression

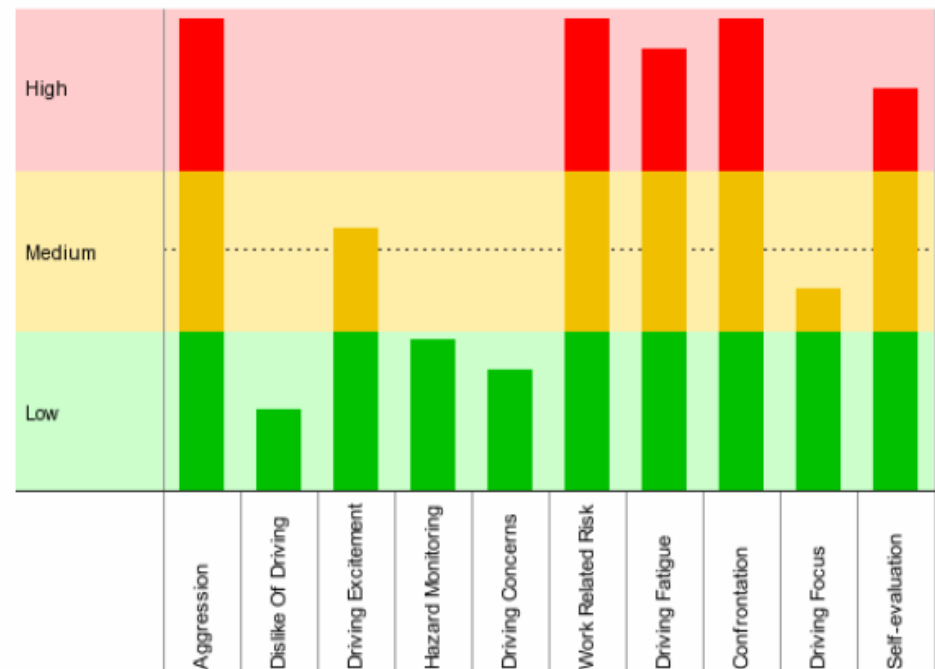
**3+ crash involved drivers**

Work Related Risk

# FDRI profiling

- Driver's score is compared with the norm
- An explanatory paragraph is provided for each factor
- Typical behaviours are provided to encourage self reflection

## Your Behavioural Risk Factors



# Peak Performance

Medium risk'

Group discussion based on FDRI  
2.5 hrs/12 participants

'High risk'

one-to-one coaching

Examines consequences

Negative behaviours discussed

Personal decisions

'Triggers' and coping strategies

# Current Projects

Fleet drivers - 40 operators

Multilingual - 7 languages

Astra Zeneca

Unilever

Bus drivers – Arriva Bus UK

Blue light drivers

Learner drivers - a2om

# Simulator-based Training

## Hazards and critical road and traffic situations:-

- Time pressure to complete tasks
- Feedback on errors
- Same scenario repeated without time pressure
- Feedback on performance differences



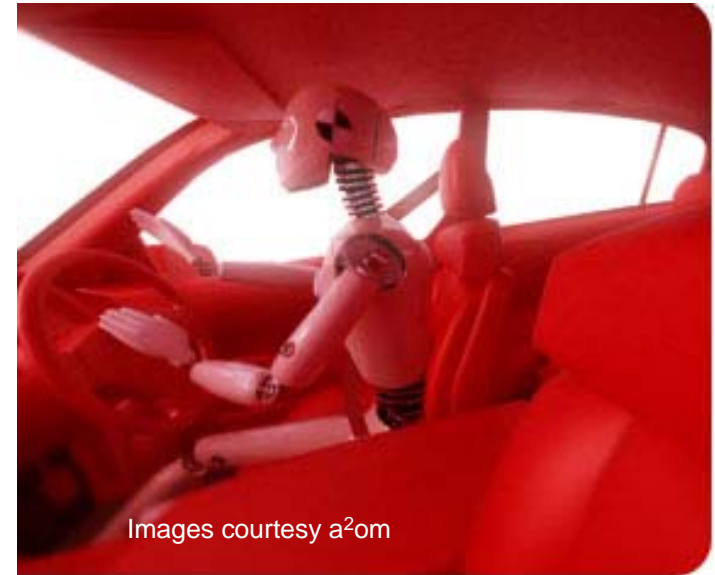
Arriva

Balfour Beatty

Home Office

- Driver trainers/instructors not qualified to deliver to higher levels of the GDE
- Cranfield CPD – Managing Human Factors in Driving
- MSc in Driver Behaviour and Education

# MSc in Driver Behaviour and Education

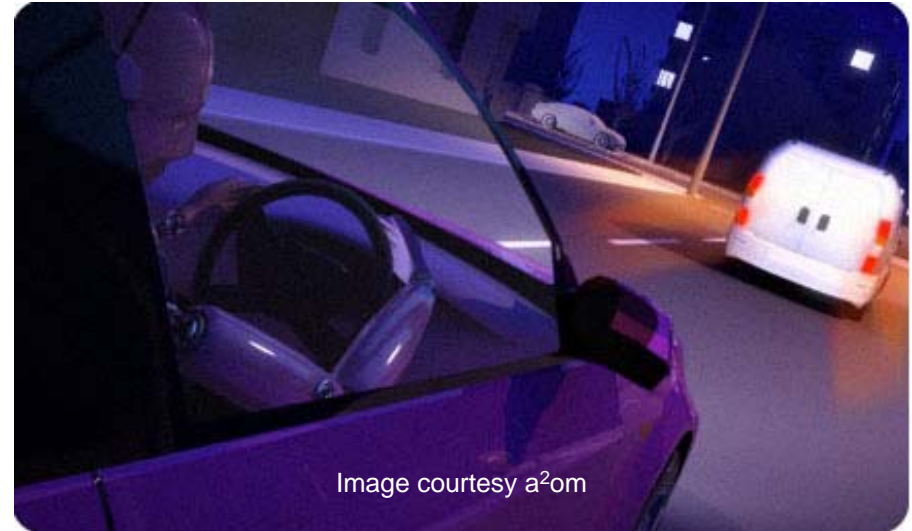


Students equipped with the skills and knowledge required to educate drivers more effectively, including the ability to systematically analyse up-to-date research, theories and techniques and their potential impact on driver behaviour

# Post Grad Course Content

## Core Modules

1. Intro to Human Factors
2. Human Performance and Error
3. Driver Education
4. Individ Diff in Driver Behaviour
5. Influencing Driver Behaviour
6. Driver Stress and Fatigue



## PGDip and MSc

7. Research Methods and Statistics
8. Cognitive Development & Driver Skill
9. Drink and Drug Driving
10. Road Traffic Accident Analysis

# Conclusion

Two key elements of driver competence development are: -

**Self-evaluation**

**Structured feedback**

Key element of developing instructor competence is: -

**Education on higher levels of GDE**