WHO IS DRIVING YOU?

An impulse control intervention

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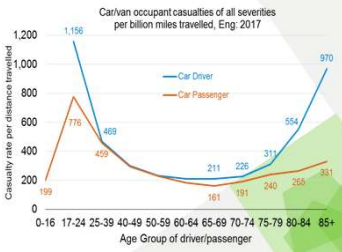
The problem

A mix of:

- Inexperience
- Age



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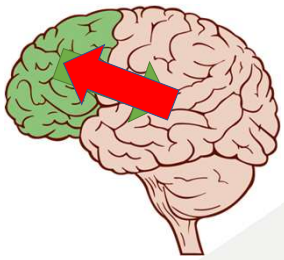
Decisions, decisions, decisions…



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Understanding impulsivity

In the Dual-system model of adolescent brain development the area of the brain associated with sensation-seeking outstrips the development of the self-regulatory executive system (Steinberg, 2008; Casey et al., 2011)

This means that decision making is not always a top down process (Glendon, 2011)

This disparity between the two systems manifests itself in poor levels of impulse control in young people

Previous studies in Estonia had shown success in the area of impulse control (Paaver et al.,2012: Eensoo, et al., 2018)

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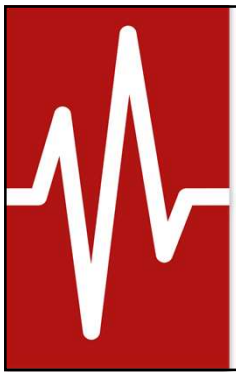

Impulse control – definition

Action without forethought or conscious judgment (Moeller, et al., 2001)

Impulse control has been characterised as the ability to offset an immediate reward for a greater reward later (Solnick, et al., 1980)

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What impacts on impulse control?

Impulse control is reduced when:

- Impaired
  - Alcohol
  - Drugs
  - Fatigue
- Peer situations

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The development team

Extern:

- An all-Irish charity but this element was for Northern Ireland
- Grant from the Road Safety Trust

Ian Edwards

Professor Robert Isler:

- Waikato University
- Research interests include body-mind interactions, eye movement behaviour and behavioural neuroscience, positive psychology and neuroplasticity, emotions, character strengths and resilience

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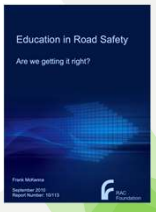
Failures in Road Safety

Road safety is often criticised for:

- Failing to be based on any theoretical underpinnings
- Not producing sustained benefits
- Being counter-productive

For an overview see McKenna, F. (2010)

Road Safety GB has been at the forefront of improving this situation through the development of their courses and CPD framework



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How we approached the problem

The Behavioural Change Wheel:

- Understand the behaviour:
  - We reviewed the literature
- Select what needs to change:
  - Improved levels of understanding of how humans make decisions, improved coping strategies, etc.
- Identify how this could be achieved:
  - In this case we knew this was going to be a pre-driver educational intervention aimed at 16 to 18 year olds.
- Identify the Behavioural Change Techniques
- Set aims and objectives
- Design
- Evaluate and refine

(Michie, S., Atkin, L. & West, R., 2014)

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How we applied the model

Capability	Opportunity	Motivation
To understand what impulsive decision-making is and why it occurs To understand how environmental context can impact on impulsive decision-making To understand how impairment (alcohol, drugs and fatigue) impacts on impulsive decision-making.		

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Training aims and objectives

Aim: To reduce inappropriate road safety related impulsive decision-making in the targeted age group

Learning objectives: To increase the student's:

- Understanding of impulsive decision-making
- Understanding of why their age group is prone to impulsive decision-making
- Ability to recognise situations when they are likely to engage in unsafe impulsive decision-making
- Motivation to develop their ability to control impulsive decision-making
- Ability to draw on inner resources for assisting them to reduce impulsive decision-making

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Behavioural Change Techniques

Behavioural change technique (BCT)	Section(s) where this BCT was used in the Who is Driving You?
Problem solving and anticendents	Crash analysis – keeping you in the driving seat

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Evaluation

Method

- Completed by the University of Ulster
- Measures used were:
  - A pre and post - questionnaire
  - Focus groups with the participants
  - Interview with the facilitators and teachers

Quantitative results

- Based on the Theory of Planned Behaviour (Fishbein and Ajzen, 1975)
- N = 20
- There was a statistically significant ($p<.05$), positive change in intention to make better decisions by planning how to control yourself in difficult situations.

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Quantitative insights

The "Who is driving you?" intervention was received very positively by the young people in the focus group, teachers, and the facilitators.

Evidence suggested the intervention may not only benefit young people in their thought processes and impulsivity in relation to driving behaviours but that as a further consequence, they potentially improve their decision-making abilities in general and enhance their life skills.

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Evaluation conclusion

In summary, this was a highly regarded and recommended intervention which appears to deliver the stated aims of helping young people to make better decisions by planning how to control themselves in difficult situations. Evidence presented here shows a measurable improvement in the awareness of issues surrounding impulsive behaviour and road safety in young people.

"Who is driving you?" Development and an evaluation of an impulse control and road safety intervention - Final report for the Road Safety Trust (p.64)

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Summary

Next steps

- Further development
- Further evaluation – randomised control trial

Questions?

More info:

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