



Advanced strategies of traffic safety education and campaigns – the Sweden's experiences



Dr. Sonja Forward, VTI

- » Engineering
- » Enforcement
- » Education
- » Evaluation

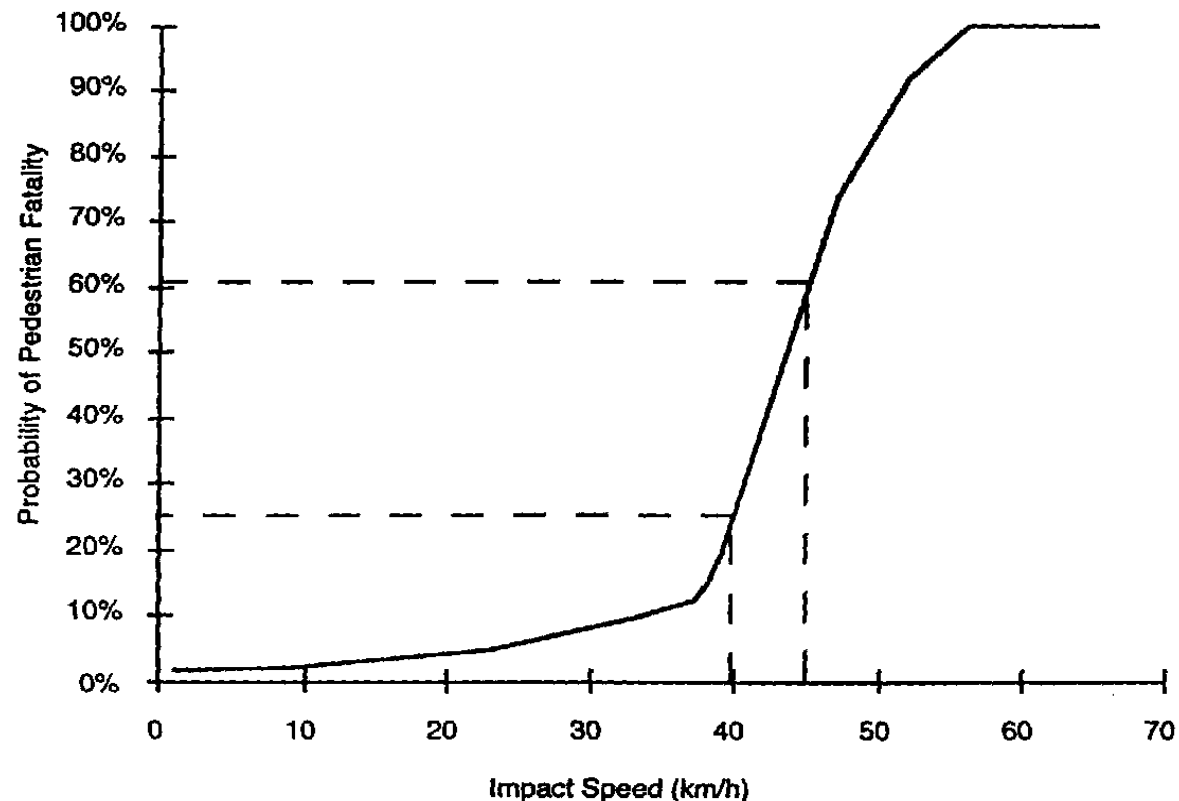
2+1 with cable barrier





Probability of Pedestrian Fatality by Impact Speed

Derived from the Interdisciplinary Working Group for Accident Mechanics (1986) and Walz, Hoeffliger and Fehlmann (1983)







Enforcement -Speed cameras vti



Change peoples' attitudes and norms
through:

- » Campaigns
- » Direct contact
- » Massmedia

Identifying and defining the problem

Main causes of road crashes

vti

Human factors 95 %

Human factors alone 65 %

(Wierwille et al., 2002)

- » **Error:** A wrong rule is applied to achieve a specific goal. Wrong action - right intention.
- » **Lapses:** forget to perform a planned action or carrying out the steps in the wrong order. Wrong action - right intention.
- » **Violation:** Any behaviour that deviates from accepted procedures. Wrong action - wrong intention.

(Driver Behaviour Questionnaire, DBQ)

Different factors different approaches

vti

- » Error: Driver training and increased awareness of mistakes
- » Lapses: Driver training, information about the problem and encourage them to practice more
- » Violation: The message needs to focus on the motivation underlying unsafe driving practices, for example attitudes and norms.

Campaigns focusing on intentional behaviour

Motives behind their actions vti

- » Believe that the consequences of the act is of benefit to themselves
- » Overestimate their own driving skills
- » Believe that people important to themselves accept traffic violations
- » Perceive the behaviour as normal

- » Increase the perception of negative outcomes
- » Decrease the perception of positive outcomes
- » Raise perception that significant others disapprove of the behaviour
- » Discuss the options available and how to implement them

**The message execution
strategy - “how it will be said”**

Seven elements to develop an vti effective message

- » it needs to be appealing (**attractive**)
- » easy to understand (**clear**)
- » used repeatedly (**consistent**),
- » believed by the audience (**credible**),
- » able to generate change (**persuasive**)
- » it needs to focus on an actual problem (**relevant**).
- » the alternative presented should be possible to achieve (**trustworthy**)

Result in change:

- » They are capable of carrying out the recommended actions

Result in a maladaptive response:

- » They feel incapable of performing the behaviour and/or the behaviour is seen as being ineffective

No effect:

- » If they perceive themselves as physically invulnerable

If fear appeal are being used

vti

- Give an effective recommendation (safe behaviour) to cope with the threat
- Increase the target's confidence in his/her abilities to successfully and easily perform the recommended behaviour.

Fear appeal: summary

vti

- » The effects of fear appeals are far from clear. Thorough research and pre-testing the message are necessary.

*Instead of fear the message can be based on
Humour*

- » People pay more attention to a humorous message than to a serious one and people who are in a good mood are less likely to disagree with a persuasive message

Campaigns – steps to take vti

1. Base the campaign on statistics and research
2. Select a specific target audience
3. Translate the overall goal into specific objectives
4. Plan the campaign
5. Formulate the message
6. Ensure rigorous evaluation
7. Disseminate the results

- Understand the target groups needs and expectations
- Challenge preconceived ideas
- Make the audience dissatisfied with their own views
- Convince them that their own attitudes are redundant and that the one presented is better
- Remember that fear appeal can have a negative effect

**Improve traffic safety through
the use of education**

Driver training in Sweden

- Driver training can be private or at a driving school.
- A learner's permit can be issued at age 16.
- The instructors need to be 24 or older and have held a valid driver's licence for five years.

Driver training: obligatory vti courses

- » An introductory course before permission is granted, private instructor and student take part (3 hours).
- » Risk 1: Theoretical - Risk awareness (min 3 hours) concerns alcohol, drugs, tiredness and other risky behaviour.
- » Risk 2: Practical - How to drive in special conditions like rain and snow (min 3 hours).

At the age of 18

- » One theoretical test (65 questions)
- » One practical test (approx. 1 hour).

Curriculum - GDE matrix

vti

(Goals for Driver Education)

(Hatakka, Keskinen, Glad, Gregersen, Hernetkoski, 2002)

	Knowledge and skill	Risk increasing aspects	Self asses- ment
Goals for life and skills for living	Lifestyle, age, sex, Personality, Group norms, Company culture	Sensation seeking Risk acceptance Safety ignorance Peer pressure	Introspective competence Own preconditions Impulse control
Goals and context of driving	Time planning Route planning Fitness to drive	Alcohol, Stress, Tiredness Rush hour	Own motives influencing choices Self-critical thinking
Driving in traffic	Traffic rules Co-operation Hazard perception Automatization	Speeding Close-following Low friction Vulnerable r.u.	Calibration of driving skills Own driving style
Vehicle control	Car functioning Protection systems Vehicle control Physical laws	No seatbelts Breakdown of vehicle systems Worn-out tyres	Calibration of car-control skills

- Taking risk in traffic is usually regarded as something attractive. Thus, young drivers motives are sometimes in conflict with traffic safety.
- Focus more on negative group pressure and how young people can avoid this.
- Increase the support to trainers, further education but also teaching material.

- More use of coaching, group discussions and other student centred techniques
- Develop best practice which are based on science

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Essential guide to taking a driving licence in Sweden: see http://www.korkortsportalen.se/upload/bibliotek/International/100079_Allt%20om%20k%C3%B6rkort_ENG_20110506.pdf

A low-angle shot of a yellow daisy flower in the foreground, slightly out of focus. The background is a bright blue sky filled with soft, white, fluffy clouds. The sun is visible as a bright, glowing orb behind the flower's center, creating a lens flare effect.

Thank you