Quality assurance and evaluation of the measures in road safety education

**European Traffic Education Seminar** 25 October 2017, Belgium Kristin Eli Strømme Trygg Trafikk, Norway







## Norway

- Big country, small population
  - 5.2 million inhabitants
  - 385.000 sq.km
- Trends
  - Population growth
  - Aging population
  - Urbanization





# The Norwegian Council for Road Safety

- National non-governmental organization since 1956.
- Members are counties, municipalities,
  - organizations and companies.
- Neutral, independent and non-profit.
- Road safety is our only interest special emphasis on education.





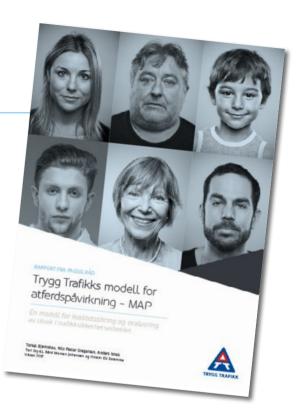
# **Education and evaluation**

- Higher requirements for documentation and evaluation.
- Effective measures in the short and long term.
- Basis for development of material and interventions.
- Communication with the educational system.
- Balancing experiential and evidence-based knowledge.



## The report

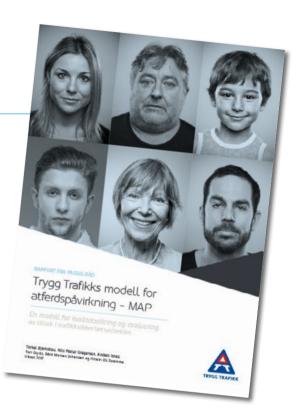
- **Chapter 1** places traffic safety promotion in a wider context.
- Chapter 2 ► presents models of behaviour change and NCRS' model of behaviour modification.





### The report

- **Chapter 1** places traffic safety promotion in a wider context.
- Chapter 2 ► presents models of behaviour change and NCRS' model of behaviour modification.
- **Chapter 3** reviews educational models, with a focus on the 5E model.
- **Chapter 4** describes evaluation of training programmes and campaigns.
- **Chapter 5** describes best practices, overview by age groups.
- **Chapter 6** shows how the model can be applied in practice.





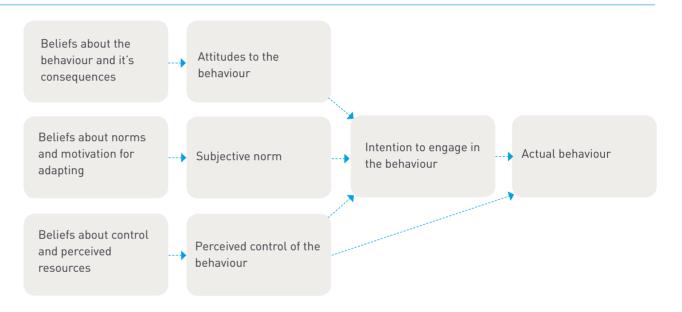
# A comprehensive model of behaviour change

- **TPB,** Theory of Planned Behavior
- **HBM**, Health Belief Model
- **TIB,** Theory of Interpersonal Behavior
- ELM, Elaboration Likelihood Model
- **TTM**, Transtheoretical Model of Change
- **MAP,** Modell for AtferdsPåvirkning The Model of Behaviour Modification



# The Theory of Planned Behaviour

- Is the link between attitudes and actions strong or weak?
- Behaviour is influenced by intentions to change.

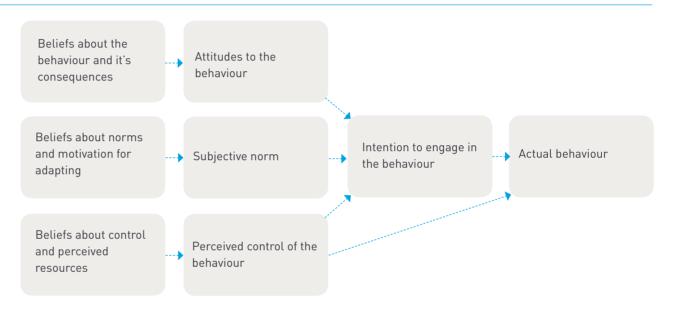


Figur 2.1: Theory of planned behaviour. Source: Ajzen, 1991.



# The Theory of Planned Behaviour

- Is the link between attitudes and actions strong or weak?
- Behaviour is influenced by intentions to change.
- ▶ The degree of control we feel.
- Governed by attitudes to the behaviour and subjective norms.
- The subjective norm can be true or false.



Figur 2.1: Theory of planned behaviour. Source: Ajzen, 1991.





# The Model of Behaviour Modification

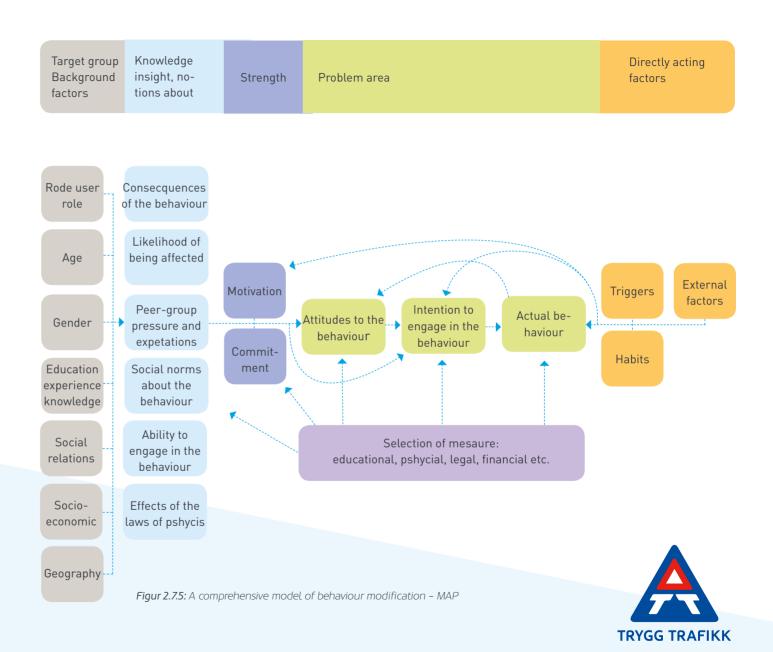
NCRS's MAP model

- We have reviewed these theories many similarities, some differences.
- Intentions, attitudes and social conditions recur as key factors.
- Each theory adds aspects that enhance our understanding
  - $\cdot$  the determinants of action
  - the preconditions for effective behaviour modification.



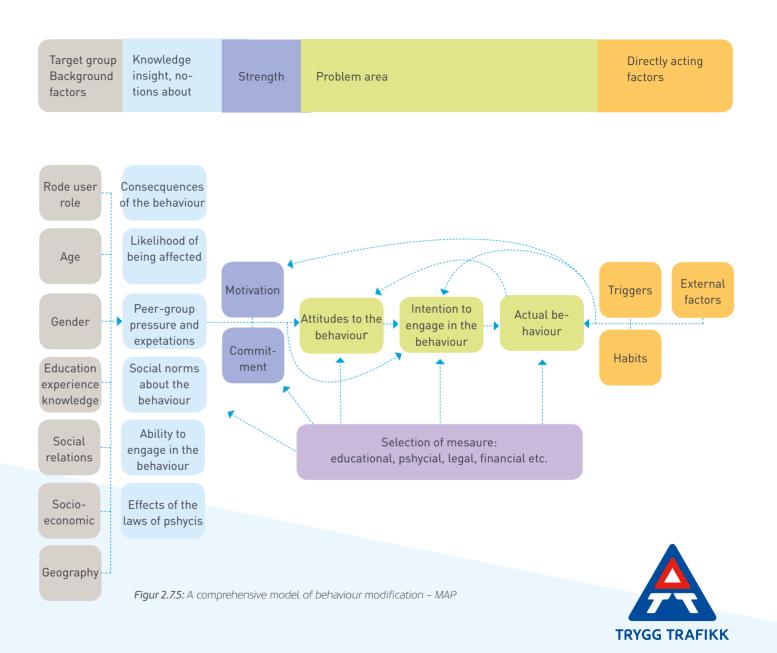
# Explanation and use of the model

- Select a problem area
  - target group.
- Analyse the causes and define a focus.
- Specify the target group.



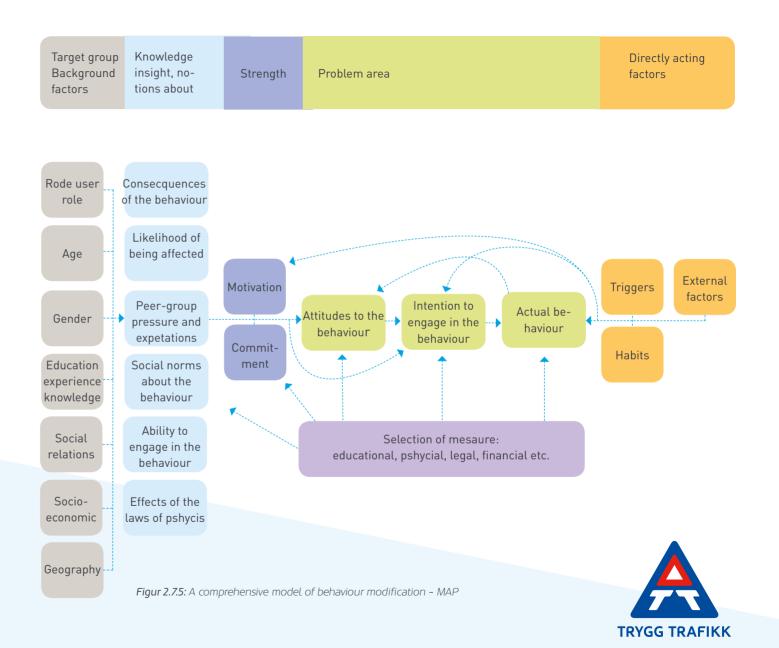
# Explanation and use of the model

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- Identify the motivation and commitment of the target group.
- Specify the objectives of the measures.



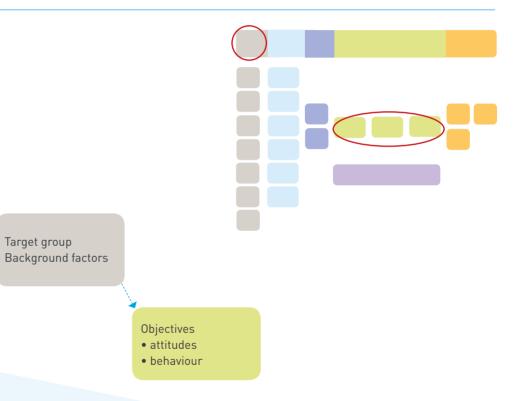
# Explanation and use of the model

- Select a problem area
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- Specify the objectives of the measures.
- Directly acting factors combinations of measures?
- Prepare an evaluation plan.

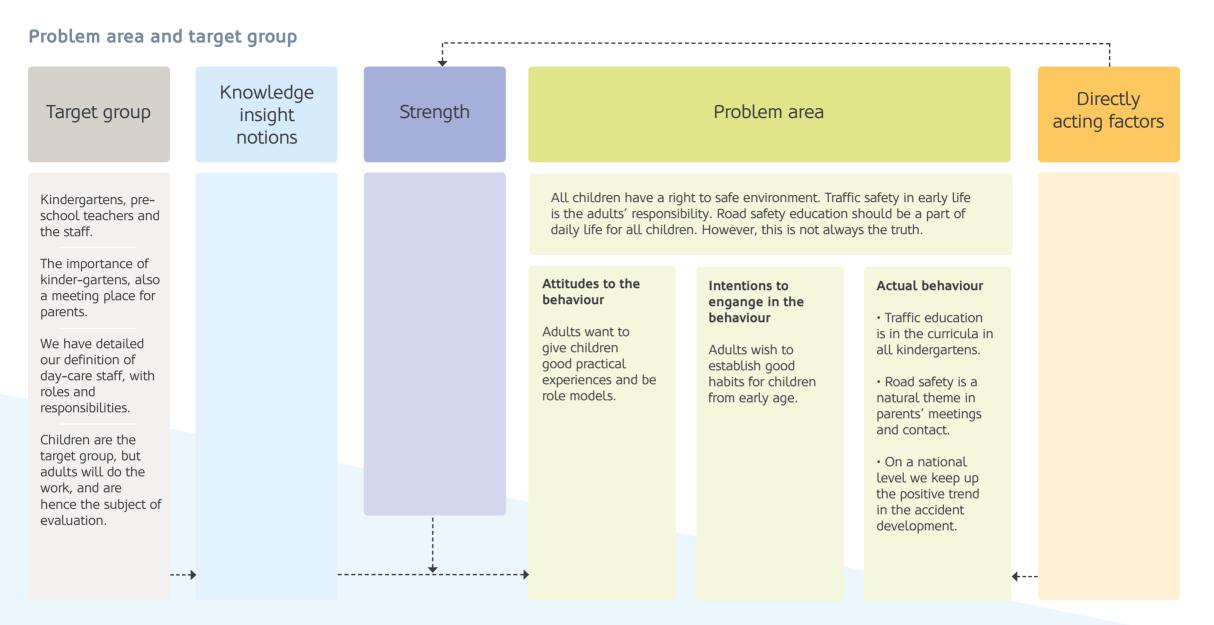


# Problem area and target group

- Select a problem area and analyse its manifestations.
- Decide on a desired outcome.
- Change attitudes, intentions or actual behaviour?
- Identify the target group.
- Take their background factors into account.

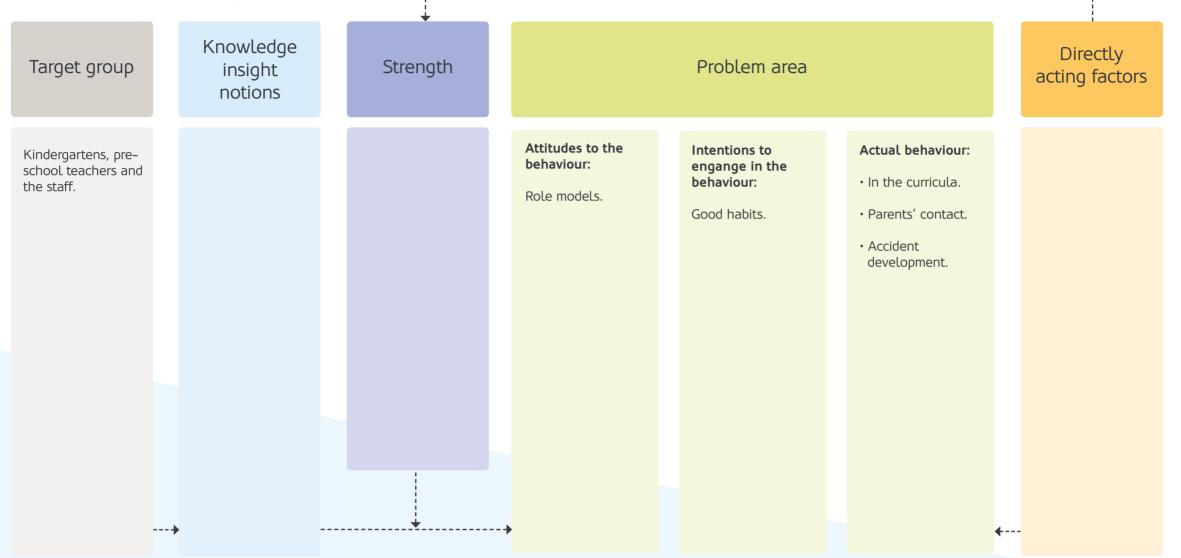








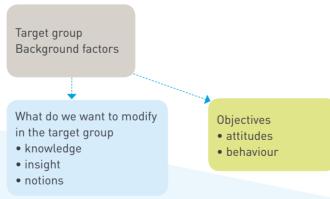
#### Problem area and target group, summary

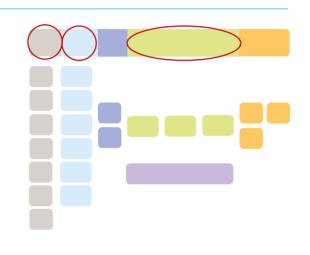




# Knowledge, insight and notions

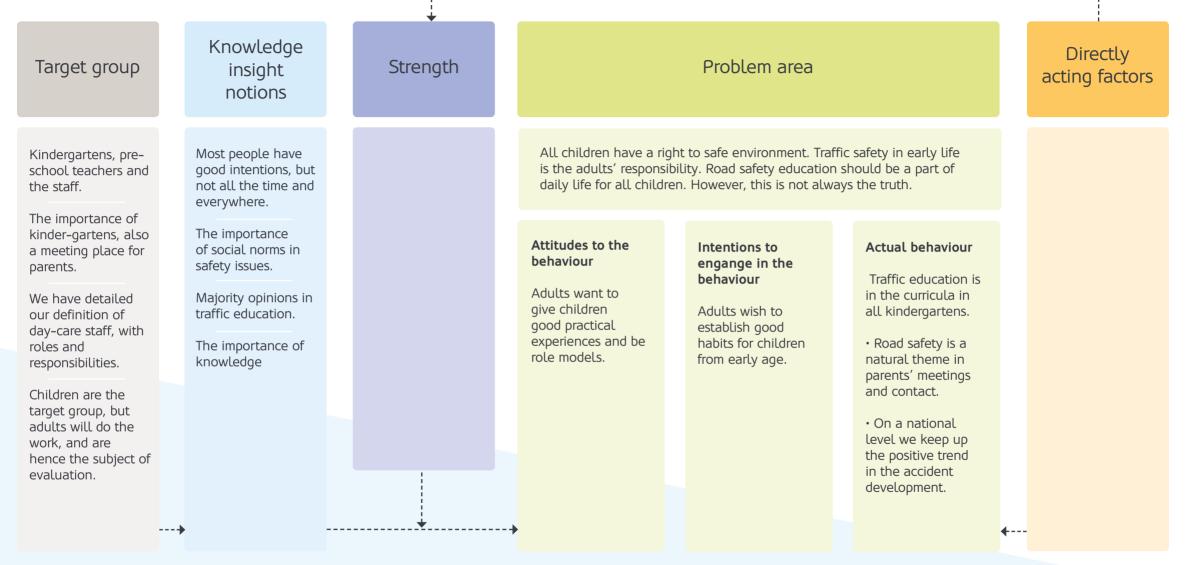
- What knowledge, insights or notions in the target group hold the key to change?
- What must develop or change to achieve the desired results?





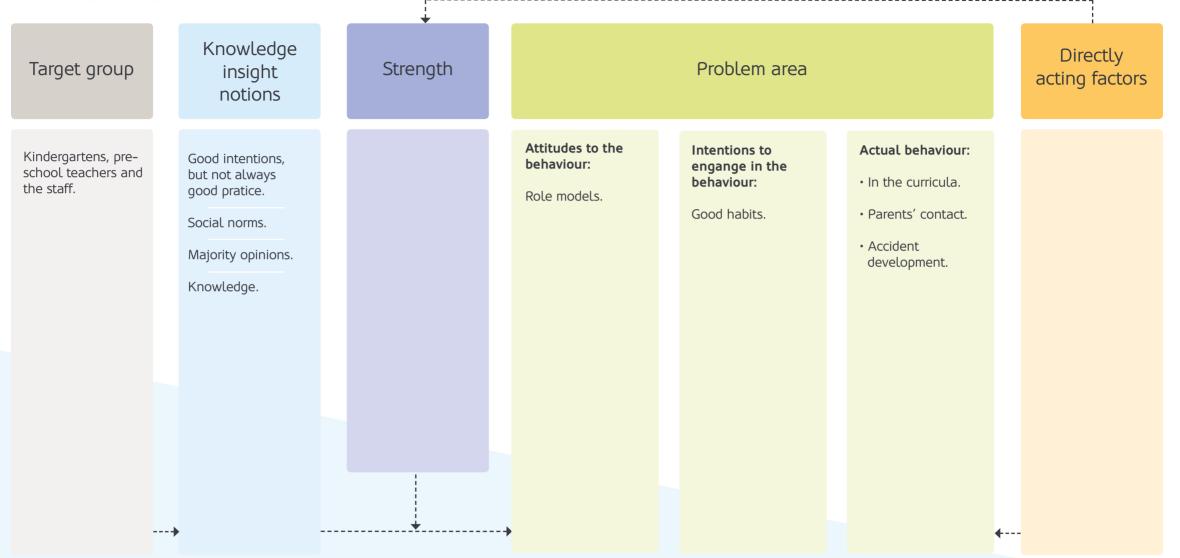


#### Knowledge, insight and notions





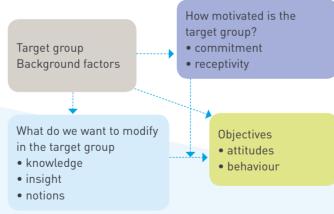
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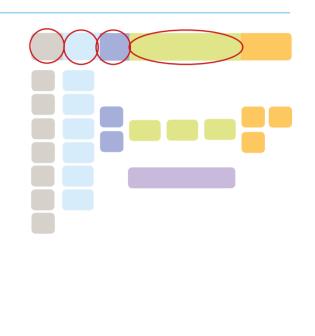




## **Motivation and commitment**

- Motivation and commitment are preconditions for changing knowledge, insights and notions.
- We will look at our total knowledge about the target group, its background, motivation and commitment.







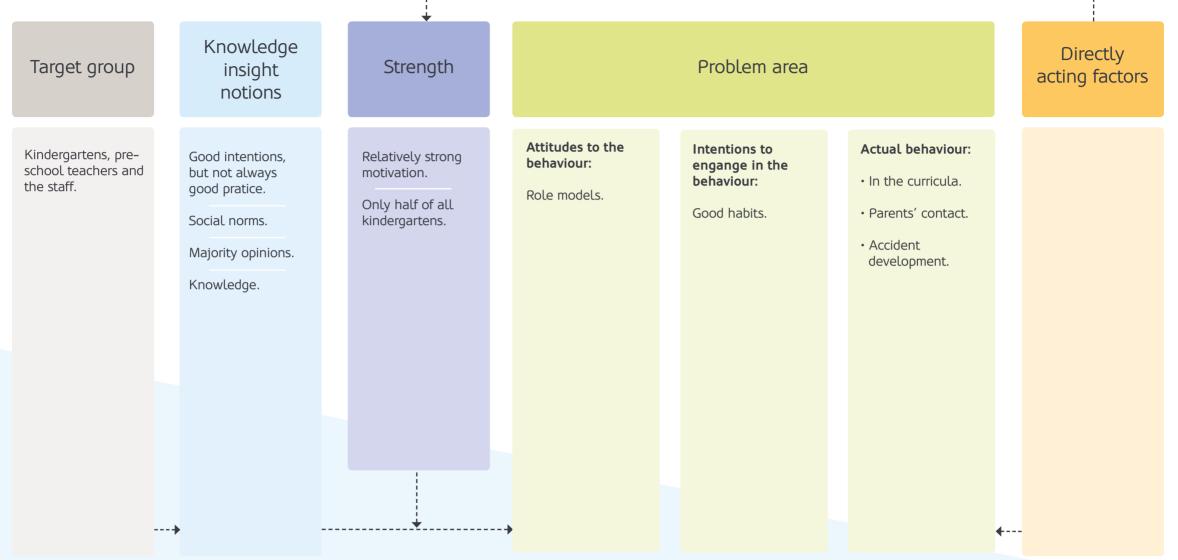
#### Motivation and commitment

Target group	Knowledge insight notions	Strength		Directly acting factors				
Kindergartens, pre- school teachers and the staff.	Most people have good intentions, but not all the time and everywhere.	Motivation and commitment is rela- tively strong But only half of all	All children have a right to safe environment. Traffic safety in early life is the adults' responsibility. Road safety education should be a part of daily life for all children. However, this is not always the truth.					
The importance of kinder-gartens, also a meeting place for parents.	The importance of social norms in safety issues.	kindergartens have traffic education in their curriculum.	Attitudes to the behaviour	Intentions to engange in the behaviour	• Traffic education			
We have detailed our definition of day-care staff, with roles and responsibilities.	Majority opinions in traffic education. The importance of knowledge	We wish to reach all kindergartens	Adults want to give children good practical experiences and be role models.	Adults wish to establish good habits for children from early age.	<ul><li>is in the curricula in all kindergartens.</li><li>Road safety is a natural theme in</li></ul>			
Children are the target group, but adults will do the work, and are hence the subject of					<ul> <li>parents' meetings and contact.</li> <li>On a national level we keep up the positive trend</li> </ul>			
evaluation.		•			in the accident development.			

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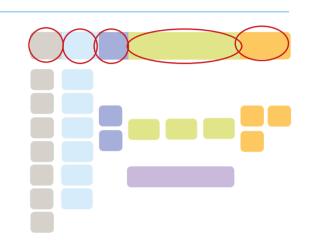


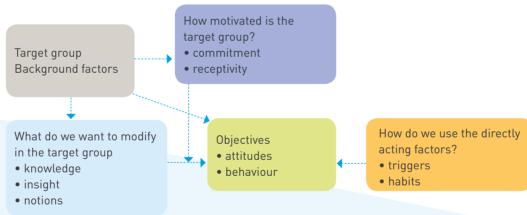


# **Directly acting factors**

External factors may have a direct effect on behaviour.

Can serve as reinforcement, but also as a barrier.







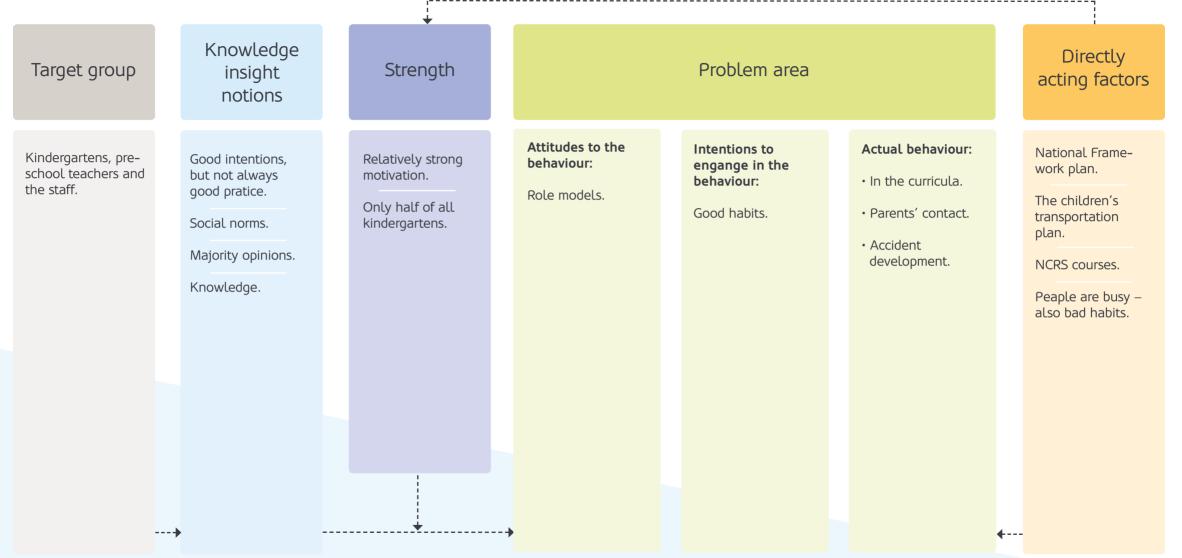
#### Directly acting factors

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Kindergartens, pre- school teachers and the staff.	Most people have good intentions, but not all the time and everywhere.	Motivation and commitment is rela- tively strong But only half of all	All children have a rig is the adults' responsit daily life for all childre	Traffic is part of the national Framework plan for kindergarten.		
The importance of kinder-gartens, also a meeting place for parents. We have detailed our definition of day-care staff, with roles and responsibilities. Children are the target group, but adults will do the work, and are hence the subject of evaluation.	The importance of social norms in safety issues. Majority opinions in traffic education. The importance of knowledge	We wish to reach all kindergartens	Attitudes to the behaviour	Intentions to engange in the behaviour Adults wish to establish good habits for children from early age.	<ul> <li>Actual behaviour</li> <li>Traffic education is in the curricula in all kindergartens.</li> <li>Road safety is a natural theme in parents' meetings and contact.</li> <li>On a national level we keep up the positive trend in the accident development.</li> </ul>	The children's transportation plan is used to highlite road safety for children.NCRS give courses in the teachers' colleges and for kindergarten staff.Peaple are busy and sometimes forget – there are also bad habits.Various types of measures com- bined to achieve maximum impact.

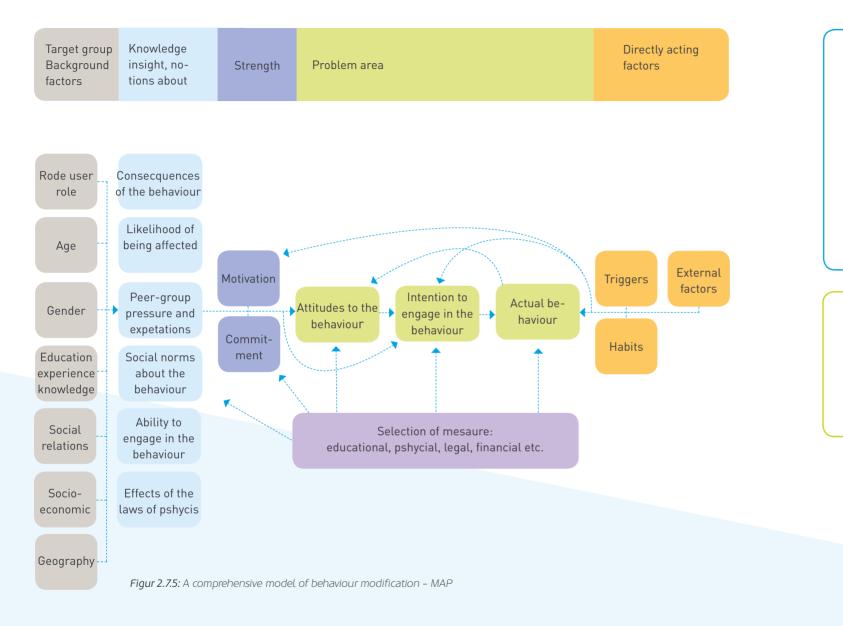
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#### Directly acting factors, summary







# Evaluation plan Process evaluation information material website posters, books, glove puppet etc traning courses evaluations Impact evaluation

- membership
- monthly/annual review
- survey of insight, attitudes and knowledge

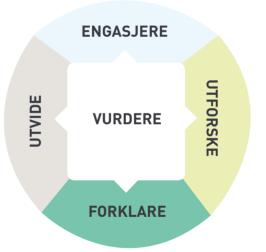
#### Childrens Traffic Club

Kindergarten members Continuity and progression Into daily life Materials, ideas, pratical training etc.



# The 5E Model

- **ENGAGE** capture the attention, motivate, identify existing skills.
- **EXPLORE** make provisions for investigation, gather information, make decisions.
- **EXPLAIN** from 'vernacular' to academic concepts.
- **ELABORATE** use academic knowledge in new contexts.
- **EVALUATE** self-evaluation, mid-term evaluation and final review.









ÅRSHJULET OM KLUBBEN ÅRSPLANSARBEID TRAFIKKSIKKER BARNEHAGE TIPS TIL TURER

#### Barnas Trafikklubb » Barnehage » Årshjulet



## Network in road safety education?

- What kind of educational activities in relation to road safety do you have in your country? (http://eacea.ec.europa.eu/education/eurydice/documents/facts and figures/education structures EN.pdf)
- Is it in your country a requirement that all schools should provide road safety education or is optional for the schools to decide themselves?
- Who makes the materials used for the different activities?
- What are your goals/KPIs for your activities?
- Are the activities evaluated/monitored and what are your results?
- Who can be contacted for additional information?



# Thank you for your attention!





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