

Achieving Change through the Be Seen Project



Alain Areal

The LEARN! Manual Webinar
Wednesday 23 June 2021 10:00-12:15 CEST

PROBLEM ANALYSIS



Accidents database
Safety Performance Indicators
Observations/Self Reported data
Literature Review

- 16.5% of accidents involving deaths or injuries were pedestrians, which resulted in 22.1% of deaths and 19.8% of serious injuries in road accidents.
- On average, each run over with injury causes 34% more deaths and 20% more serious injuries than the average of all accidents.
- 48.0% of dead pedestrians and 37.3% of severely injured pedestrians resulted from being run over in poor lighting conditions (night or dusk).



PROBLEM ANALYSIS



- Pedestrians are the most vulnerable group of road users, namely children and the elderly;



- The risk of being involved in a road accident at night is 2 times higher than during the day;



- A pedestrian walking at night without a retro-reflective material has an **8 times higher risk** of accident than if he uses a retro-reflective material;



PROBLEM ANALYSIS

- In studies where hundreds of pedestrians run over were analysed, it was concluded that about 1/3 (33%) of pedestrians hit by a car show difficulty in seeing the vehicle that hit them, and about 2/5 (40%) of drivers show difficulty in seeing the pedestrian who ran over;



- Higher the speed practiced, the shorter the distance at which the pedestrian is detected;



- At night, a pedestrian's visibility can only be guaranteed by good colour contrast. This is only achieved through the use of retro-reflective material, by the pedestrian.



BE SEEN PROJECT GOALS



General Goal:

Reduce accidents involving pedestrians during the night and twilight periods.

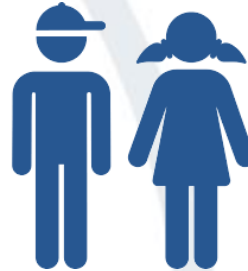
Specific Goals:

- To increase the retro-reflective material usage rate in pedestrians while walking during periods of poor visibility;
- To raise awareness about the importance, advantages and need of using retro-reflective material;
- To raise pedestrian's awareness about the increased risk of being run over while walking during periods of poor visibility;
- To raise drivers' awareness to the pedestrians run over problem.



BE SEEN PROJECT TARGETS

PrimaryTargets:



Children

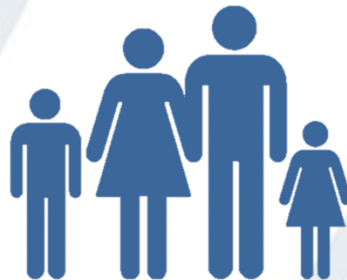


Elderly

SecondaryTargets:



Teachers



Parents

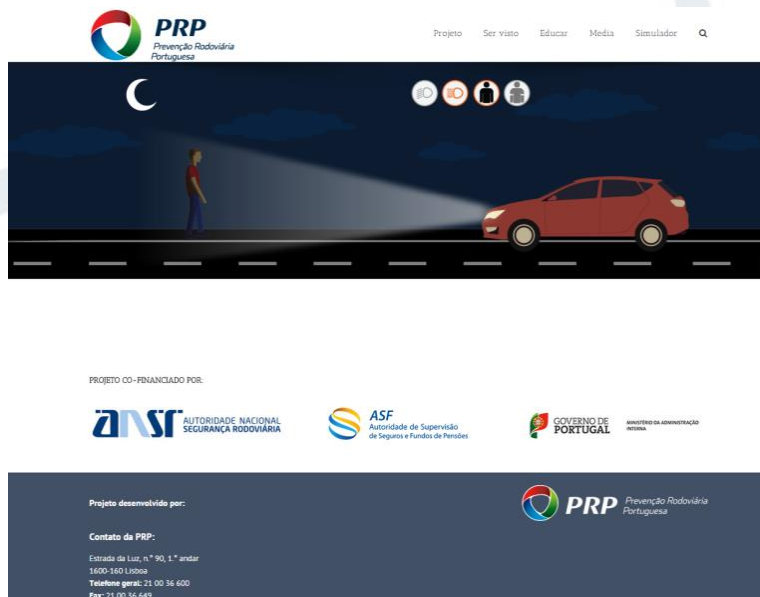


Drivers



General Public

BE SEEN PROJECT ACTIVITIES



PRP Prevenção Rodoviária Portuguesa

Projeto Ser visto Educar Media Simulador

Projeto CO-FINANCIADO POR:

ANSR AUTORIDADE NACIONAL DE SEGURANÇA RODOVIÁRIA

ASF Autoridade de Supervisão de Seguros e Fundos de Pensões

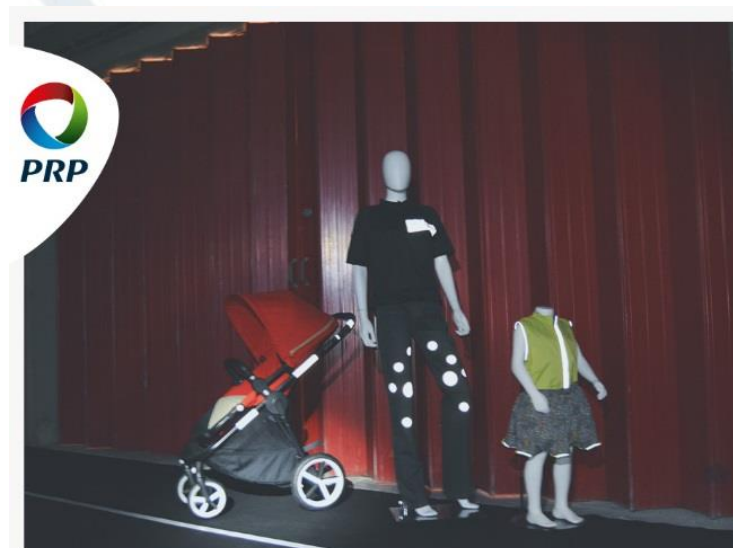
GOVERNO DE PORTUGAL MINISTÉRIO DA ADMINISTRAÇÃO INTERNA

Projeto desenvolvido por:

PRP Prevenção Rodoviária Portuguesa

Contato da PRP:

Estrada da Luz, n.º 90, 1.º andar
1600-1601 Lisboa
Telefone geral: 21 00 36 600
Fax: 21 00 36 649



SEJA VISTO!

Os peões constituem o grupo de utentes da estrada mais vulneráveis, nomeadamente as crianças e os idosos.

O risco de ser atropelado à noite e nos períodos de visibilidade reduzida, dentro e fora das localidades, é maior.

Em estudos onde foram analisados centenas de atropelamentos, concluiu-se que cerca de 40% dos condutores revela dificuldade em ver o peão que atropela. E quanto maior for a velocidade praticada, menor é a distância a que o peão é detectado.

De noite, a visibilidade de um peão só pode ser garantida com a utilização de material retrorrefletor, por parte do peão.

Sabe a que distância o peão é visto sob as luzes dos faróis?

- Se usar roupa escura, apenas a 25 metros
- Se usar roupa clara, essa distância duplica (50 metros)
- Se usar material retrorrefletor, essa distância é 6 vezes superior (150 metros)

Use sempre material retrorrefletor como por exemplo:

- Braçadeiras;
- Mochilas com tiras retrorrefletoras;
- Roupa com aplicações de material retrorrefletor.



PRP Prevenção Rodoviária Portuguesa

DÊ NAS VISTAS!

Use material retrorrefletor.
www.sejavisto.prp.pt

PRP Prevenção Rodoviária Portuguesa

Material retrorrefletor e a indústria da Moda

www.sejavisto.prp.pt

Use material retrorrefletor.
www.sejavisto.prp.pt

PRP Prevenção Rodoviária Portuguesa

DÊ NAS VISTAS!

Venha experimentar a nossa câmara escura!

Use material retrorrefletor.
www.sejavisto.prp.pt

GOVERNO DE PORTUGAL MINISTÉRIO DA ADMINISTRAÇÃO INTERNA

ANSR AUTORIDADE NACIONAL DE SEGURANÇA RODOVIÁRIA

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DESIGN AND METHOD OF THE EVALUATION



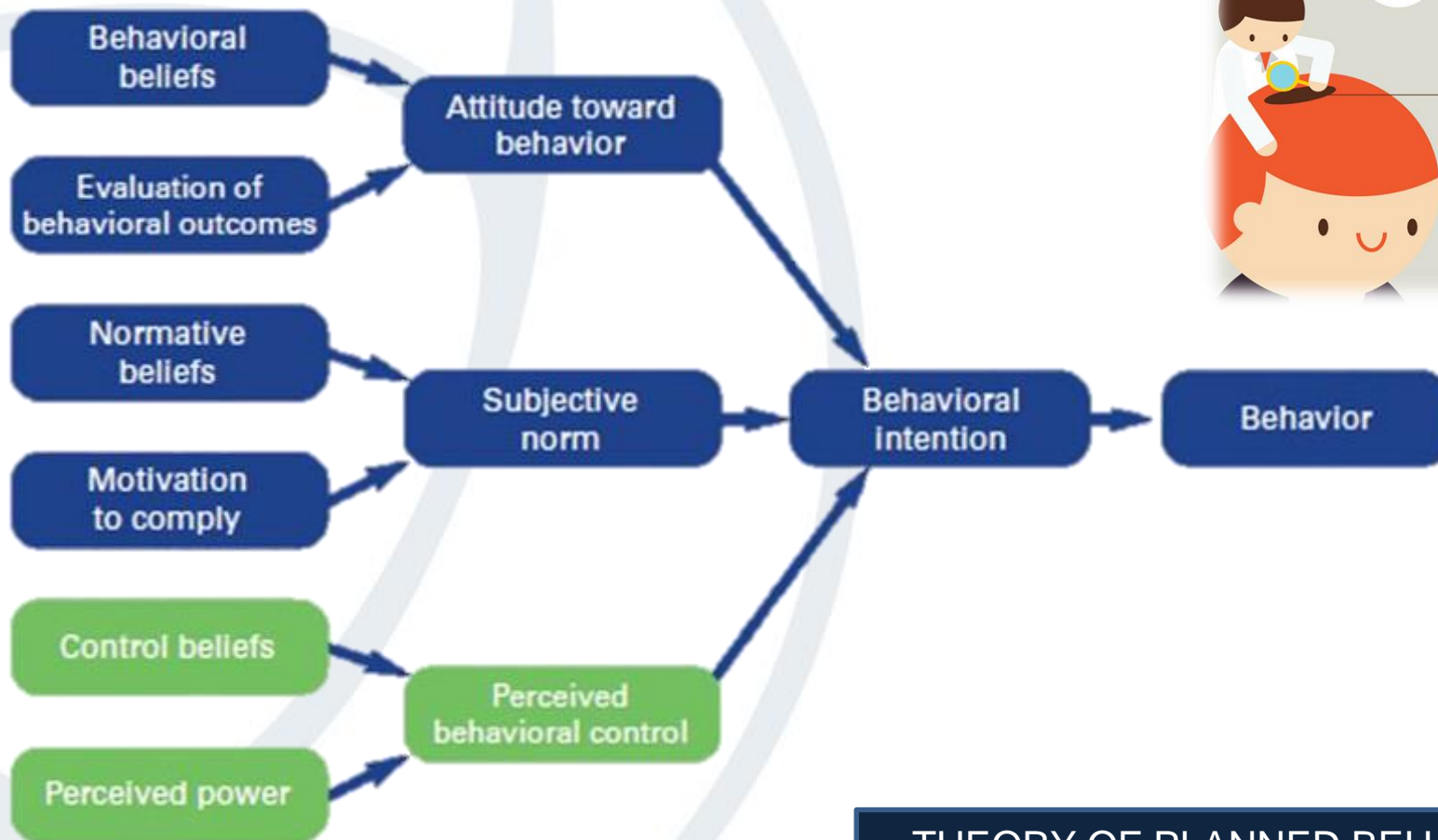
1. Survey For Children up to 14 Years of Age (14 Questions; *Answer Yes or No; Supervised by teachers; paper form*)

Questions	Yes	No
Q1. I have retro-reflective clothing or accessories at home.		

2. Survey For Children 15 Years of Age and Older (59 questions; Likert Scale 7 point; mainly online surveymonkey software)

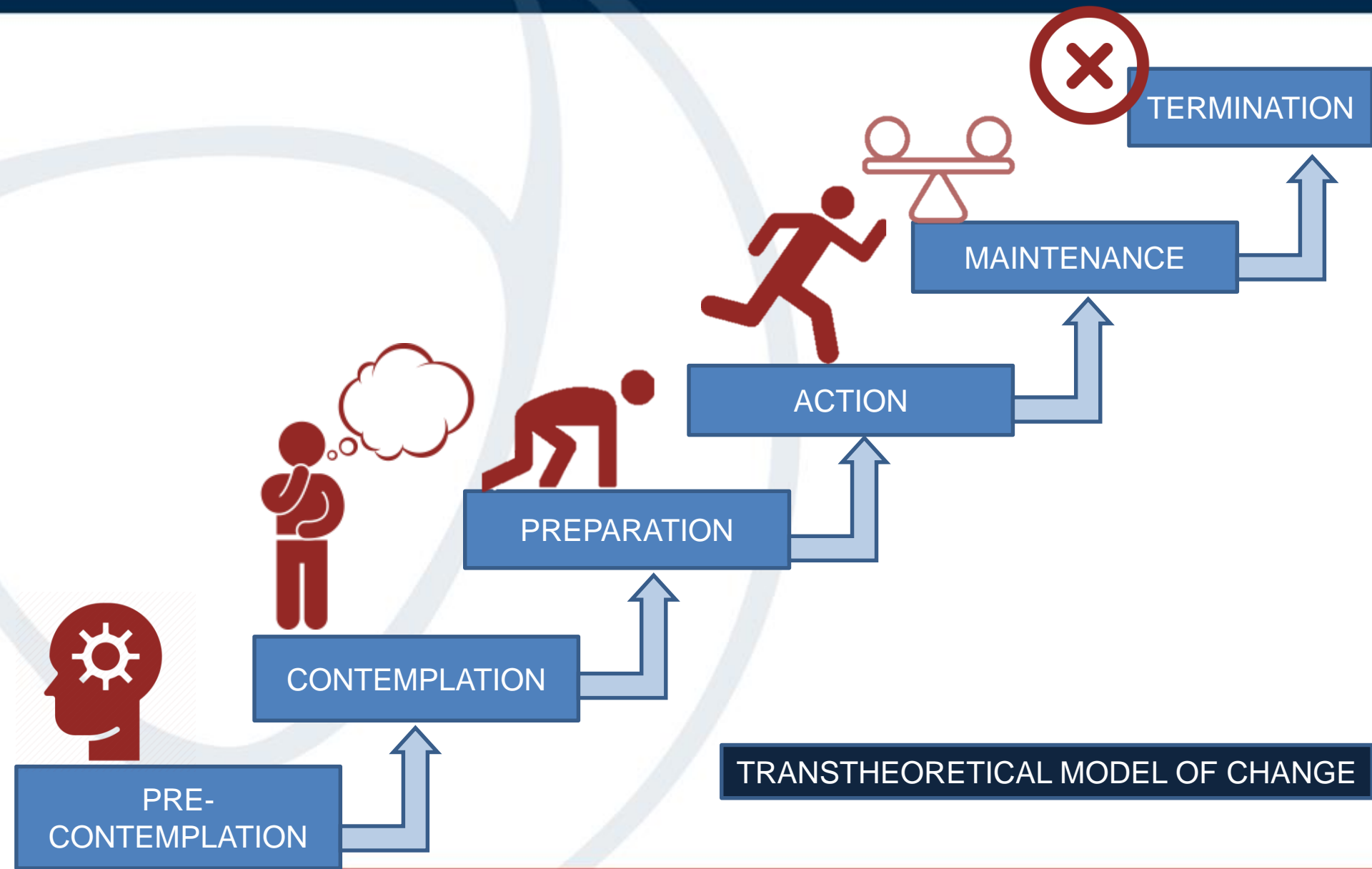
Questions [Previous Behaviour and Personal Norms subscales]	
46. How many times during the past three months have you used retro-reflective material in situations of reduced visibility, both inside and outside the localities?	Never: 1:: 2:: 3:: 4:: 5:: 6:: 7: Always

BEHAVIOURAL CHANGE THEORIES



THEORY OF PLANNED BEHAVIOR

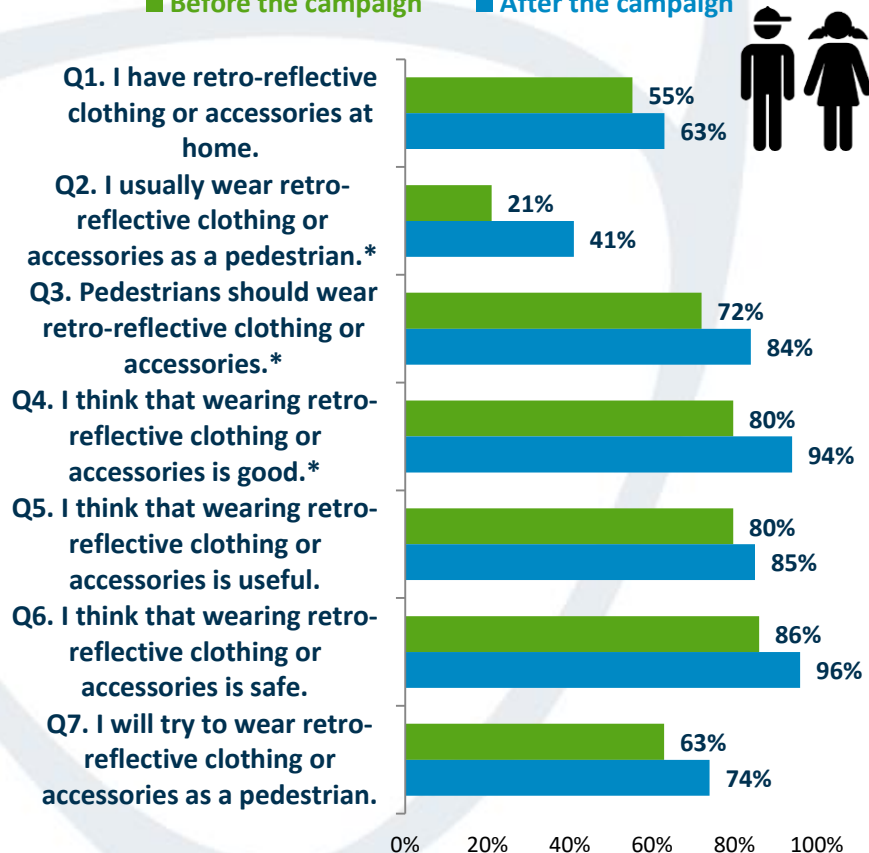
BEHAVIOURAL CHANGE THEORIES



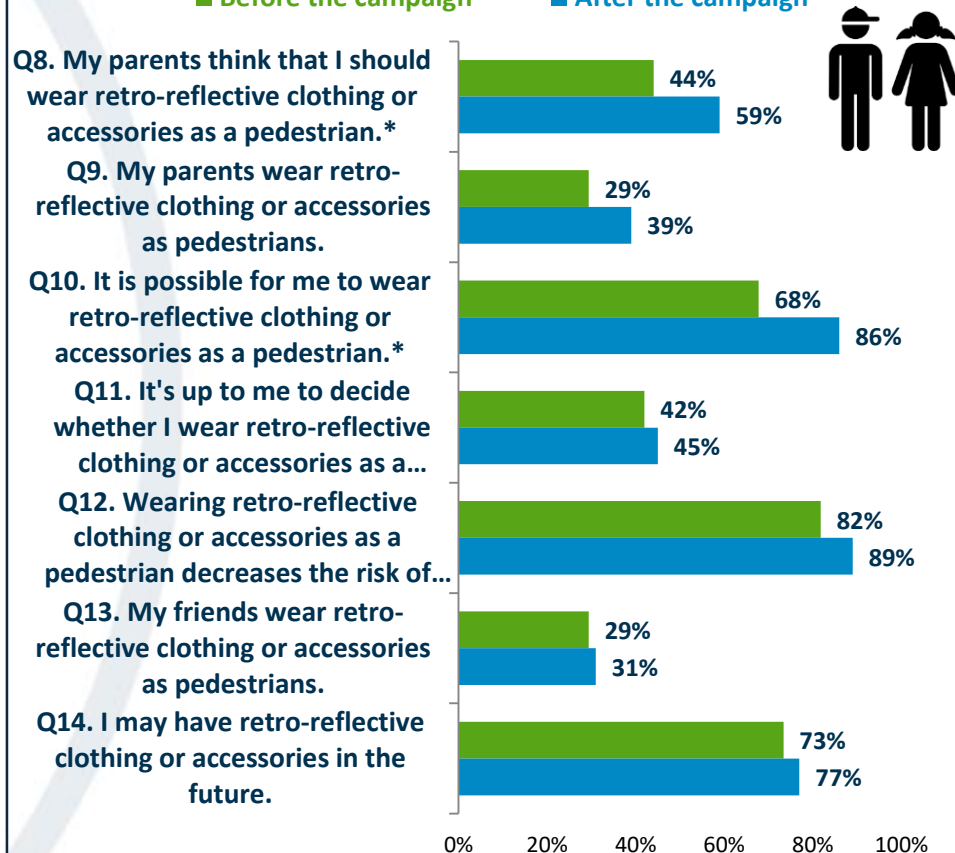
USE OF RETRO-REFLECTIVE MATERIAL (AGE 6-14) - 2016

Evaluation Study - Percentages of “yes” before and after the campaign

■ Before the campaign ■ After the campaign



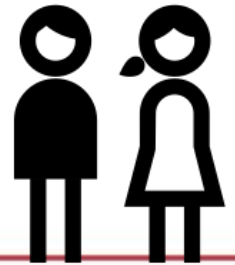
■ Before the campaign ■ After the campaign



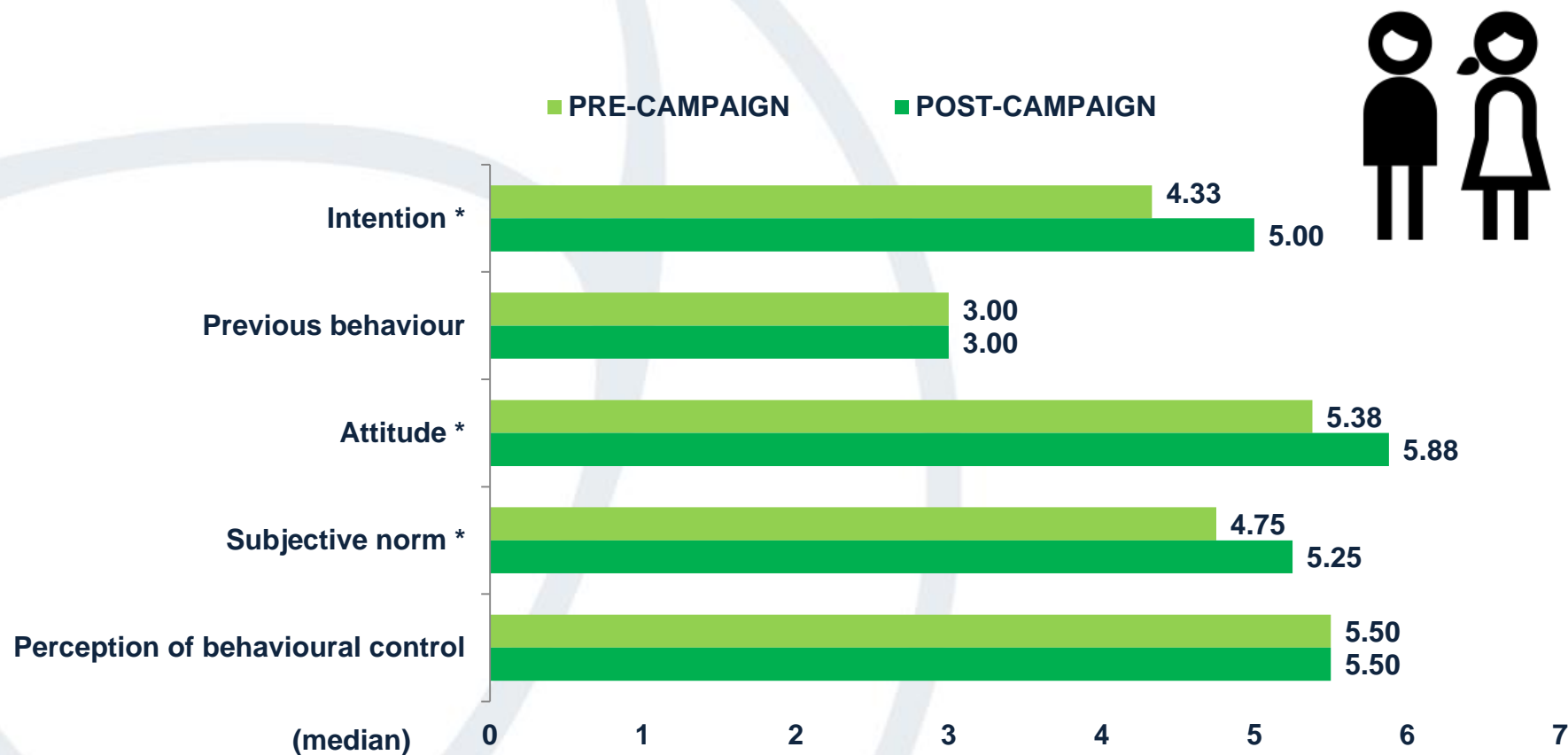
Characterization of the responses to the questionnaire, before and after the campaign. The results show that the percentage of children who answered “true” increased in all questions in the questionnaire. (*statistically significant differences: $p < 0.05$ in the Chi-Square Test).

SURVEY FOR CHILDREN 15 YEARS OF AGE AND OLDER - STRUCTURE

1. **Theory of Planned Behaviour:** 51 questions were grouped into questions on intention, previous behaviour, attitude, subjective norm and perception of behavioural control
2. **Trans-theoretical Model of Behaviour Change**, answers by the six phases of change that people go through when they decide to change their behaviour
3. **Sociodemographic characterization** (gender, age, educational qualifications) as well as questions related to the means of transport used (driving license, most used means of transport) and travel as a pedestrian (urban / rural, type and travel time as a pedestrian).

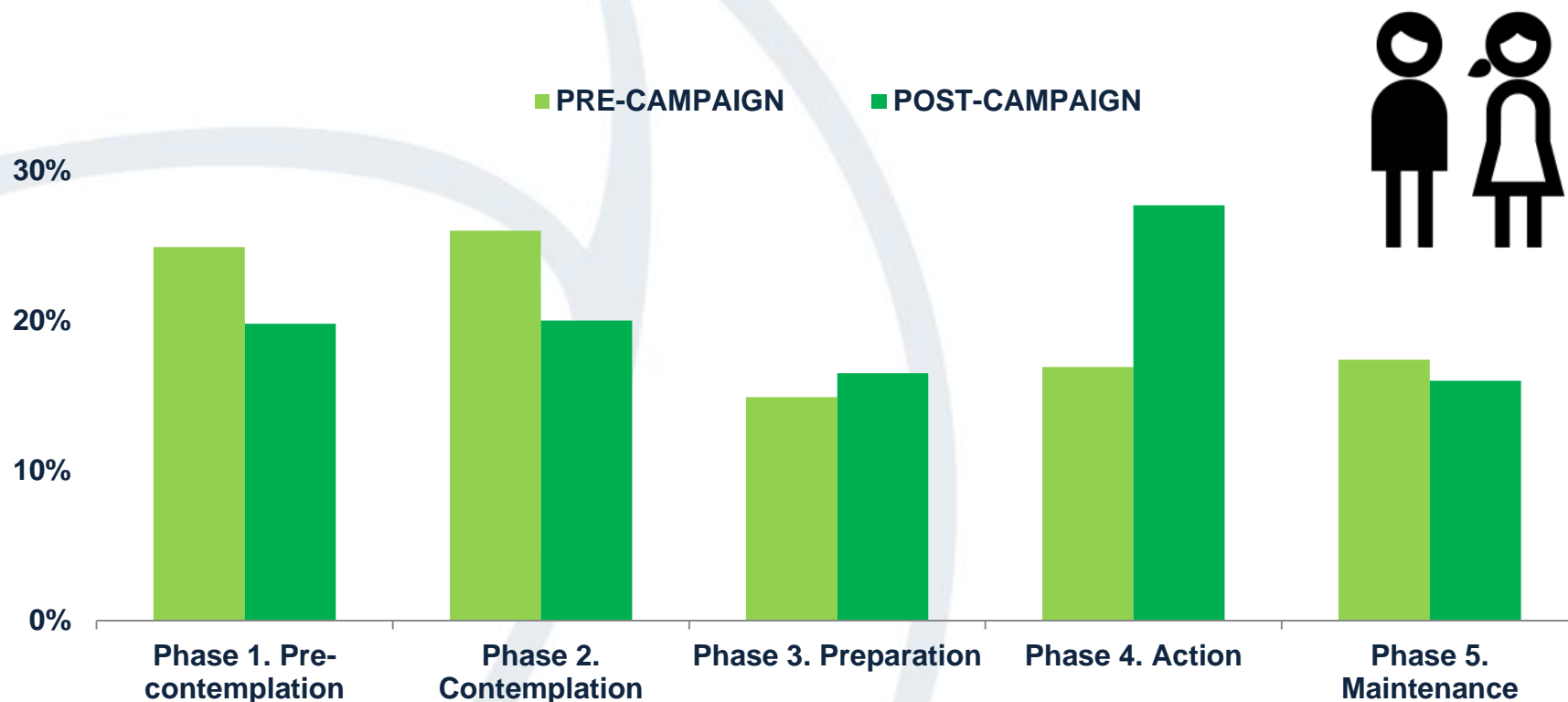


SURVEY FOR CHILDREN 15 YEARS OF AGE AND OLDER - RESULTS



Medians of the dimensions assessed before and after the project.
(* statistically significant differences: $p < 0.05$ on the Mann-Whitney test).

SURVEY FOR CHILDREN 15 YEARS OF AGE AND OLDER - RESULTS



**Distribution by the different phases of the change in the Trans-theoretical Model of Behaviour Change, before and after the campaign.
(Chi-Square Test: $p = 0.025$).**

FINAL REMARKS

- Having used pre (baseline) and post measurements in the design of the evaluation, a comparison between the results of the surveys showed that the “Be Seen” project has led to **positive results** for both children under the age of 14 years and those who are older.
- Bearing in mind that the levels of use of retro-reflective material are still low, the evaluation also showed that further activities with the objective to promote their use should be developed and implemented.
- Final Report

