

I spy, I spy with my little eye

The effect of watching eyes on pre-swim shower behaviour (PPT)

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I SPY, I SPY WITH MY LITTLE EYE

The effect of watching eyes on pre-swim shower behaviour





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Previous behavioural studies

- Amsterdam conference
 - Influence of minimal interventions
 - Information based intervention was best
 - Carrying stuff was a barrier for showering
- Zell am See conference
 - Improved research location
 - Normative intervention was best
 - Carrying stuff was still a barrier





Theory

3rd behavioural study

The watching eyes phenomenon

- Feel like being watched
 - Socially approved behaviour
 - Automatically (unconscious)





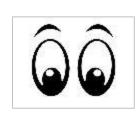


Does the phenomenon work for swimming pool hygiene as well?

Which pair of eyes?

- Pre-test (32 p.o.e)
- Focus (10 p.o.e)
- Questionnaire (1-7)
 - Realistic
 - Serious (authority)





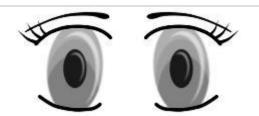
















HELLEBREKERS



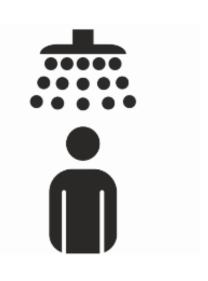


Influence "Watching Eyes"

- Influence watching eyes
- Influence symbol
- combinations





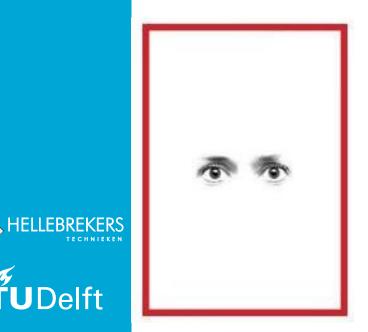


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TECHNIEKEN



	No symbol	Symbol
No "Watching Eyes"	Reference	Symbol-only
"Watching Eyes"	Eyes-only	Eyes + Symbol

Poster design









Influence "Watching Eyes"

Measured by means of:

- 1. Observation
- 2. Questionnaire
- 3. Water quality sampling





Intervention design

- Each week a new intervention
- 3 observation days (1 weekend day)
- 3 timeslots (10-12, 13-15, 17:30-19:30)
- Water samples 2x / observation day
 - Urea
 - NPOC
 - TN
- Questionnaire on 4th day







Observation list; data collection

		Date			Time			Temperature:		
No.	Shower (+/-)	Age (10+, 20+ 30+, 40+, 50+, 60+, 70+, 80+, 90+)	Gender (m/v)	Company (+/-)	Children (0-10) (+/-)	Hair wet (+/-)	shampoo/ soap (+/-)	Shower time (# x button pushed)	Belongings (+/-)	Comments (x)
1										
2										
3										
4										
5										
6										
7										





Questionairre

- General information (gender, age)
- Pre-swim shower? Companions?
- Seen poster? Content? Purpose?
- Hygiene perception (1-7)
- Importance of hygiene (1-7)
- Own behaviour? And others? (1-7)





Results

- 596 observations
- 126 questionnaires
- 24 water samples in duplo





Observed pre-swim shower %

	Control	Eyes-only	Eyes + Symbol	Symbol-only
Sex				
Male	36.1	48.2	51.1	49.4
Female	34.5	43.2	39.3	49.4
Carrying belongi	ings			
Yes	30.4	37.0	31.4	37.3
No	40.0	54.7*	64.5*** ^{††}	62.0** ^{††}

HELLEBREKERS TECHNIEKEN



^{*} p < .05, ** p < .01, *** p < .001: indicating a within-group difference, in bold. † p < .05, †† p < .01, ††† p < .001: indicating a between-group difference, in *italic*.

Questionnaire

76.6% states having pre-swim showers

Propositions:

Scale 1-7 (1 means: totally disagree)

- HELLEBREKERS TECHNIEKEN
 - **TU**Delft

- Perception of hygiene (1-7); 6.09
- Importance of hygiene (1-7); 6.74
- Hygienic behaviour (1-7); 6.63

Water quality

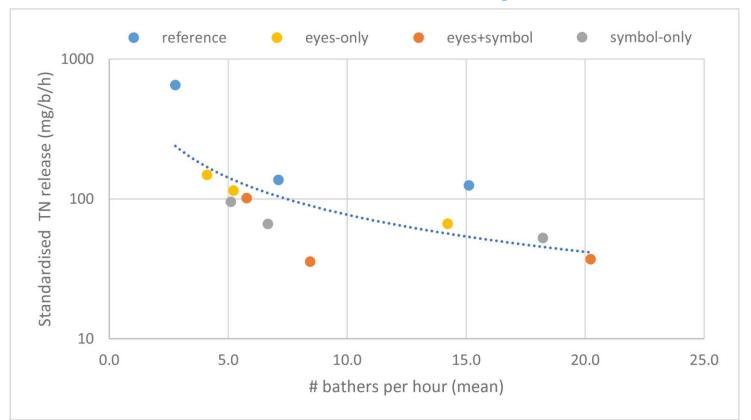
Release per bather (mg/L) per hour

parameter	reference	Eyes-only	Eyes + symbol	Symbol-only
TN	1.27	0.56	0.30	0.40





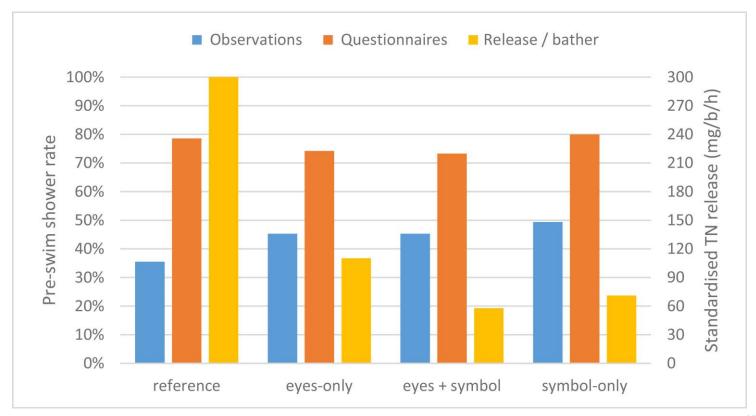
Influence # bathers in pool







Resume results





TUDelft

I spy I spy, with my little eye

- Watching eyes do influence hygienic behaviour (2-ways)
- Unclear whether Watching eyes are appropriate
- Combination of different interventions for maximum effect





Conclusions

Maximum effect

- Inform them about why
 - on audio in changing area
 - Video/poster in reception area
- Remind them of what (just before entering shower area)
 - Symbol or short informative message
- Facilitate how
 - Place to store bags without getting wet





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Thanks for your attention

Questions?





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