

**How to improve pre-swim shower behaviour
A minimal intervention field experiment in a holiday park (PPT)**

Stronks, I.; Keuten, Maarten

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How to improve pre-swim shower behaviour

A minimal intervention field
experiment in a holiday park

Ilse Stronks, University of Twente
Maarten Keuten, Delft University
Mark van Vuuren, University of Twente

Content

1. Introduction
2. Theory of behavioural change
3. Our study
4. Conclusions



Previous research

behaviour → Initial anthropogenic pollutants

- Continual anthropogenic pollutants

behaviour → Incidental anthropogenic pollutants

60-80% of anthropogenic pollutants are released by unhygienic behaviour



What to do

Improvement of hygienic **behaviour will reduce anthropogenic pollutants and reduce unwanted DBP's significantly**

We needed help from behavioural scientists
University of Twente.

Behavioural change (1)

Many publications on behavioural change:

- Using stairs instead of escalator
- Re-use of towels in hotels

Similarity of these study's:

- Use of posters with short messages
- Based on theories from behavioural science
 - Communication
 - Psychology

Behavioural change (2)

Global methods:

- Informative method
- Normative method
- Adding a game element
- (pointing towards) facilities

Informative method

Mechanism: when people know why certain behaviour is desirable, they act alike

Normative

Describe the social norm: what other people do or feel

Mechanism: deviation from the norm leads to social rejection

Adding a game element

Mechanism: no arguments but stimuli



(pointing towards) facilities

Mechanism: remove barriers to promote desired behaviour

Previous study

- 3 communal swimming pools
- 3 minimal interventions
 1. Normative
 2. Informative
 3. Routing game
- Informative method best results
- Barrier found in carrying belongings
- Additional variables due to different locations

Setup current study

- Reduce variables between locations
- Use holiday park swimming pool
 - Location variables are constant
 - Each week new set of visitors (subjects)

Interventions

- 2x informative
- 2x normative
- 2x (pointing towards) facilities

- 3x combinations of above

Informative



No irritated eyes?

Take a **shower before**
swimming

Dirt on the body reacts with chlorine in the pool water. This causes irritated eyes. Showering before swimming washes away this dirt and reduces the chances of getting irritated eyes.



Taking a shower before
swimming decreases
chances of getting red eyes

Dirt on the body reacts with chlorine in the pool water. This causes irritated eyes. Showering before swimming washes away this dirt and reduces the chances of getting irritated eyes.

Normative



Most people take a **shower**
before swimming



Fellow swimmers appreciate
it if you take a **shower before**
swimming

Facilities



Hands free when showering?

You can store your belongings
on the table around the corner



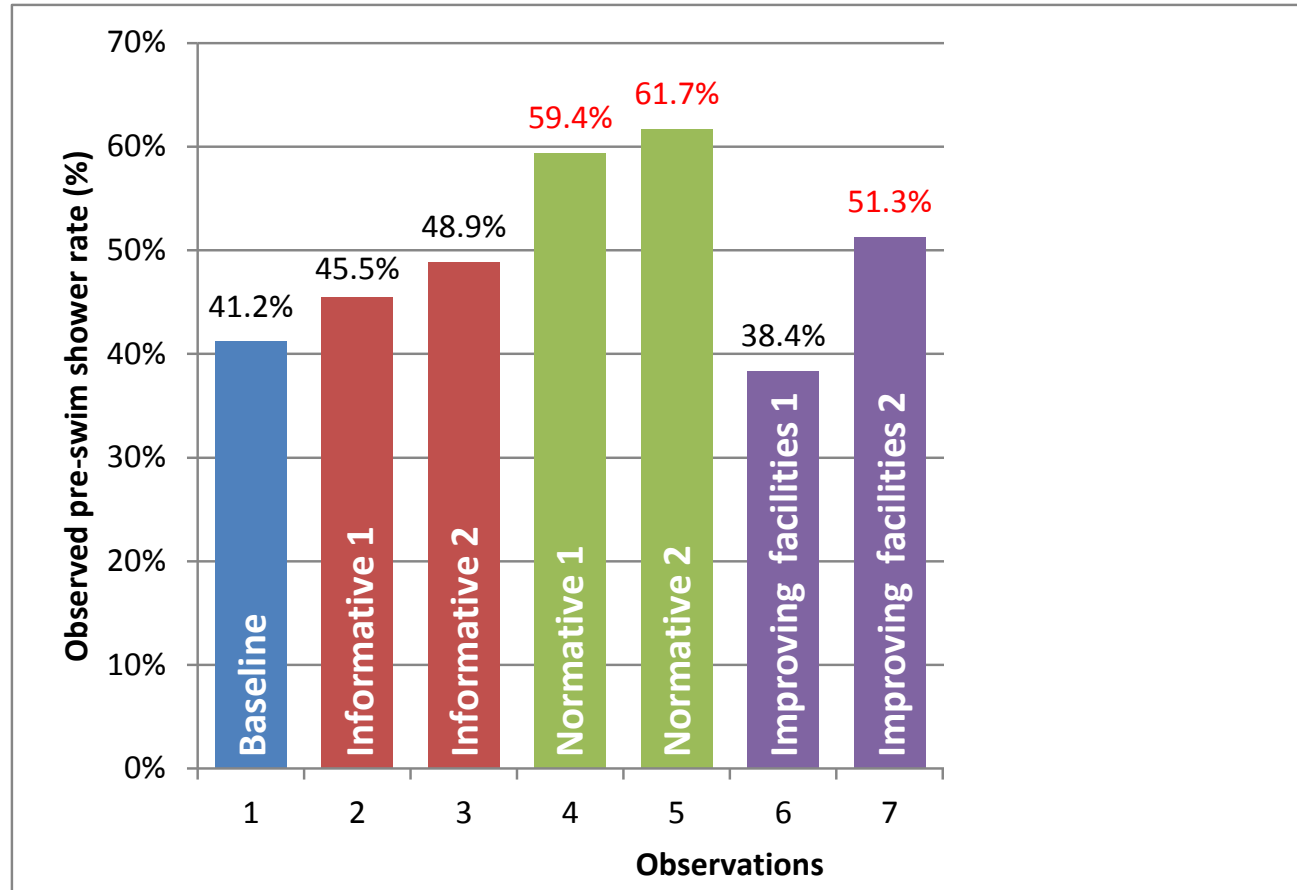
Method

- Signs on the door leading to the shower/pool area
- Visual observation of visitors (no interaction with subjects)
- Reference: pre-swim shower% without signs
- 6 single interventions: each intervention 1 day observation
- 3 combinations of best single interventions

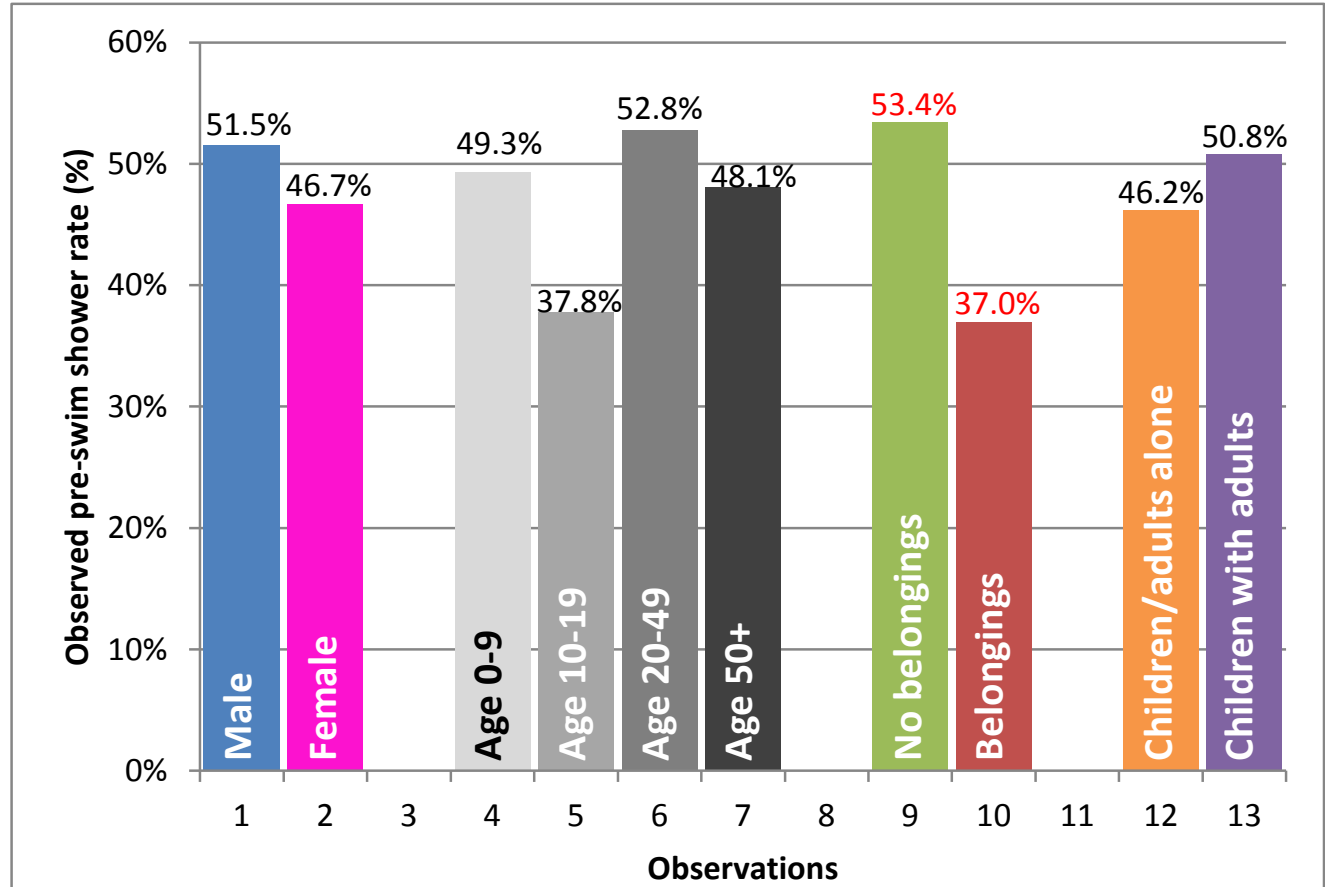
Total: 1771 swimmers observed



Results interventions



Results groups



Conclusions

- Communal pool → informative method
- Holiday park pool → normative method

Maybe different motivation for behavioural change in different types of swimmers

Future questions?

- What is the influence of watching eyes?
- What is the influence of audio/video messages?
- Does teaching normal hygienic behaviour during swimming lessons improve hygienic behaviour?
- What other barriers inhibit pre-swim showering?
- What is the optimal pool design for hygienic behaviour?
- How to get people to use a toilet when nature calls?
- Small changes can have a big influence

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Thanks for your attention

Questions ?

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m.g.a.keuten@tudelft.nl