

Behavior change session

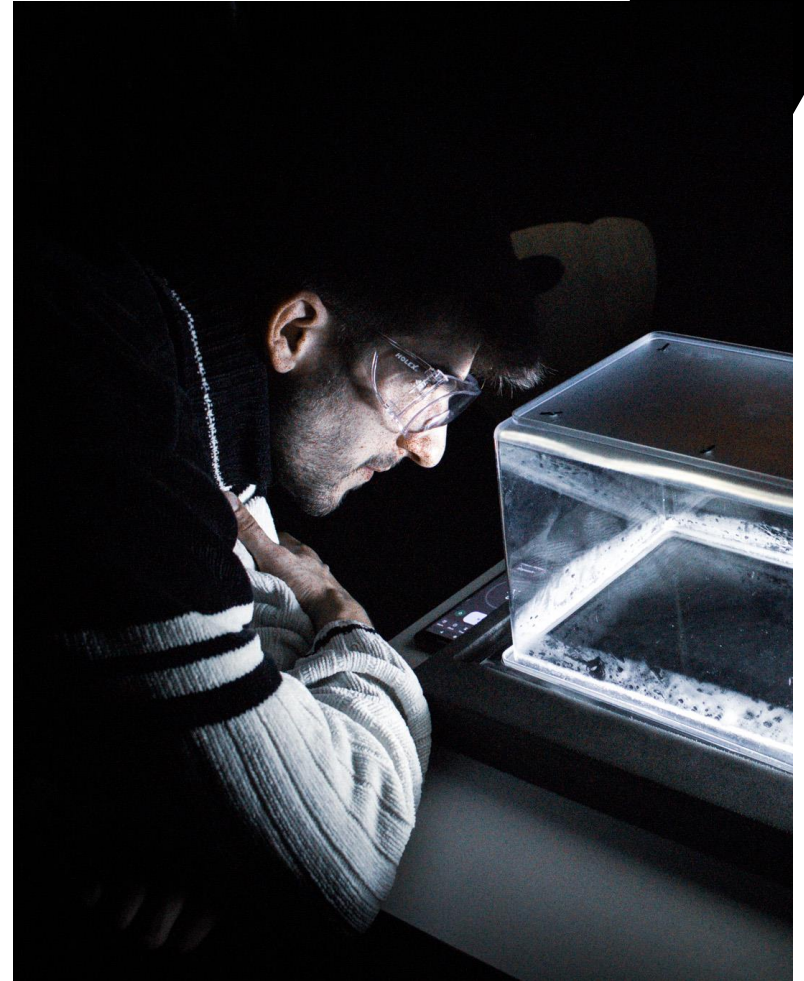
What psychology can teach us about the future
Terraforming Pilot May 2023
Ole Werner, M.Sc and Galactic Firefighter
CERN IdeaSquare



Who am I to talk to you

Ole Werner

- Galactic Firefighter at CERN
IdeaSquare (just emotional fires tho)
- BSc Psychology, MSc Behavior Change
- Love to engage people, want to understand your minds





Agenda

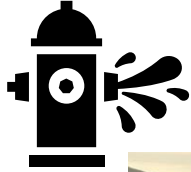


1. What is Behavior Change
 1. short history of behavior change
2. Models
3. Making the HMW to a reality
 1. Nudge vs. Boosting
4. Learnings/ What do you think?



What is Behavior Change?

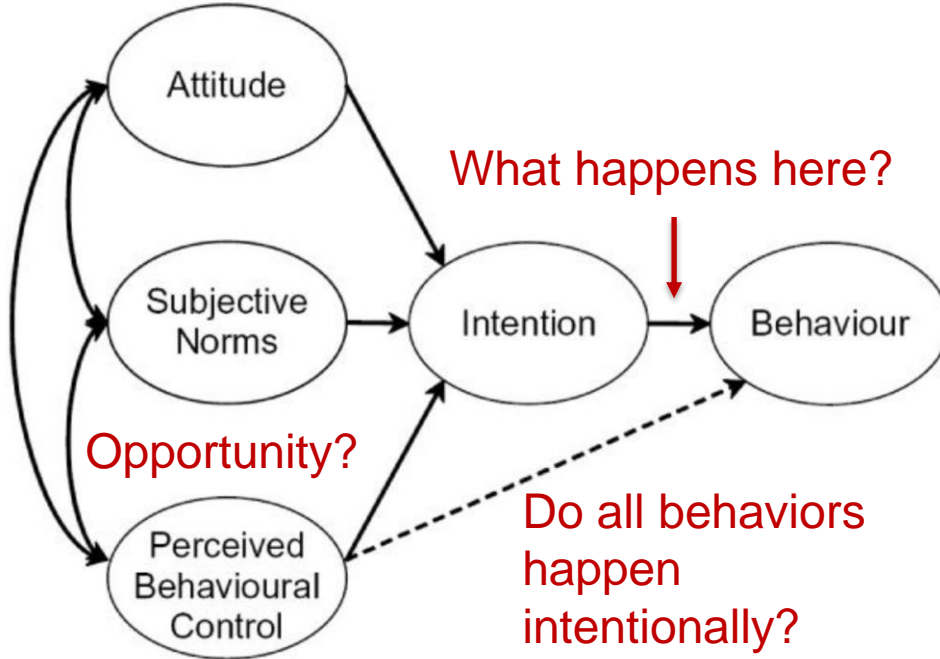
History





**How is a decision made
on an individual level?**

Models of Behavior Change



Theory of Planned Behavior

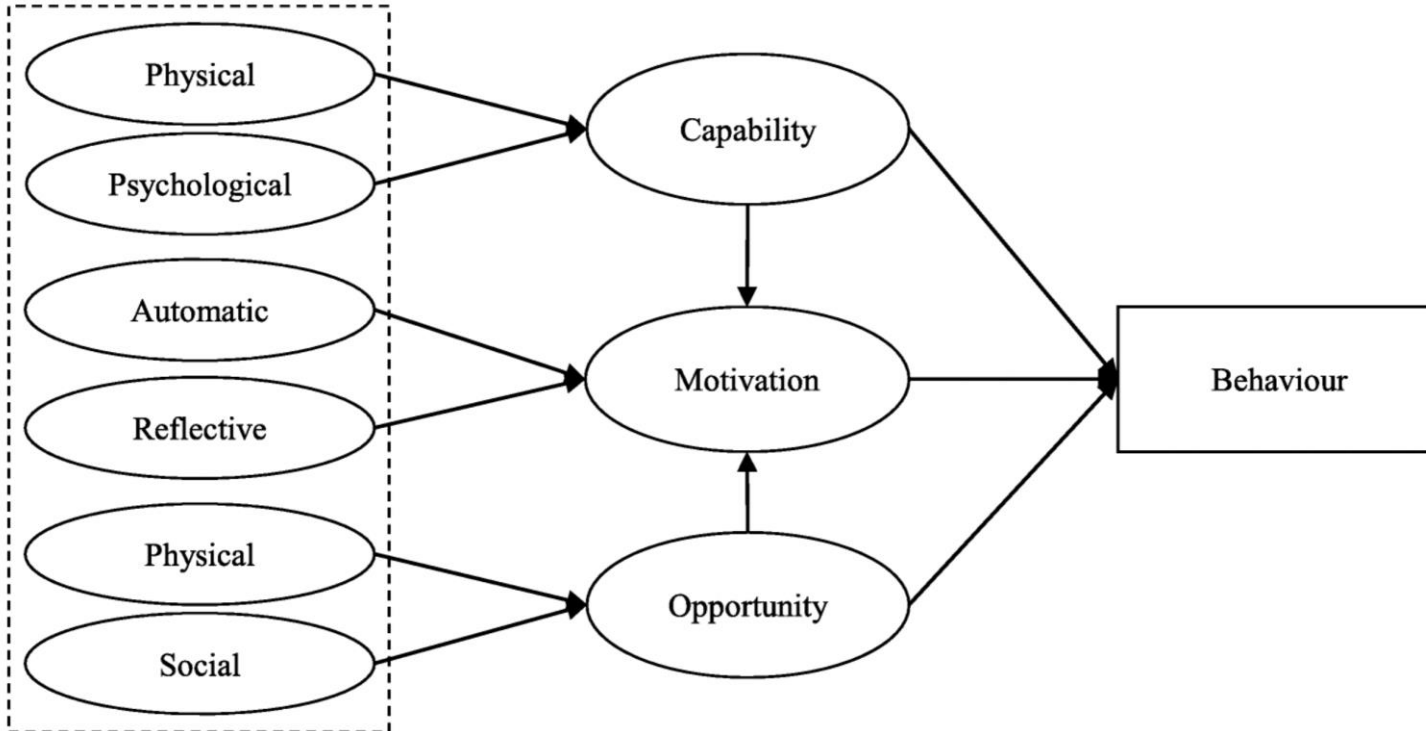
What do you think?

Are there elements Missing?

Would you Agree?

Discuss 2 min with neighbors

Models Cont'd: COM-B Model



Discuss
2 min

Note. Adapted from: “The behaviour change wheel: A new method for characterising and designing behaviour change interventions,” by S. Michie et al., 2011, *Implementation Science*, 6(1) p.42.

Problems in Behavior change

You can help to “make sense” of a big and systematic problem by looking at its **behavioral components**.

Consider your HMW and try answering the following: (15 mins)

1. What is the behavioral part of problem, that you will focus on?
2. Why is it a problem?
3. For whom is it a problem?
4. What are possible causes for the problem?
5. What is the target group?
6. What are the key aspects of the problem?





Discussion



Behavior Change



Like marketing... but good!

Also: Seeing (individual's) behavior as a driving component of change

Divide & Conquer

"THE PROBLEM"

THE BEHAVIORAL SIDE OF THINGS



D

R

I

V

E



WIIFY





Tackling huge (pot. wicked) problems with behavior change



DRIVE

Define the Problem in behavioral terms

(Who/what/When/Where/How/With whom?)

Research the psychological concepts/literature

(What has been done in that area before)

Influence the behavior

Combine problem definition, desired outcome & Stakeholders

Verify your effectiveness

What gets measured gets managed (experimental design)

Express your recommendations

Picture complete? Whats next?

Nudging- Change through unconscious influence

- 1: the nudge should be transparent and never misleading.
- 2: the nudge should be easily opted-out of.
- 3: there should be good reason to believe that the behavior being encouraged will improve the welfare of those being nudged



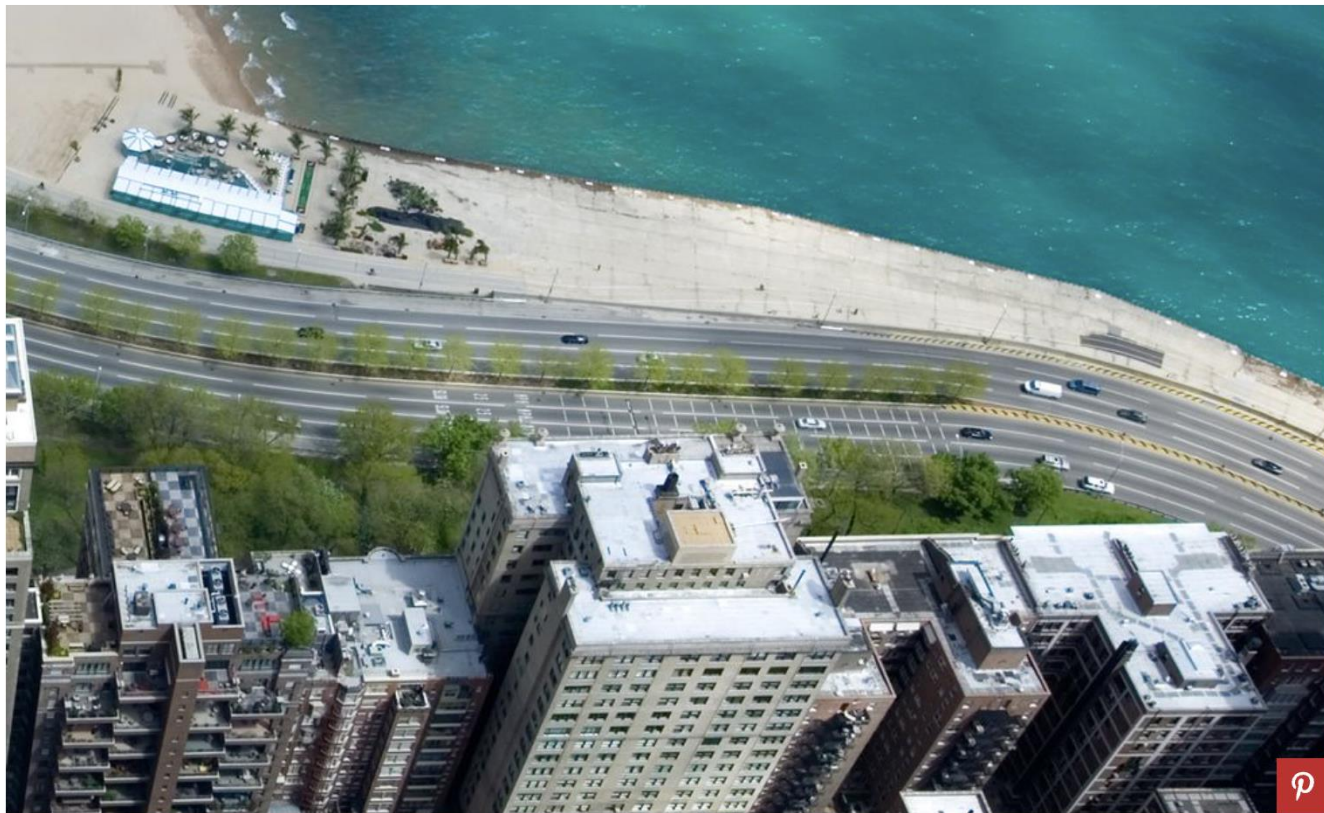
More aim -> less cleaning costs

Gamification, Saliience

Hamari, 2014

Taylor & Fiske, 1978





GETTY IMAGES

How do people regulate their speed while driving?

Protect your flight (recommended)

ⓘ Avoid change fees. Protect your trip.

Top 3 benefits of travel protection, get up to: ↕

1. 100% flight refund if you're sick and can't travel [See details](#)
2. \$1,000 for lost baggage, including laptop, phone or camera [See details](#)
3. \$15,000 for emergency medical transportation [See details](#)

[View terms, conditions and plan sponsors](#)

Select an option*

Yes, I want to add the Total Protection Plan to my trip to Porto.

👤 35,755 customers protected their flight in the last 7 days

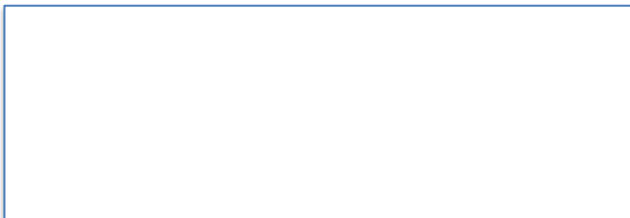
\$178.99

No, I'm willing to risk my \$4,393.76 trip.

Mary got \$468 back when she cancelled her flight to ... [Read more](#)

Who decides the best interest?

In it, an airline booking website is using several behavioral tools to nudge us towards choosing to add flight insurance to our trip:



Boosting – Change through Knowledge

The objective of boosts is to **foster people's competence** to make their own choices—that is, to **exercise their own agency**.

Mostly applied in

- health and medical decisions
- financial decision making
- weather- and climate related behavior

But arguably, any form of “traditional teaching” can be considered boosting

...Even this session 😊

Easy readings: <https://www.scienceofboosting.org/>



Motivational boosts



competence : autonomously adjust one's motivation, cognitive control, and self-control through interventions such as

- growth-mindset or sense-of-purpose exercises,
- attention and attention state training,
- psychological connectedness training,
- training in precommitment and self-control strategies (Smile to get happier)
- ...
- Self-nudging (Crisps or Fruit bowl)

Summary - Methods of influencing decisions

Generally there are many ways to influence behavior, some are more suited in certain settings than others, here is a small overview of nudging vs boosting

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	Skill Training => cross-situational Competencies
	Expensive (usually requires training, trainers etc.)
Unconscious exposure	
Short-term, no effect without nudge	

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Nudging	Boosting
Physically bound “choice architecture” => Only one situation	Skill Training => cross-situational Competencies
Cheap (poster, stickers or otherwise designing options)	Expensive (usually requires training, trainers etc.)
Unconscious exposure	Conscious participation
Short-term, no effect without nudge	Long-term, observable effect beyond end of training

Rotterdam: Committing to keep clean

Illegal garbage disposals were a persistent and serious problem in Rotterdam, resulting in high cleaning costs and decreased satisfaction with the neighbourhood among residents.

Rotterdam, Oude West
-densely populated
(1,100 households)
-social cohesion was high
-illegal littering caused nuisance



→Rule: if trash is disposed outside of containers, 95-500€ fine

How?

1st Week (Sticker)

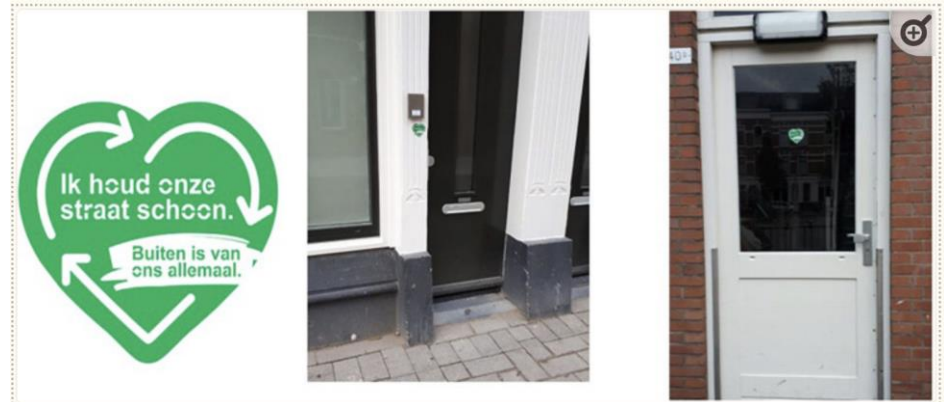
→ show commitment to keeping the neighborhood clean (72%)

2nd Week (Poster)

→ reminders were employed that depicted the desired behavior

→ emphasizing group membership and shared responsibility for the neighborhood

“Together we keep our street clean. Outdoors is for every one of us.”

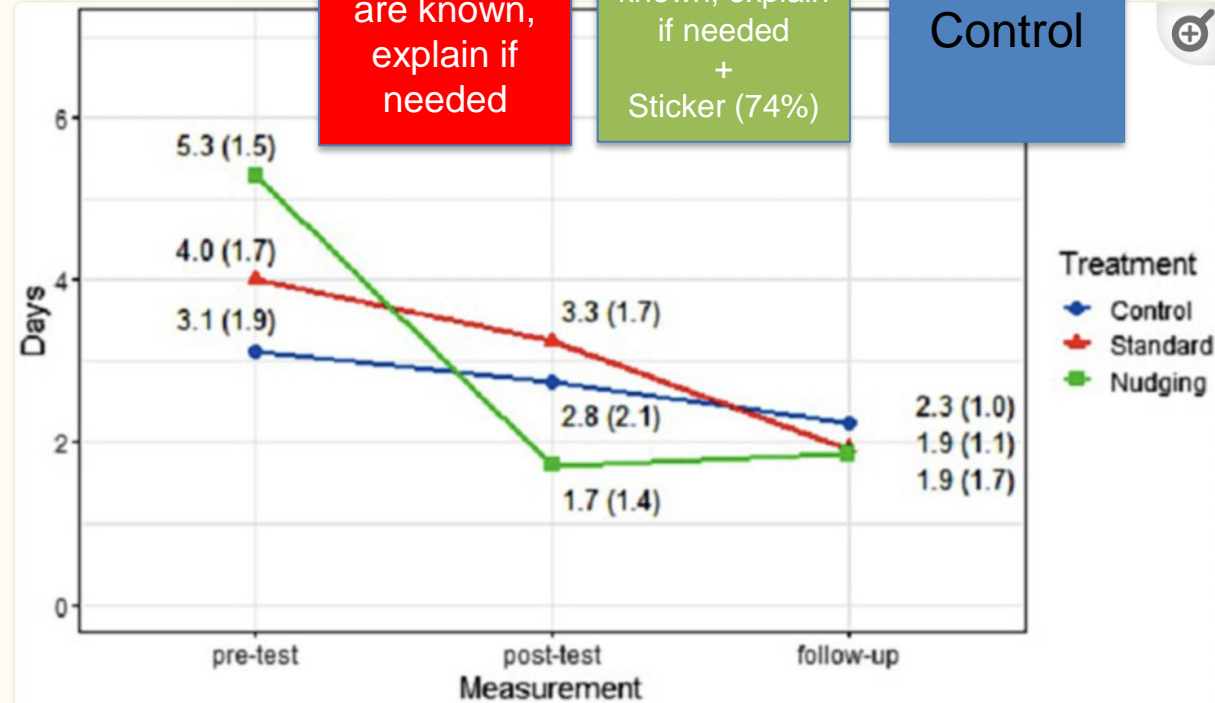


Results

Ask if rules
are known,
explain if
needed

Ask if rules are
known, explain
if needed
+
Sticker (74%)

Control



BAU+Nudge:

two-third decrease of
illegal garbage
disposals when
compared to the pre-
test



Got inspired? (15 min)



Design a Boost or a Nudge for your problem statement/HMW from before.

Look again at how you answered the six questions to define your problem. These answers should be reflected in the form of boost/nudge you design. (Where will you do it? For Whom? Why?)



Discussion

What do you think?

Do you think behavior change is “fair”?

Would you aim to incorporate behavior change in your new society?

If yes, in which areas?

Do you prefer boosting or nudging?

