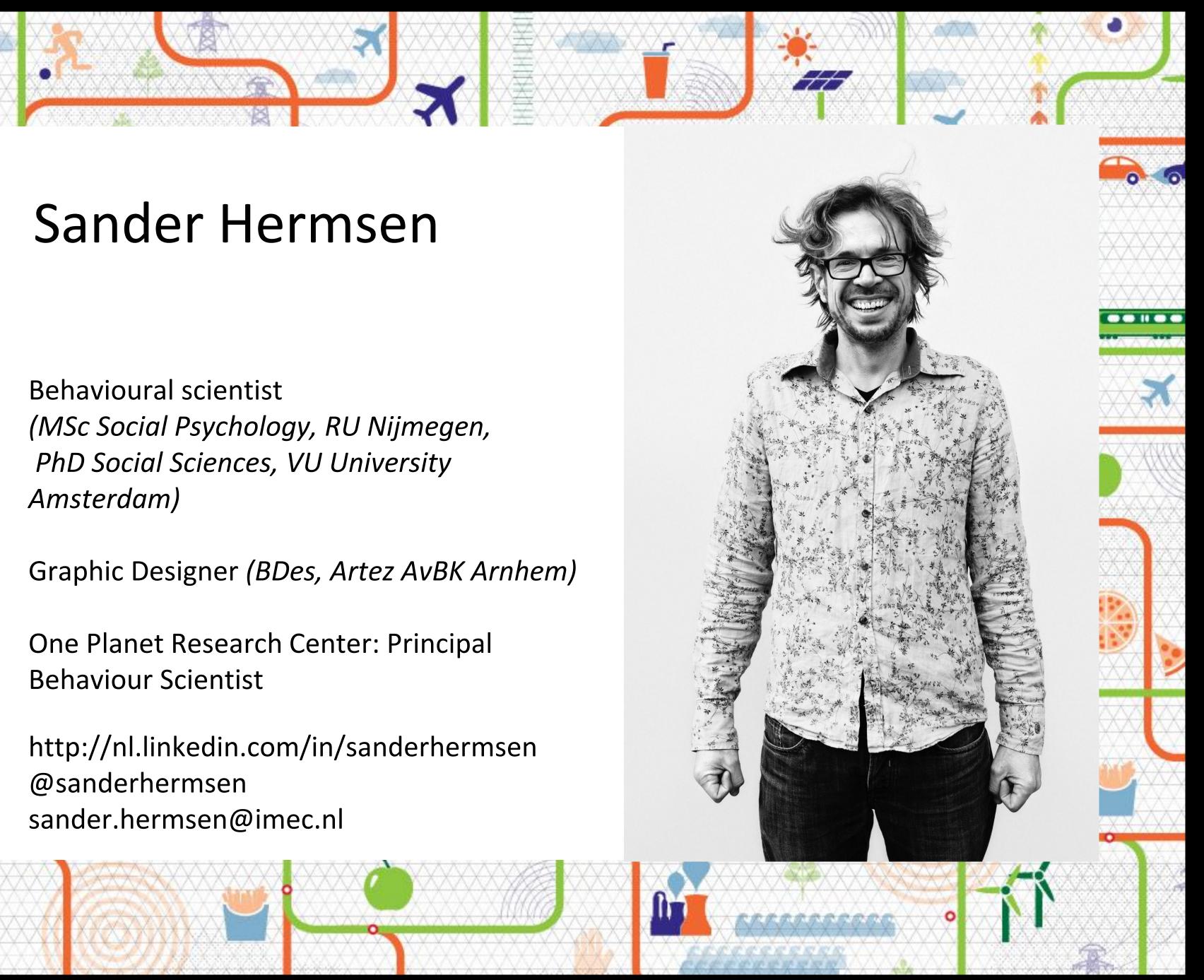


Motivational feedback for behavioural change Sander Hermsen









How can technology support healthy eating?

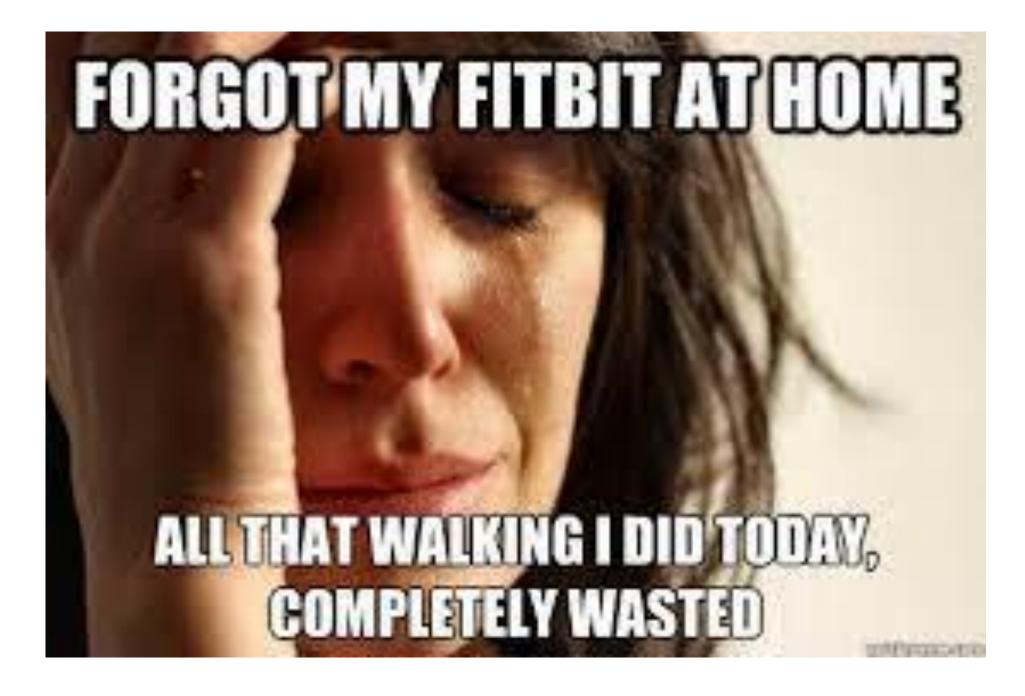
- foster self-monitoring
- increase knowledge of behaviour
- create awareness of current behaviour
- create awareness of gap with desired behaviour
- trigger actions

Feedback plays a role in every support function!

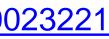
Hermsen, Frost, Renes, & Kerkhof (2016). doi:10.1016/j.chb.2015.12.023.

Does feedback motivate?

- Yes it does
- Not per se through increased knowledge (most problems aren't information deficit problems)
- But by moving behaviour up on the priority ladder



Northcraft, G. B., Schmidt, A. M., & Ashford, S. J. (2011). https://doi.org/10.1037/a0023221



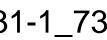
When does feedback motivate? When we can understand it

- reflection-on-action
- kcal you are planning to eat today")

• If possible, give *timely feedback* ("the lunch you are about to eat contains 1000 kcal" versus "the lunch you ate yesterday contained 1000 kcal") – reflection-in-action vs

Give feedback in context ("the lunch you are about to eat contains 1000 of the 2000

• Feedback should be easy to understand ("the production of this 200g hamburger caused the emission of 4.8kg co2, this is comparable with driving 6km in an average car")



When does feedback motivate? When we can act upon it

- what can I do with knowledge of my cholesterol level?
- knowledge vs application







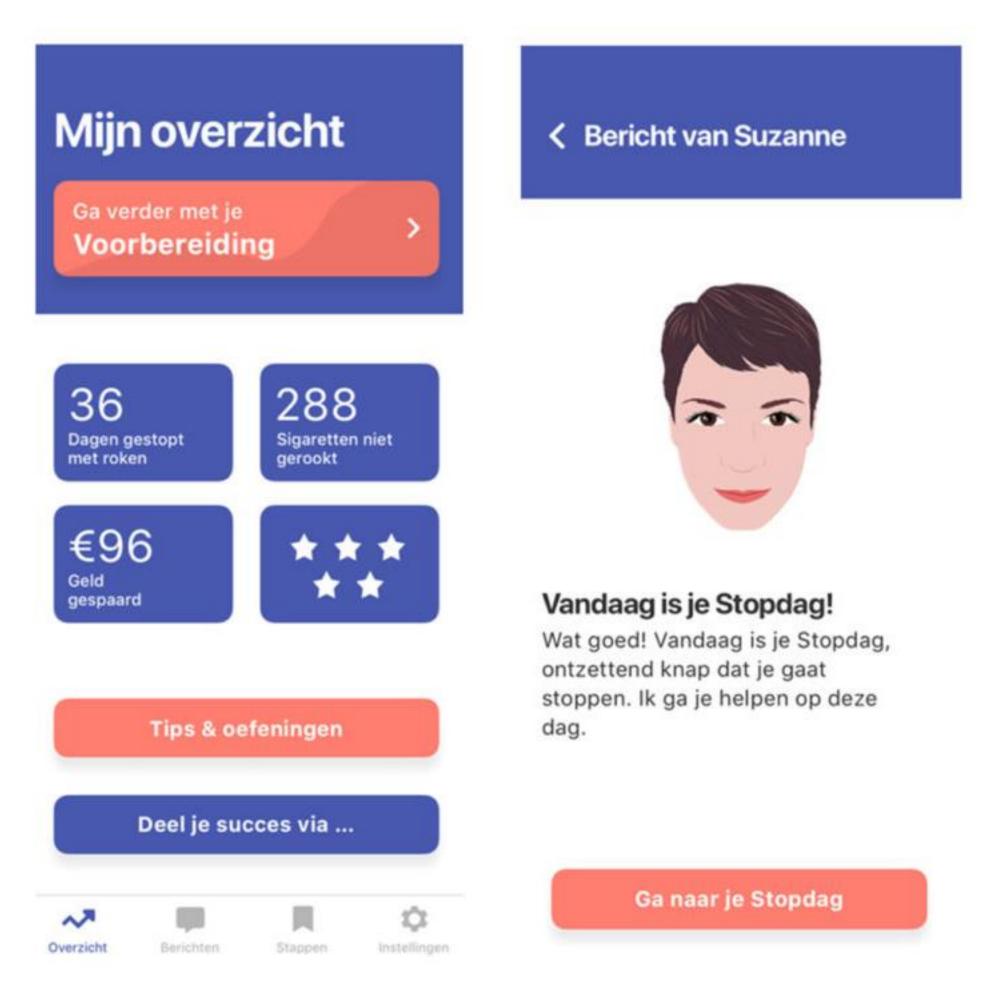
When does feedback motivate? When it corresponds with our skills



When does feedback motivate? When we have 'mental room' for change

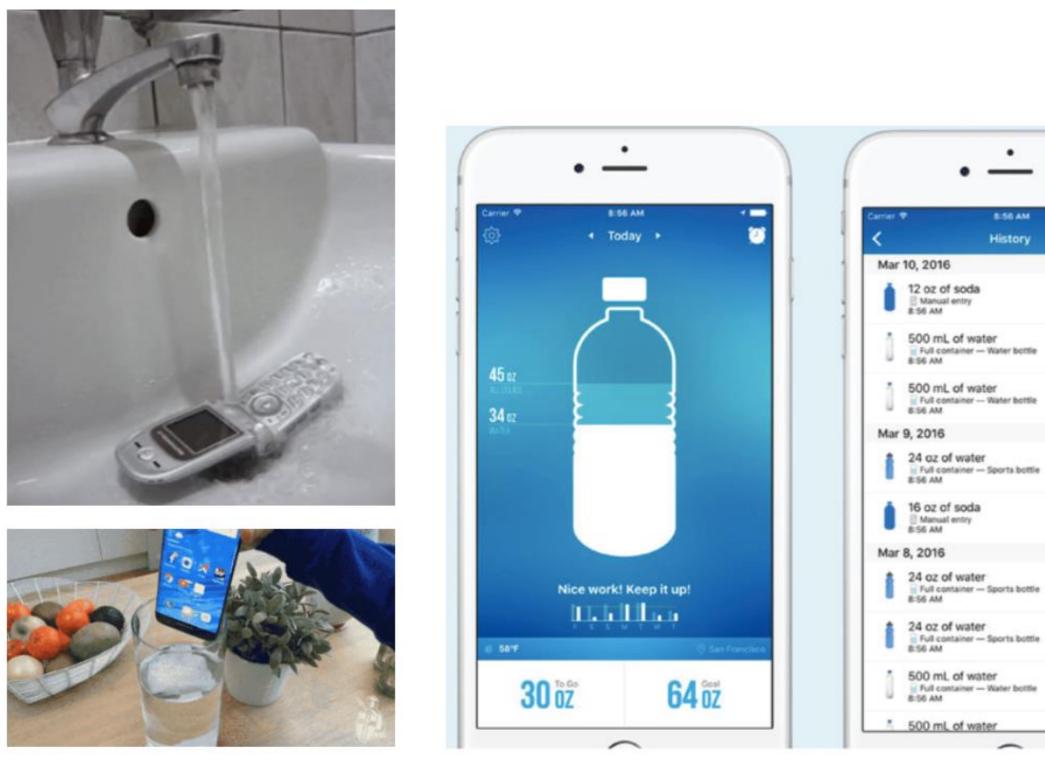


Meijer, E., Korst, J., Oosting, K., Heemsker, E., Hermsen, S., Willemsen, M., Van den Putte, B., Chavannes, N.H. & Brown, J. (2021). doi: 10.1186/s13722-021-00255-5.





How can we make sure feedback motivates? Refrain from using tricks and #nudges





Social comparisons, Negative feedback, **Praise feedback**, Competition, **Cooperation:**

All failed to increase sustained use

Hermsen & Frost (2018). doi:10.17605/OSF.IO/9VC42

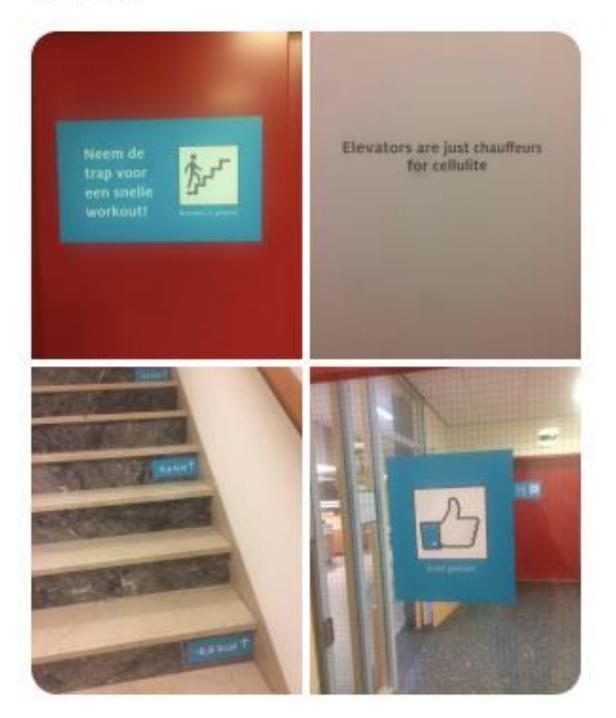


How can we make sure feedback motivates? Combine with emotional and social support



Sander Hermsen @sanderhermsen

Some *serious* physical activity #nudging here at @radboudumc. Fortunately combined with some excellent facilities for less able visitors





Korpershoek, Y.J.G., Hermsen, S., Schoonhoven, L., Schuurmans, M.J., & Trappenburg, J.C. (2020). doi: 10.2196/15449.



Sietse Sterrenburg @Ssterrenburg

Replying to @sanderhermsen @radboudumc 'goed gedaan!' zou bij mij echt contra-productief werken. Ik zou me gemanipuleerd voelen. Een klein feitje over gezondheidseffect van regelmatige beweging zou ik veel blijer mee zijn.

5:04pm ·	7	Mar	2018		Twitter	Web	Client
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Q112 (01 ····

How can we make sure feedback motivates? Connect to intrinsic motivation

How? Well, ask people!

how do I combine the needs of a vegetarian teenager, a child with food allergies, and a parent who should lose some weight?

how can I deal with temptations from outside, especially olfactory cues?

how do I interpret nutritional information on packaging? what claims are real, and what's marketing?

how can I (quickly) select healthy alternatives in the supermarket?

how do I provide healthy festive food at birthdays?

what is the best time to eat certain foods?

how can I avoid eating yummy but unhealthy food when I am tired or unhappy?

how can I reduce my chocolate consumption?

how can I tell if a product is not just healthy, but also sustainable?

how can I snack less whilst feeling less hungry?

how can I have a bit more variation in what I cook?

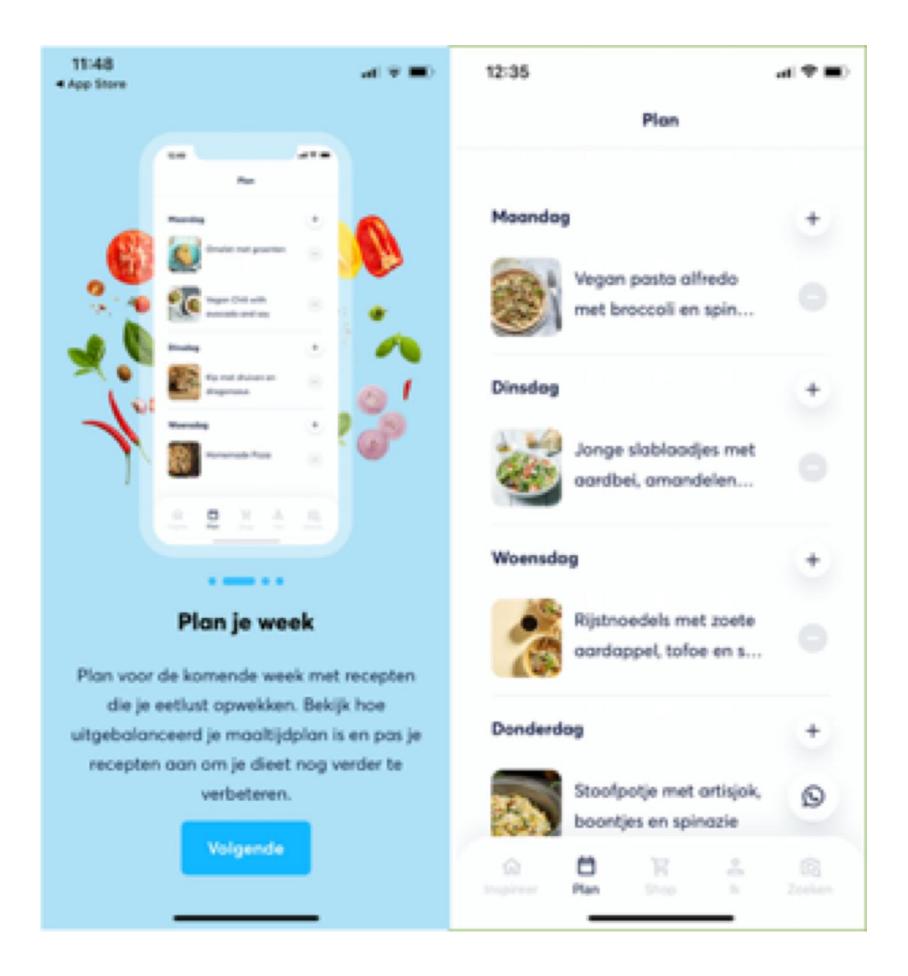
how can I reduce packaging waste?

how can I use more locally sourced ingredients?

How can we make sure feedback motivates? Connect to intrinsic motivation

How? Tailor intervention delivery

Hermsen (manuscript under review). Healthricious: improving an existing app for healthy eating to support groups at risk of COVID-19.





How can we make sure feedback motivates?

- Feedback is understandable, in-context
- Feedback is timely, ready to be acted upon, fitting to skills
- Feedback fits to social practices and intrinsic motivations
- Refrain from tricks, but combine with emotional, social and practical support when needed