# Why use Explorative Self-experimentation?

#### AN ARGUMENTATION GUIDE FOR PUBLIC HEALTH

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#### **Premise**

Due to increasing strains on healthcare systems worldwide, there is a need to move healthcare upstream, to focus on prevention and increasing the overall population health. Although many individuals intend to change their behaviour, there is much evidence for a gap between intention and action. Despite there being many "solutions" for changing health behaviours, finding an intervention that fits with one's goal, personal preferences, as well as physical and socio-economic context is a challenge in its own right. A strategy is needed that helps individuals find health behaviour change intervention that *work for them.* 

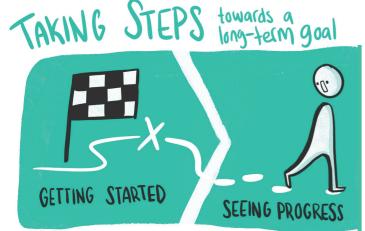
#### Definition

Explorative Self-experimenting (ESE) is a meta-strategy for helping individuals change and maintain personal health behaviours. The core idea is that individuals try out interventions themselves to see if they work, exploring their effect on personal behaviour in their own context.

#### **Pros and Cons**

- + ESE omits the need to design interventions that are suitable for everyone, as it helps individuals find and adapts interventions that already exist.
- + Engaging in the method once forms a mindset that users can re-applied over and over to changing other behaviours
- ESE requires a high-cognitive work load as a result needs some time and mental space to be effectively applied.
- Building ESE tools is challenging due to the high individuality of the method application

#### Five Phenomena Explorative Self-experimentation achieves:



#### TAKING INCREMENTAL STEPS TOWARDS A LONG-TERM GOAL

ESE offers users a concrete starting point which leads them to take incremental steps towards a long-term goal. Users make progress towards their health goals and are aware of it! This leads to behaviour change as:

- ESE creates a sense of urgency by specifying a time-frame and by triggering a commitment and consistency bias
- Seeing progress helps satisfy user's need for competence which leads to a boost in intrinsic motivation

# GEHING to the HEART OF THE ISSUE HEIGHTENED AWARENESS IDENTIFY MODIFY GOAL

ROOT CAUSES

#### **GETTING TO THE HEART OF THE ISSUE**

ESE gives users a heightened awareness of their own behaviour. This leads to them identifying root causes and adjusting their goal to address these. This leads to behaviour change as:

- Consciousness raising helps users be aware of potential causes of "relapsing", and thus helps avoid these
- It increases the perception of relevance of addressing the identified health issue leading to a higher intention to act

### TRIAL & ERROR to SUCCESS



#### TRIAL AND ERROR TO SUCCESS

ESE promotes users to try multiple interventions in a short period of time. Users adapt a problem-solving mentality in that they identify barriers in their interventions and try to overcome them. This leads users to find interventions that fit, or at least identify what works or does not work for them. This leads to behaviour change as:

- · The high periodicity of interventions increases the likelihood of finding a good fit
- Engaging in problem solving helps address contextual problems that may stand in the way of successful change



OF OWN BEHAVIOR

#### DISCOVERING NEW PERSPECTIVES

Engaging in ESE leads users to new perspectives on personal agency in that they realise they can change their behaviour. It also helps users shift the blame for unsuccessful behaviour change attempts from them to the incompatible interventions. Some users attain a new attitude towards their own health in the priority they assign it, and most users make discoveries regarding their own behaviour tendencies. This leads to behaviour change as:

- An increase in self-efficacy, leaves people more confident in their ability to change their own behaviour, and therefore more likely to pursue it
- · A positive change in attitude towards the behaviour helps shape the intention to act



#### FINDING SUPPORT

ESE is often a conversation starter between users and their close social circle. This results in many users finding social support. This leads to behaviour change as:

 Finding social support can aid in adhering to the behaviour

# **How to Facilitate Explorative** Self-experimentation? A QUICK GUIDE FOR DESIGNERS

#### Introduction

This guide provides two lenses from which to approach the challenge of facilitating explorative self-experimentation. The first is to design for the underlying needs of people wanting to change their health behaviours. The guide provides seven starting points that cater to the seven core needs of self-experimenters. The second approach is to consider the activities comprising each phase of the Explorative Self-experimentation process and design different ways to guide participants through them. The final part of this guide shows how the two approaches overlap, so designers know which needs to focus on in which part of the process.

#### Seven starting points for facilitating ESE:

One way to facilitate self-experimentation is designing for the underlying needs of people wanting to change their health behaviour. The seven starting points ensure that the solution addresses these user needs.



#### PROVIDE GUIDANCE THROUGH THE PROCESS

Self-experimenters value feeling guided and knowing what to do. Some ways to provide guidance include:

- · A structured process with a clear starting point
- · Actionable tips and examples
- · Open questions
- · Guidelines for how to formulate a goal



#### PROVIDE INCENTIVE FOR **MOTIVATION**

A key component for changing behaviour is staying motivated over time. Some ways to provide incentives to keep going

- · Playful elements
- · Visual triggers / reminders
- · Visualizing progress
- · Celebrating small achievements



#### PROVIDE INSPIRATION FOR INTERVENTIONS TO TRY

Self-experimenters value being inspired during their exploration with different interventions. Ways to provide inspiration

- · Examples of interventions others have
- · Samples of proven behaviour change techniques
- · Presenting novelty and variety over time



#### MAKE ROOM FOR PERSONAL GROWTH

Self-experimenters want to learn about themselves in the process and feel personal growth. Ways to make room for this development include:

· Prompting reflection through questions

· Having check-in meetings



#### **FOSTER A RESILIENT MINDSET**

A resilient mindset helps selfexperimenters deal with set-backs on the journey to change their behaviour. Creating the right frame of mind can be done by:

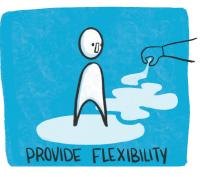
- · Making things modifiable to allow mistakes
- · Set-up malleable goals that can be adjusted along the way
- · Diverge on interventions to have options to fall back on.



#### **GIVE IT A PERSONAL FEELING**

Self-experimenting is a highly personal journey. Creating a personal attachment to the tools can help foster intrinsic motivation. Ways to give it a personal feel include:

- · Make it tangible
- · Leave room for personalization
- · Deliver high fidelity tools
- Encourage hand-written commitments



#### PROVIDE FLEXIBILITY THROUGH ADAPTABLE INTERVENTIONS

Day-to-day life can be highly variable, and thus self-experimenters value flexibility from their interventions. Adaptable interventions pave the way for compatible solutions. Way to introduce flexibility include:

- · Create room for exceptions
- · Make tools compact and portable

#### Provide Guidance through the process: Another approach to facilitating ESE is to consider the activities comprising each phase of the process and design different ways to guide participants through them.

#### PROVIDE AID IN INITIATING:

What do users need to start selfexperimenting? Help users get into the right mindset, define an issue and a goal, as well as assess their current situation



#### PROVIDE AID IN EXPLORING:

How can users be facilitated in thinking of interventions to try out? Provide guidance for exploring interventions and creating a behaviour change





How can users keep track of their progress?

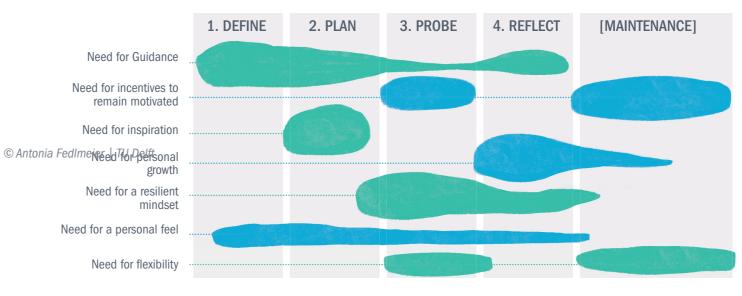
#### PROVIDE AID IN TRACKING:

Help users measure success and help them check-in regularly with themselves.

#### PROVIDE AID IN EVALUATING:

How can users evaluate if an intervention is working for them? Help experiment.

Seven core underlying needs of self-experimenters can be mapped onto the phases of the process framework. This shows that some needs persist across all phases, while others are localized to a single moment in the process. Knowing how the needs are spread across the various phases can inform which starting point to use for design solutions in each phase.



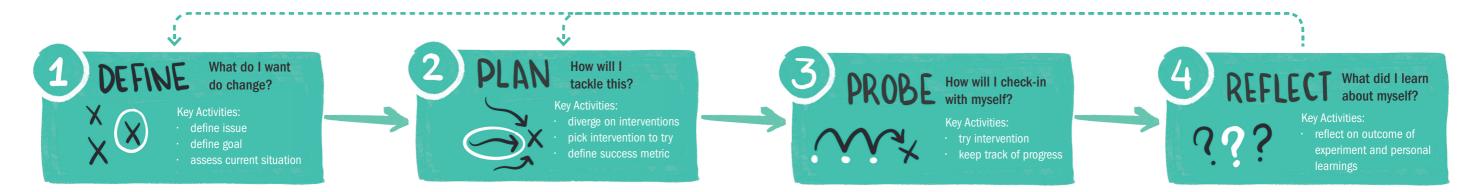
#### PROVIDE AID IN **MAINTAINING:**

Help users iterate and maintain their self-experimentation efforts. Alternatively, for users who find a compatible intervention, help them maintain their behaviour change.



users reflect on outcomes and make decisions based on their evaluation of the

## How to Find what Fits for you? A QUICK GUIDE TO SELF-EXPERIMENT



#### What do I want to change?

#### 1. LET'S EXPLORE THE ISSUE

Are there any health-related issues in your daily life that you would like to work on? Write down any that come to mind and choose one to work on for the next weeks.

Ex: bad posture, weight gain, lack of focus, low energy, stress,

#### 2. LET'S DEFINE A GOAL

There is a difference between an outcome goal and a behavioural goal. An outcome goal is focused on the result of a behaviour, while a behavioral goal defines what you do. Losing 2 kilos is an outcome goal. Eating less food is a behavioral goal. What is your behavioral goal?

TIP: Having SMART goals is known as an effective strategy for success in improving behavioral problems. Smart goals are those that are: Specific, Measurable, Actionable, Realistic,

Ex: Eat two meat-free dinners per week for one month; Put away all mobile devices and shut off all screens by 9 p.m. on week nights for one month.

#### 3. LET'S SEE WHAT WE'RE WORKING WITH

What do you need to achieve your goal? Ex: A yoga mat; running shoes, information

What are barriers to reaching your goal? What makes it hard? What motivates you? What enables you to achieve your goal?

#### How will I tackle this?

#### 4. LET'S EXPLORE POSSIBLE TACTICS

What are possible interventions you can try out? Take some time to brainstorm - the more options the better. If one does not work out, you'll have plenty of others to fall

Ex: putting a reminder in the calendar; creating a visual trigger, downloading an app, asking a friend to be your referee...

#### 5. LET'S MAKE A PLAN

Which intervention(s) do you want to try first? Pick a concrete starting date. How will you know if your intervention is successful?

Ex: You can use quantitative measures such as counting steps, weight, time, etc. Or qualitative measures such us checking how you feel.

#### How Will I check-in with myself?

#### 6. LET'S TRACK YOUR PROGRESS

Depending on your goal, you may want to check-in daily or weekly on how it is going. Find a way to keep track that suits you and your goal /intervention.

Ex: you can keep track by journalling, using an app (for counting steps for example), or simply make check-marks on a calendar.

#### 7. LET'S START EXPERIMENTING!

Start trying your intervention. Check-in regularly with yourself. If you notice it's simply not working - move to phase 4.

#### What Did I learn?

#### 8. LET'S EVALUATE THE EXPERIMENT

How did it go? What are your barriers and enablers for maintaining this intervention? What improvements can you make?

#### 9. LET'S REFLECT ON PERSONAL LEARNING

What did you learn about yourself? What are the things that work or don't work for you? Is the issue you are working on still relevant? Or can you identify other root causes that need to be addressed first? Does your goal still motivate your? If not, make it more specific, or more ambitious, or break it down into something smaller.

#### 10. WHAT'S NEXT?

Based on your reflections, decide your next steps. Can you tweak your intervention or your goal so it better fits you and your context? Or is it better to try something entirely new? Perhaps even change your goal or issue?



DEFINING THE ISSUE



DEFINING THE GOAL



ASSESS CURRENT SITUATION



EXPLORE POSSIBLE INTERVENTIONS



CHOOSE AN INTERVENTION TRY IT OUT



CHECK-IN WITH YOURSELF -> IS IT WORKING?













REFLECT ON EXPERIMENT AND PERSONAL LEARNINGS ADJUST EXPERIMENT

