

SE Intervention Phase 1 Process Documentation

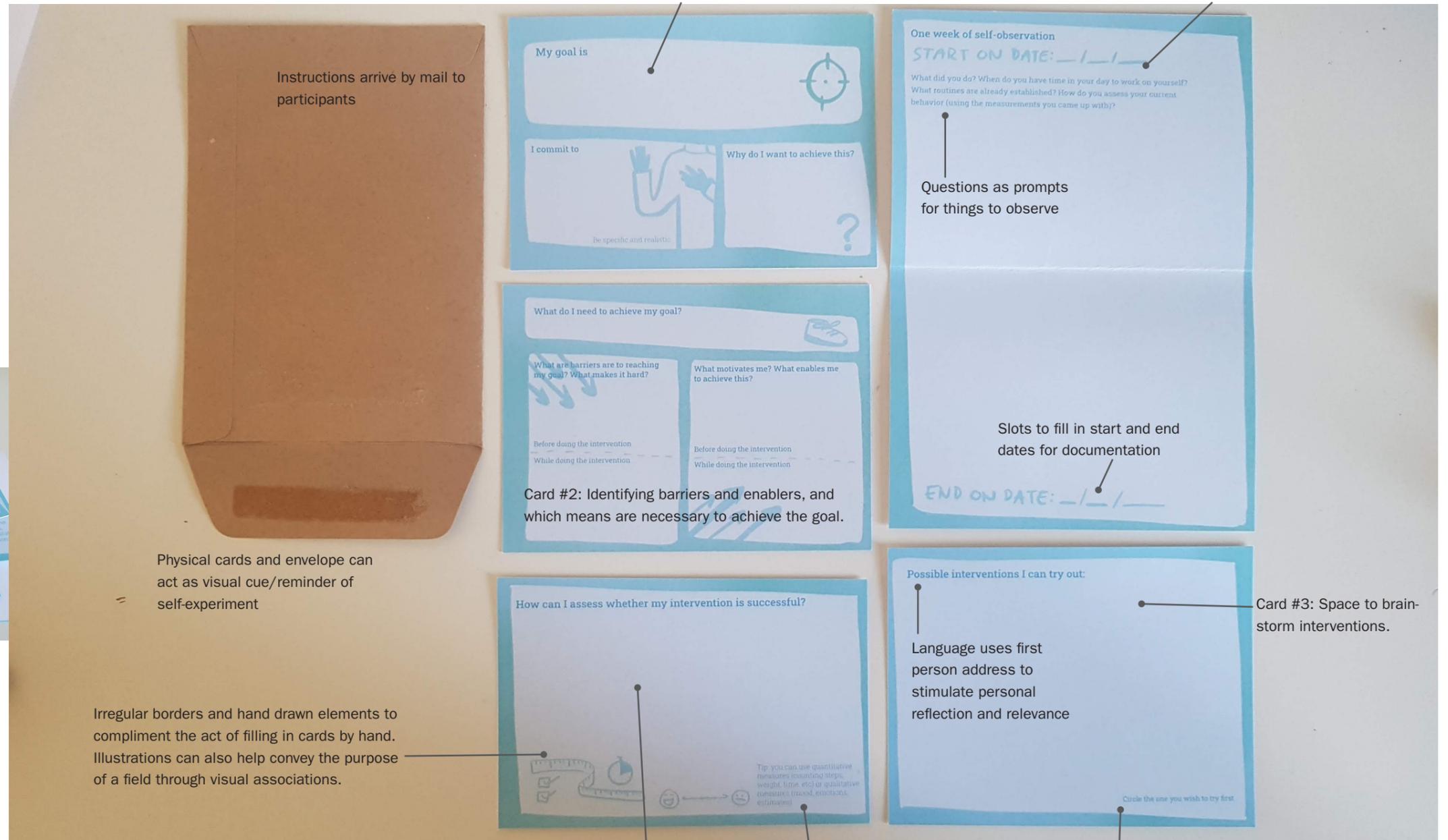
PROTOTYPE DESIGN

The following two pages illustrate the design features and decisions that went into constructing the prototype in the form of an annotated portfolio.

Personal Note to thank participants for their time and contribution



Analogue instructions to foster a moment of mindful reflection while filling it in. Also to attempt to make the interaction feel less like "work" in a period where most work is done digitally from home.



Card #1: Three fields to write down a personal goal, the commitment one is now making to work towards this goal as well as a reflection why one is trying to reach this goal.

Card #5: A space to make personal base-line observations for 1 week. Minimalistic structure to allow for variety of observations

Physical cards and envelope can act as visual cue/reminder of self-experiment

Irregular borders and hand drawn elements to compliment the act of filling in cards by hand. Illustrations can also help convey the purpose of a field through visual associations.

300g paper and attention to aesthetic design to increase subjective value of cards and encourage safekeeping over disposal

Card #2: Identifying barriers and enablers, and which means are necessary to achieve the goal.

Card #4: Selecting appropriate measures to help user evaluate if the intervention is successful or not

A few tips to help users think of own metrics

Card #3: Space to brainstorm interventions. Language uses first person address to stimulate personal reflection and relevance

Prompt to circle one intervention to converge on a decision of how to start

Slots to fill in start and end dates for documentation

Questions as prompts for things to observe

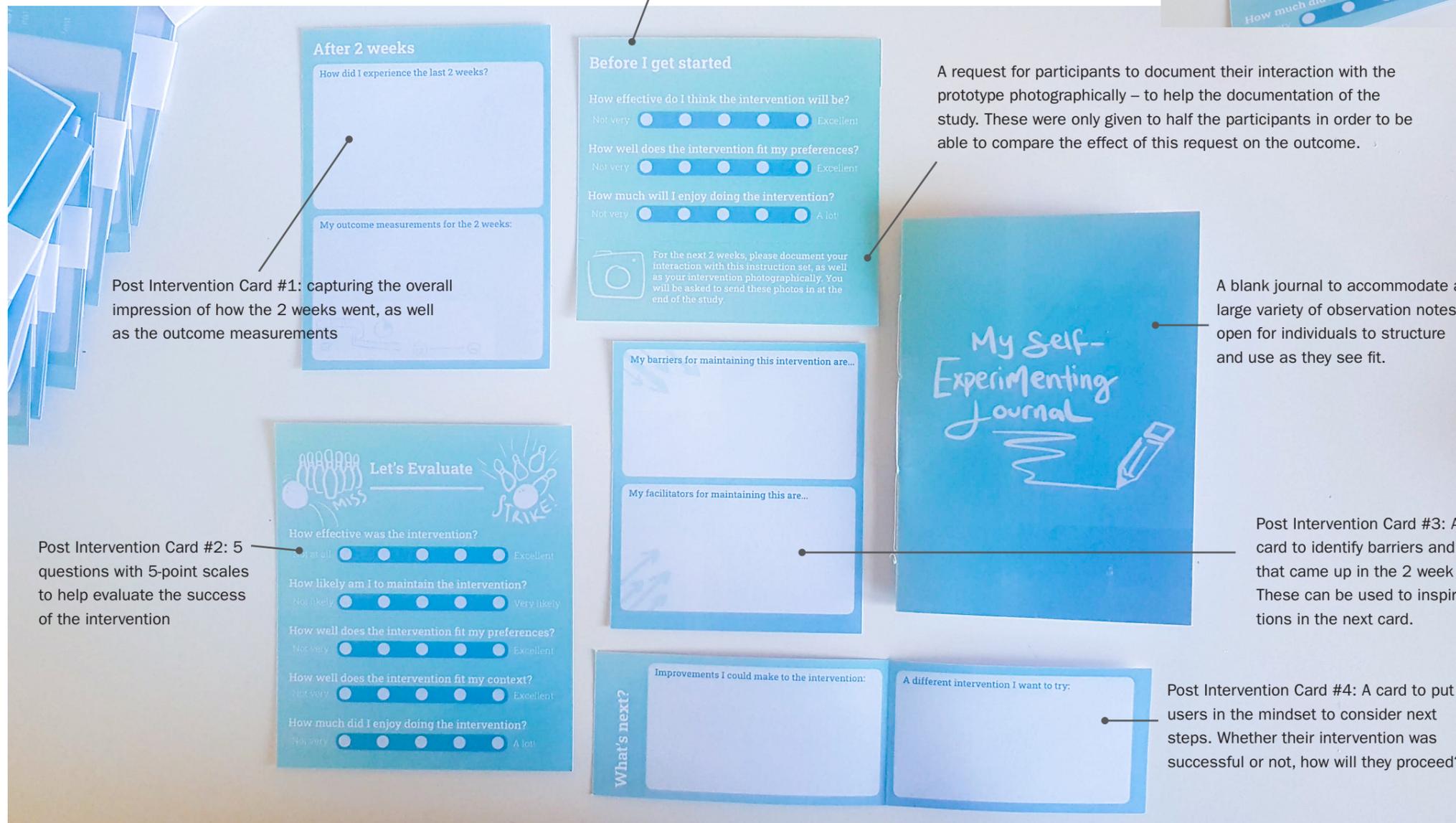
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Packages are labelled with numbers to clarify the order of opening. (1) is to be opened before starting (2) is to be used throughout the intervention to note down observations. (3) is to evaluate and reflect after two weeks of intervention.



Pre-intervention: three scales to fill out before starting, asking participants to predict the effectiveness of the intervention



Post Intervention Card #1: capturing the overall impression of how the 2 weeks went, as well as the outcome measurements

Post Intervention Card #2: 5 questions with 5-point scales to help evaluate the success of the intervention

A request for participants to document their interaction with the prototype photographically – to help the documentation of the study. These were only given to half the participants in order to be able to compare the effect of this request on the outcome.

A blank journal to accommodate a large variety of observation notes, open for individuals to structure and use as they see fit.

Post Intervention Card #3: A reflection card to identify barriers and facilitators that came up in the 2 week intervention. These can be used to inspire modifications in the next card.

Post Intervention Card #4: A card to put users in the mindset to consider next steps. Whether their intervention was successful or not, how will they proceed?

SE Intervention Phase 2 Process Documentation



MAIN CHANGES FROM THE LAST PROTOTYPE:

Although the second prototype is a new concept altogether, it evolved in part from the first prototype tested. There are some of the main differences to the first prototype:

- The baseline week was removed and there was no longer a separation between a “preparation” and “self-experimentation” kit. The prototype is presented in a collective folder. The baseline week was removed from the study as the focus shifted to the facilitation of SE rather than evaluating the impact on baseline measurements.
- More focus on guiding participants in each step through tips and examples, as participants expressed a need for more guidance.
- Making space for self-discoveries by adding a “what did I learn about myself” section to cater to this newly identified higher aim.
- Playful interaction through paper design in order to make the process fun and intriguing
- No tools were given for observation (i.e. Journal), instead tips and instructions were given to let participants choose their own mode of observation. This was done because the Journal was perceived as either highly useful or not useful at all, and I wanted to observe how participants prefer to observe their behaviour if no tool is provided.
- Adding an incentive and structure to encourage iteration of interventions.

Some of the main similarities to the first prototype intervention include:

- The visual style in terms of colour, graphics and language was kept the same as they received good feedback.
- A physical prototype was sent to participants through the mail
- Guidance was provided mainly through questions and instructions on paper
- Some of the content remained the same including: sections about a goal, enablers, barriers, way of measuring success, and brainstorming interventions

PROTOTYPE DESIGN

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3/4th of the prototype is designated to help users initiate the SE process

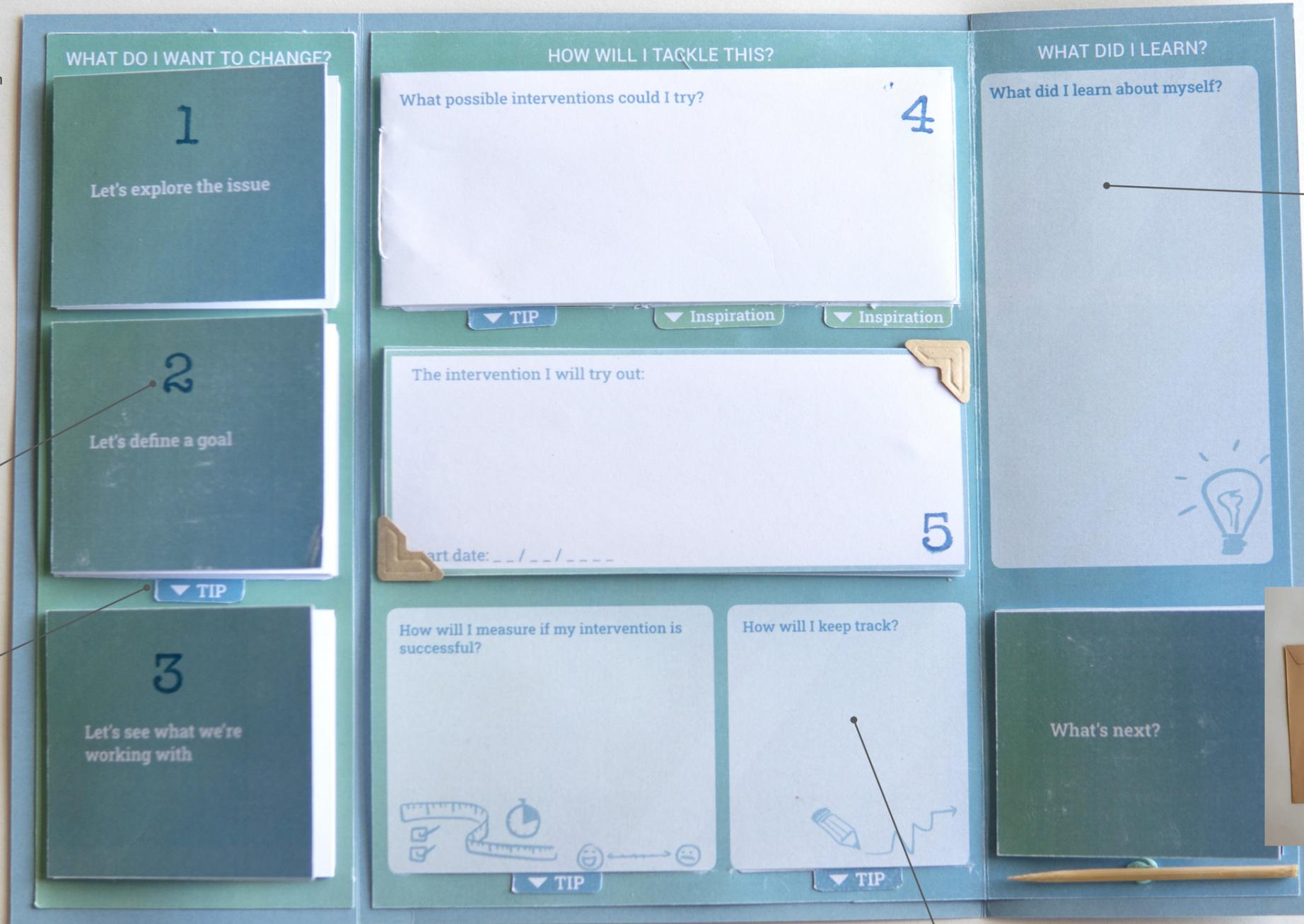
1/4th of the prototype is designated to stimulate reflection and encourage iterations to maintain the process of SE

An A4 compact folder that guides the user through the Self experimentation process. The process bares resemblance with the design process.

The user is guided through a set of questions, tips and examples, as well as space allocated to write down responses, ideas and reflections.

Consecutive steps are numbered (1-5) to clarify the order.

A playful interaction with the prototype is encouraged through paper flaps that can be unfolded, tips that can be pulled-out with latches, and a score board that can be scratched into.



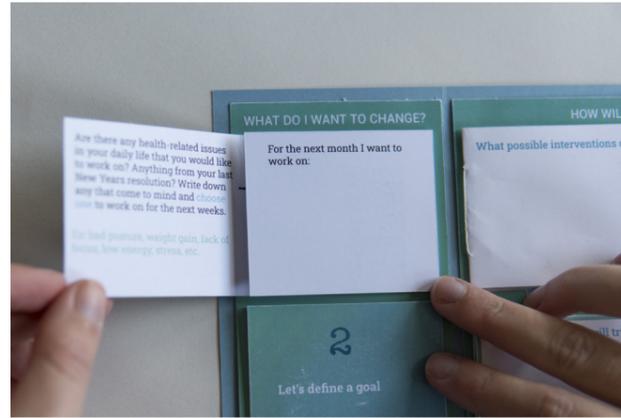
A place is dedicated to note down self-discoveries that are made as a result of the self-experimentation.

The prototype is delivered by post. Attached to the prototype is a note thanking participants for their participation and informing them to fill out the feedback form prior to the next meeting.

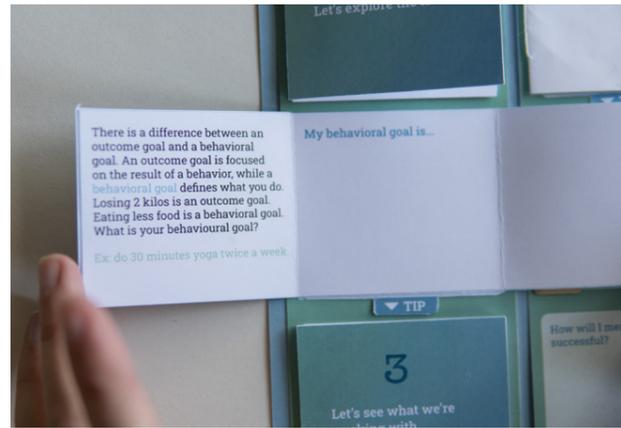


This time no journal was provided, but instead participants were asked to think of their own method of keeping track of process.

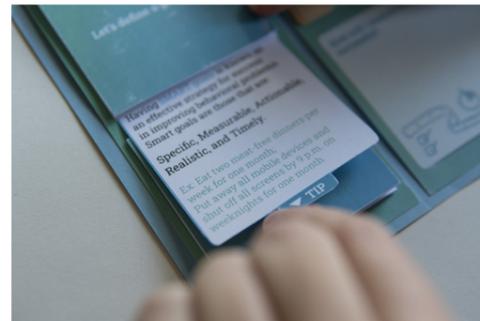
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In response to feedback from the first session, a step of “exploring the issue” was added before defining a goal for the self-experimentation. This helps users pick a goal that is rooted in an issue they are experiencing in their daily life. It can make the goal feel more relevant, and if users are unhappy with the goal they can pick another goal to approach the same issue from a different angle.



More guidance is provided for the goal setting. First through encouraging participants to choose a behavioural goal (rather than an outcome goal) and second, by providing instructions and examples of how to set a SMART goal “Specific, Measurable, Actionable, Realistic and Timely”.



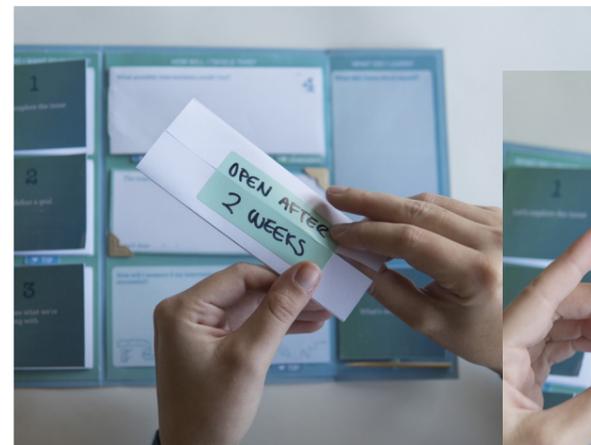
After setting the goal, participants are asked three questions to encourage reflection on barriers and enablers they may face in reaching this goal. This can help them think of interventions to try. (The same questions were also included in prototype 1)



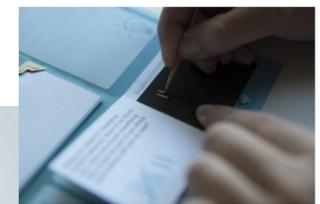
After choosing an intervention to try, participants are asked how they will measure whether or not their intervention is successful, as well as how they will keep track.



Participants were given 4 sheets to brainstorm possible interventions to try out. To facilitate this a tip was added “A behaviour occurs when the situation to do it, the ability to do it, the motivation to do it, and the trigger telling you to do it are in alignment” (Lee, 2016) as well as two behaviour change techniques “defining a trigger” and “finding the opportune time/ place”



The card used to write down which intervention will be tried, can be opened after 2 weeks to reflect upon it. Rather than providing a set of scales, the participant is asked to give an intuitive rating between “miss” and “strike”. Following this, the participant can reflect on barriers and enablers for maintaining this intervention, as well as think of possible improvements



Finally participants are encouraged to try new interventions if they feel like the current one is ineffective. A scratch-away score board is provided to keep track and encourage multiple interventions to be tried.

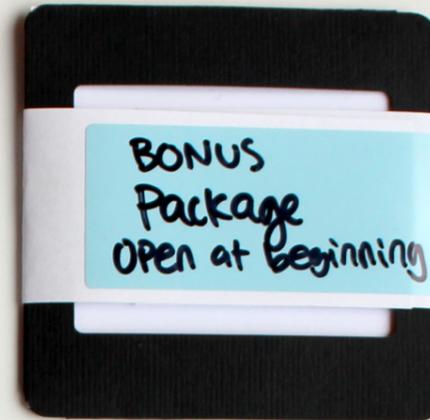
SE Intervention Phase 3 Process Documentation

Dear

Thank you for taking the time to partake in my research! The goal of the study is to find out how self-experimentation can lead to health-behavior change. I've created this prototype to guide you through the process of trying to change a health behavior. There is no wrong way to interact with it: anything that does not work out, with the prototype or with your attempt to change your health behavior is a great learning opportunity. The prototype is there to help you, but you are not required to use all of its parts. For example, if you feel that one of the questions/sections is unnecessary for you, leave it out (and let me know why later.)

Let's make an appointment for in two weeks to capture your experience – are you available on January 15th? In the small envelope you'll find a sheet to collect some feedback – please fill it in before our first meeting. Have fun experimenting!

Ps. let me know when this package arrives and if you are available on January 15th for a feedback meeting.)



WHAT DO I WANT TO CHANGE?

START HERE

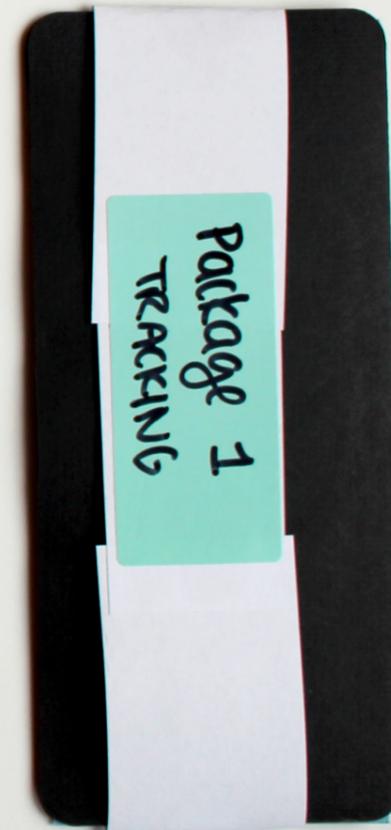
do I need? 3

1 Let's explore the issue

2 Let's define a goal

4 What hinders me?

5 What enables me?



SE Intervention Phase 3 Process Documentation



The final page of the flyer leads participants through phase 4. It contains a series of questions to first, evaluate the last conducted experiment, and then to reflect about personal learnings and next steps. In the evaluation, participants are asked to reflect on barriers and enablers for maintaining the intervention in the future. Considering these reflections, the participant can then improve upon their intervention and start a new iteration. The final section is a decision guide to answer the questions “what happens next?”. With a series of questions, the user can determine if they should simply adjust their intervention, or go back to refining their goal and issue.

Behaviour change technique:

Problem Solving

By asking participants to reflect about barriers and enablers to maintaining their intervention/desired behaviour, participants are made aware of influencing factors and engage in “problem solving” (Michie et al., 2013), by trying to find interventions that overcome certain barriers or make use of certain facilitators.

Behaviour change technique:

Discrepancy between current behaviour and goals

By reflection on how well participants were able reach their goal they naturally identify if there is a discrepancy between their behaviour and their set goal. Drawing attention to this discrepancy is another behaviour change technique classified by Michie et al. (2013).



INSPIRATION CARDS FOR INTERVENTIONS

Three sets of inspiration cards were included, to help participants explore possible interventions to try out in phase 2 of the process. Each card has two sides. The blue side contains a quote along the lines of “what works for me is...” The purpose of the quote is to highlight individuality, and that each person needs to find what works for themselves. Furthermore it provides a very actionable example, or success story, of what someone has done. Some of the quotes were taken from past participants of SE phases 1 and 2, others were made up to capture the gist of their learnings. The backside of the each card displays a proven behaviour change technique inspired by the Cards for Change (Byrne-Davis, Bull, & Hart, 2019) including a short description as well as a prompt to get the reader thinking about how to apply it to their own behaviour change goal.

Behavioural bias/principle:

Curiosity Gap

The cards are packaged in three sets to heighten anticipation and allow participants to open one set at a time. This is a way of introducing novelty and variety over time, and provide incentive for participants to continue by engaging their curiosity.

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GOAL DISPLAY

The toolkit includes a laser-cut paper frame with removable pieces of paper inside. Upon receiving it, the frame displays the instructions “write your goal here and place it somewhere visible”. The toolkit also provides a wooded stand to encourage participants to display their goal.

Behaviour change technique:

Restructuring the physical environment by adding cues

This goal frame can act as a visual trigger to remind participants about their goal and intervention in daily life. By displaying it, participants are adding a cue to their physical environment, which is a proven behaviour change technique (Michie et al., 2013)

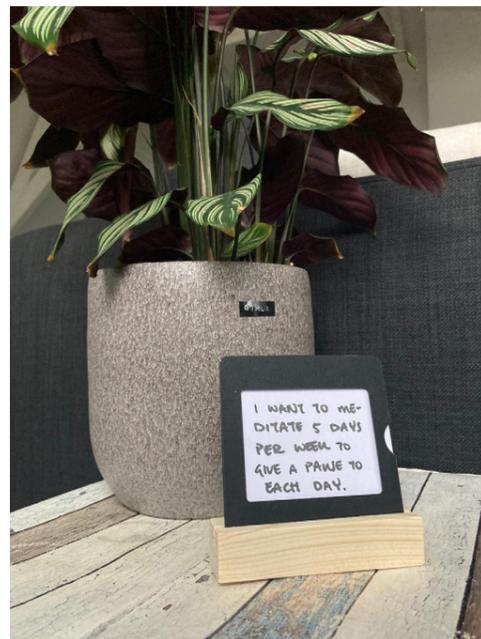


Fig. 60. How participant 5 SE phase 3 displayed their goal



MARKING PROGRESS: A VISUAL TRACKING TOOL

The toolkit provided three versions of a tracking tool in order to cater to different tracking needs. The purpose of this tool is to keep people motivated over time by (1) making progress visible and (2) celebrating small achievement. This is done through creating a satisfying interaction with the paper that affords participants to mark progress in a tangible and visible way while creating a small reward through sensational pleasure for checking-in on the process.

Due to the highly individual needs for tracking, this tool is kept abstract, without written indication for what each mark means. Each participant can attribute their own meaning to this interaction, and even add their own markings to the paper beneath. High quality colourful paper (300g) was used to create an aesthetic impression to help persuade users to display the prototype and attach a degree of value to it.

Behaviour change technique:

Self-tracking & Monitoring of behaviour

By using this tool, participants are observing and recording their behaviour, and are engaging in the proven behaviour change technique “self-monitoring of behaviour” (Michie et al., 2013).

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The first tracking tool is designed for daily goals, as it contains 28 flaps in four rows of seven (figure 70). These can be interpreted as four sets of weekdays, allowing the user to track their behaviour for four weeks. A second tool is provided for weekly goals (figure 72). It contains nine flaps to split a seemingly endless task into bite-size pieces. Provided that the participants makes a start on their goal, this tool relies on the completion bias, to nudge the user to fill in the rest of the card. The final tracking tool takes a slightly different approach by alluding to the principles of levels as known from games (see figure 71). This tool presents participants with small challenges, one harder than the last: starting very easy Lvl 1 only requires doing the intervention once, Lvl 2 presents a challenge of four completions, level three increases this to 9, and level four raises it to 16. This tool tries to include a bit of novelty and variety over time by presenting the participant with different challenges, accompanied with varying colour-reveals in each level (blue, green, gold..).

Behavioural bias/principle:

Completion bias and Goal gradient effect

This tool triggers the completion bias, which compels people to complete a task once they have started it. By breaking the seemingly endless task into bite-size pieces it also triggers the goal gradient effect which increases Motivation as participants get closer to reaching their goal (i.e. completing the card)

