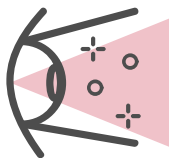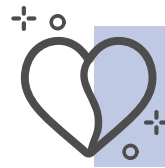# Energizing sleep-deprived parents:

Unlocking parents evening activities
with mindful and secular rituals

Master thesis by
Lina Li

COLOPHON

Energizing sleep-deprived parents: Unlocking parents evenings with mindful and secular rituals

Master thesis
by Lina Li

TUDelft

DELFT INSTITUTE OF
positive design

Abstract

What do you think when you hear the word secular rituals? Secular rituals are meaningful actions that highlight everyday experiences. They provide focus, let people slow down and be mindful. With the rise of digital innovation with longer and fixated uses of device screens, we become busier and overloaded with information. To solve this, we have become from unconsciousness to becoming mindful about our habits (Levitin, D. J. 2014).

In the research of my graduation thesis, I explore personal energy care and on everyday rituals to increase mindful behaviors. While evident research has been done about vitality and organizational energy management in the working environment, little to none research has been done about energy care in the home environment (Shippers, M.C., & Hogenes, R., 2011).

Being a parent in this digital age has its challenges, like suffering from sleep and lack of energy (Huffington, A. 2016). Amidst the joy of parenting, sleep-deprived parents have their commitments and obligations. When this accumulates, they are tired all the time and results in imbalance of personal energy care, especially working parents with small children (3-5 years old). Managing energy care and being mindful nowadays is a need for well-being (Hoffman, C., 2010). So in this project, the focused user groups are sleep-deprived parents that lack energy. This results in the vision of the project: **going from unconscious behavior to mindful behavior of personal energy care for parents.**

In the conducted user research, it is found that during transitions in activities, rituals are essential. Through exploring ritual touchpoints throughout the day results in the design opportunity to look into evening

rituals that re-energizes sleep-deprived parents. From collecting existing secular rituals, it resulted that four out of the six ritual categories contributed to energizing people in the evening: seek relief, restore balance, seek control, and nurture relationships. To let parents take care of themselves with performing secular rituals in the evening. This creates the design goal: **Create a modern secular ritual for working parents with young children (3-5) to manage their personal energy care at home in the evening.**

The design goal created the concept design: Tada.

Tada is a self-improvement tool with the main function to suggest mindful and secular rituals in the evening for sleep-deprived parents. Tada's direct and easy way of ritual suggestion makes it a new experience to spark and try out rituals to end the evening on a positive and recharged way. The desired interactions Tada aims for are: **personal, mindful, focus, and surprise.**

The Tada design concept uses two moments of friction that originated from two sustainable healthy models: the hooked model and the aesthetics of friction model. These moments of frictions lets parents reflect on their energy level, suggests personalized rituals and gives you a positive message after accomplishing the ritual. The longer you use Tada, the more personalized it becomes.

This graduation project ends with a user evaluation on how parents experience Tada and on its usability. Tada is the design concept that results from user research insights and, according to the user evaluation, evokes the desired interactions.

Acknowledgements

What an adventure has this been! I am incredibly proud of what this graduation project turned out to be. I could not have done this by myself. Therefore, I would like to take a moment to thank the following people.

First, I would like to thank my team, Natalia and Jeske. You were always positive and motivating me to look from a different perspective and taking care of me, which I really appreciate — also, a special thanks to Anna. You were always positive and challenged me to do the graduation project in my own way.

Then I would like to thank my lovely family. My mom Nucheng and dad Weida, that gave me advice on a professional and personal aspect. They always cooked nice dinners to encourage and motivate me. My sister Hellen, and brother in law Chang. And my adorable little niece and nephews, Mila, Benji and Gaby. Especially Hellen helped me through a lot during the graduation. Thank you so much for your unconditional love and motivation. Thank you Luna, my little cat that reminded me to take breaks by sitting on my laptop and playing with post-its.

My best friend. Ting, thank you for the weekly ritual meetings to energize me with movies, MacDonalds, and going to fun events with me. And for always listening to my complaints and discuss my project.

My dearest friends. Thank you so much for your support in all my stages during the graduation project. Yeejek, thank you for the meaningful discussions, encouraging me to get out of my comfort zone, and giving feedback on the report. Pelin, thank you for your help in giving your perspective in our conversations and for being an excellent editor. Thank you, Alexander, Aron, Chi, CY, Esther, Jet, Julian, Leona, Marc, Matty, Michael, Naghme, Nick, Nounou, Pak Long, Rudy, Sebastiaan, Sukying, Tijn, Ziyi and other friends. Thank you for having faith in me and helping me throughout the end.

"

So often, we exhaust ourselves and the planet in a search for very large pleasures - while all around us lies a wealth of small pleasures, which - if only we paid more attention - could daily bring us solace and joy at little cost and effort. But we need some encouragement to focus our gaze. By finding our own mix of small pleasures that will heighten our senses and return us to the world with new-found excitement and enthusiasm.

"

- The School of Life

Preface

What a ride it has been. This personal Master graduation project started with the wish to solve the problem of sleep deprivation for parents and transitioned to the evenings' rituals and mindful behaviors. Rituals hold something magical and through this project, I wanted to show the potential rituals have in the daily life - the moment we feel busy and mindless. And that it is possible to slow down and take notice of small moments in the evening when you focus.

In this personal graduation project, I could combine my interest in secular rituals with my DFI design profession. With evening rituals, I aim to energize sleep-deprived parents and recharge them for the next day.

This topic holds a special meaning to me, and I hope you enjoy reading the graduation thesis report as much as I do.

Quote
This quote comes from the book "Small Pleasures" by The School of Life.

Table of content

> "
> *Before the children sleep, they find it fun to jump on the bed. Especially my daughter and my son like it very very much. My youngest son is too young to play wildly, but he enjoys the situation and moments as well. I allow this, because this brings me joy.*
> "

NL

Plaats emotie / ritueel sticker hier!

Beschrijf het ritueel zo gedetaileerd mogelijk. Wat gebeurde er? Wat was de context? Wie was er bij betrokken? Wat voor objecten werden gebruikt? Hoe voelde je je?

A ritual that my child enjoys

Vlak voor het slapen gaan van de kids vinden zij het leuk om te springen in bed, vooral Mila en Benji vinden dat erg leuk. Ook Gabi doet mee voor zover mogelijk. Dit laat ik ook toe, want dit geeft mij ook veel vreugde.

Chapter 0
Project introduction

The project introduction explains the starting point of this graduation project from sleep deprivation to energy care. Then, the project relevance with energy care in relation to research and design is described. Next, we elaborate on the project opportunity and aim and the used method in this project. This forms the beginning of collecting literature in the next chapter.

Project introduction
0.1 Energy care and well-being

Energy is everywhere. Look around you, and you will notice that everything is driven by some form of energy. Just like how cars need fuel and maintenance to work, and smartphones need to recharge the battery every day, we also need to maintain and balance our energy for our wellness. The fluctuations and changes in our energy level are influenced by everything we do and how we do it. **So, perhaps the focus to our wellbeing lies in how we manage our energy** (Schippers, M. C., & Hogenes, R. 2011). In our daily life, we often struggle to keep a balance between work and life. We are often too busy and feeling too tired to invest in ourselves. Investment in better energy management can make a difference in daily interactions at work and the home environment (Gröpel, P., & Kuhl, J., 2009). It is worth the effort and meaning if we get more out of life and feel good about ourselves with proper attention placed on our energy management.

The inconsideration of energy imbalance is very prevalent in our culture, society, individual behavior, and decision making. Currently, sleep deprivation and digital connectivity overabundance are two obvious consequences. Both societal issues are significant and affecting people's energy and wellbeing (Huffington, A., 2016).

The starting point of this graduation thesis project was to explore the problem behind sleep deprivation. We spend about 33% of our lives sleeping or either attempting to do so (J. Aminoff et al., 2011). Sleep is about restoring and revitalizing energy for the next day. Studies have concluded that using digital screen time before sleeping affects the internal body clock and the melatonin production for falling asleep (Lanaj et al., 2014). The notifications, vibrations, and other digital 'attention-seekers' trick our brain to be alert, at the cost of our sleep. This is just one of the many factors influencing our current energy and sleep. However, eliminating smartphones, iPads, or laptops is not a sustainable answer. As the innovation of everyday technology makes us more efficient and productive in the working environment. Current technology usage has infused in our daily lives, and we use it without much reflection. Mindless and passive scrolling on digital devices makes people not actively engaging without realization (Lukas, B. 2019). These behavior affects energy usage and drains our energy without realizing. How would it be if people were more mindful of this behavior to improve their energy and wellbeing to flourish?

Being a parent in this digital age has its challenges including suffering from sleep and lacking energy throughout the day (Gui, M., Fasoli, M., & Carradore, R., 2017); Gujar, N. et al., 2010). Amidst the joy of being parents, they have work, their children, and household commitments. Which renders that they do not invest enough time on themselves. This results in tired parents when accumulated, and that reduces their ability to react on negative stimuli and emotions during the day (Gujar, N. et al., 2010; Anderson, C., & Platten, C. R. (2011).

Even when the child(ren) are sleeping, parents often have other (working) activities in the evening (working on a laptop, doing housework and errands) and focus their time on browsing through social media, watching tv or Netflix (Hysing, M., Pallesen, S., Stormark, K. M., Jakobsen, R., Lundervold, A. J., & Sivertsen, B., 2015). These activities hinder parents from recharging for the next day and could influence daily interactions at work, with their children and their decision-making process (Levitin, D. J. 2014).

Concerning energy and wellbeing, the question for parents is how to be mindful of their own energy consumption, how can they have influence in their energy care and maintenance to invest in themselves and to lead to a positive attitude towards their individual needs and wants. **So the key is to look into personal energy care and explore its tools for being more conscious.** In conclusion, this is the vision of the project:

Going from unconscious behavior to mindful behavior of personal energy care for parents

0.2 Project relevance

For research

Concerning about the time and energy modern and working parents put in raising their children. Parents seem not to invest enough on themselves. Parents put higher expectations on themselves and compare them to their peers. This can cause a strain on their wellbeing, often without themselves realizing it, see figure 0.1. It is essential that parents invest in themselves. This can be contradictory to innate responses as being a parent.

In addition, research about energy management, vitality, and productivity in the working environment are evident in the academic field, not yet on an individual level in the home environment (Schippers, M. C., & Hogenes, R., 2011). While personal energy care in the home environment is as essential as energy management in organizations, this graduation thesis project makes it initial steps to explore energy care in the home environment.

For design

In the context of design, existing designs of personal energy care is unusual. As problems concerning energy are about sustainable energy, electricity usage in homes, converting raw materials in other variation of energies. People's focus on energy consumption is not shifting, yet its exploration leads to all sorts of chances that designers can tap into for example to design for rituals (Ozenc, K. & Hagan, M., 2017).

Also, designers are interested in designing for wicked problems and complex issues in the current society (Tromp, 2013). Designers want to design for users that leave a positive and social impact in the society. This project taps into this subject to design for impact in general as well.

Figure 0.1
Exhausted parents

0.3 Project opportunity & aim

Project opportunity

Within the scope of personal energy care for parents, there are still countless opportunities to focus. From a positive design perspective (Jimenez, S., Pohlmeyer, A. E., & Desmet, P. M. A., 2015) rituals become an interesting element for parents to become mindful about their personal energy care. This graduation project is about daily rituals. Rituals are actions performed with a higher purpose and meaning. The value of having and establishing daily rituals is that the intention and the outcome of this behavior is energy regaining. With the core-elements of focus, mood, and space, a daily ritual can be personally significant and meaningful. Maybe, making parents conscious about investing their time in energy regaining rituals can be useful to improve their energy care.

Project aim

This research and design project aims to explore current daily rituals performed by parents and to come up with a design tool that focuses on personal energy care and energy regaining rituals of parents with the vision created on chapter 0, page 17.

The following research questions shape the research and design activities of this project:

1. How do parents deal with sleep deprivation on a daily basis?
   - What is their current approach to deal with sleep deprivation?
   - What are their values and concerns of modern, working parents?
2. What role do children play in relation to personal energy care?
3. What rituals do parents perform on a daily basis?
   - What personal rituals do parents do in their daily life?
   - What family rituals do parents do in their daily life?
4. What touchpoints in a day influences energy care to regain energy?
   - What emotions do parents feel in relation to personal energy care?
5. What (technological) activities drain or regain energy for parents?
   - What role does a smartphone play for parents in relation to energy care?

0.4 Method

With the belief and argumentation that design can impact happiness and wellbeing among its users is apparent and had increased over the past few years (Desmet, P. M., & Pohlmeyer, A. E., 2013). They proposed a method called the Positive Design approach. The Positive Design Approach uses possibility-driven attitude to explore alternative opportunities, indirectly linked to the problem. This graduation thesis consists of a research phase (chapter 1, 2, 3,) and a design phase (chapter 5, 6, 7). In combination with the positive design approach and the double diamond method, see figure 0.3, this graduation thesis project uses iterative processes and activities to explore energy care and daily rituals. Insights from the research phase inspire the design activities and the other way around.

Research

The literature review, applied models and user-centric research details the research phase of this graduation project. The understanding of terms and models are applied and initiated the qualitative user research, using the context mapping skills method. The main insights were used to form the foundation of the design brief, which resulted in the final design goal.

Design

After the research phase, the design phase starts with defining the design brief, that consisted of the final design goal, interaction vision, and the desired interactions. The final design goal is created through several iterations of design and research activities. The result is a suggestion tool that can let parents be more mindful about their personal energy care to invest time in themselves.
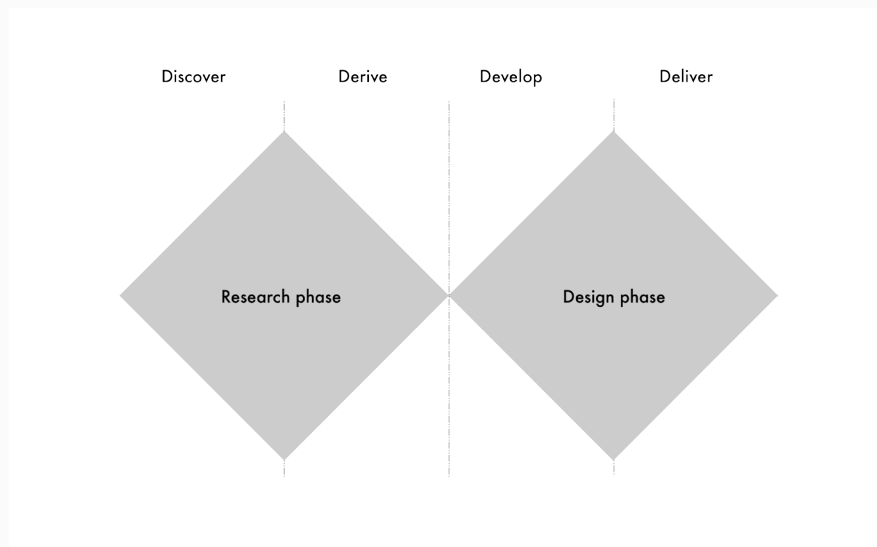
Figure 0.3
Double diamond method with four phases.

> "
> *Every night I read a bedtime story for my daughter before she sleeps in bed. She chooses her own book for me to read. Her favorite book is called "The bossy tin soldier". I intensely enjoy reading the story for her and she also enjoys it.*
> "

A ritual that my child enjoys ...

NL

Plaats emotie / ritueel sticker hier!

Beschrijf het ritueel zo gedetailleerd mogelijk. Wat gebeurde er? Wat was de context? Wie was er bij betrokken? Wat voor objecten werden gebruikt? Hoe voelde je je?

mijn dochter Ik lees elke avond een verhaaltje voor als mijn dochter avond in bed ligt. Ze kiest zelf een boekje uit, haar favoriet boek is 'Het bazige tinnen soldaatje' Ik vind het heel leuk om voor mijn dochter voor te lezen en zij geniet ook intens ervan.

Chapter 1
Knowledge collection

In this chapter, more in-depth knowledge will be explained to understand more about energy care, being mindful, and rituals. We will look at literature from different fields and elaborate on these terms. The chapter summary details the gap we want to address in this project.

"

We must then transfer some psychic energy each day from tasks that we don't like doing, or from passive leisure, into something we never did before, or something we enjoy doing but don't do often enough because it seems too much trouble.

"

Knowledge collection

1.1 Energy

What is energy care? What defines energy, different types, and levels of energy? What strategies increase energy? What are the reasons for parents with sleep deprivation, and what strategies do they use?

Definition

"Energy management" has been defined as vitality, productivity, creativity, and its positive impact on the working environment (Shippers, M.C., & Hogenes, R., 2011). When there is a high energy level within a company, it seems that everything happens easier. The term energy management is hardly mentioned nor measured explicitly, in the home environment. The term "energy care" is used from now on in this thesis report. It means maintaining personal energy in the home environment. That is the context that we are focusing on in this project.

Energy is defined as "a type of positive affective arousal, which people can experience as emotion (short responses to specific events) or mood (longer lasting affective states that need not to be a response to a specific event)". (Quinn and Dutton, 2005).

Energy outcomes can both be short-term and long-term. A short-term energy outcome is an instant satisfaction or instant gratification as well as, long-term draining effects result in a burnout. From an individual's basic energy level, it is viewed as imbalance.

Quote on the left
Csikszentmihalyi (1997) suggests this, in order to become more energetic on a daily basis.

Energy flow

An important reason why people often lack energy or feels energy imbalanced is that they have trouble determining what they like and even if they know what activities they like best, fail to seek out these activities more often (Cross, R. et al., 2003).

An existing energy model called the energy flow model is developed by Csikszenmihalyi (1990), as shown in figure 1.1. This state of flow can occur during any activity, be it at work, home, hobby, sports, or games and is characterized by maximum fulfillment. This complete immersion in an activity is the result of the focusing of mental energy on the activity, which is liked by the person that is doing the activity. This happens if the energy flow is stable with challenges and the skills of the person. If the challenge and skills are too easy, it creates boredom. And if too much of a challenge, it creates anxiety.
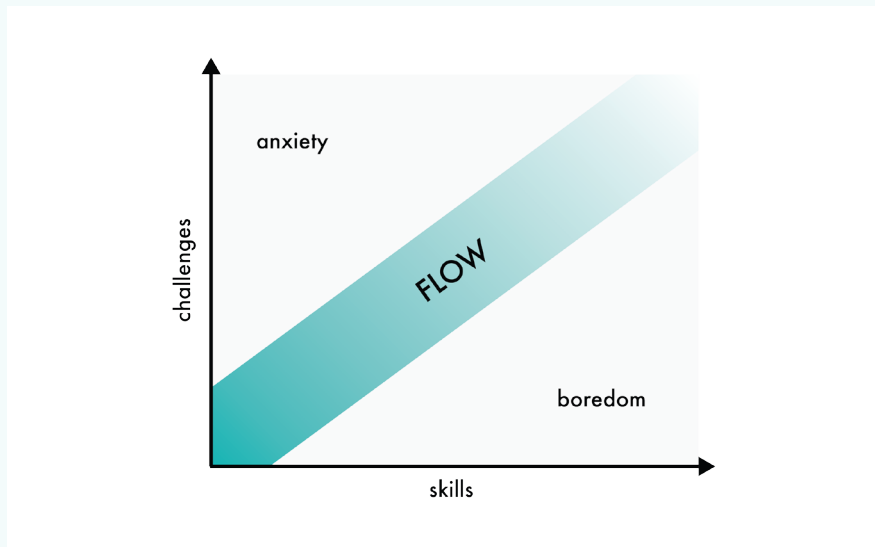
Figure 1.1
Flow theory by Csikszenmihalyi (1990)

1.2 Energy consumption

Energy types

Now we discussed the energy flow model, we explain the three different types of energy. Maintaining a high energy level in the working environment, despite the stress people may have, is what people often have to deal daily. In the home environment, the energy level should be able to recharge and regained for balancing the optimal energy. There are three types of energy distinguished in energy care:

1) mental energy: being able to focus intensely; powers ideas and thinking, and the internal processing of your mind;
2) physical energy: strength, endurance, flexibility; manifests itself as bodily action and movements and powers all physiology;
3) emotional energy: such as excitement and desire, and contributes to the state of being; fuels positive emotions.
(Shippers, M.C., & Hogenes, R., (2011); Harris, S., 2018).

A general example:
We intend to do it (mental energy), but we do not want to (emotional energy) and we end up arguing with ourselves rather than doing it (affects physical and mental energy). This example is concerning decision making and solving daily dilemmas of conflicting concerns. Parenthood is full of these decisions.

The energy types can work together but also work against each other. When the three different energies work in the same direction, energy is gained. On the other hand, when the mental, physical and emotional energy are working at different purposes against each other, in that way there is energy drained. When the three energies work together, the person can reach the state of flow easier, as visualized in figure 1.1.

SLEEP KNOWLEDGE   SLEEP BEHAVIOR

73% — 73% know that looking at screens (tablet, smartphone, laptop) shortly before bedtime makes sleeping more difficult.

94% looks at screen one hour before sleep time. — **94%**

62% — 62% know that drinking caffeinated drinks a few hours before bedtime can have a negative influence on how well you sleep.

66% drinks beverages with caffeine a few hours before bedtime. — **66%**

59% — 59% knows that if you drink alcohol before going to sleep, you will not sleep well.

68% takes an alcoholic drink a few hours before sleeping. — **68%**

93% — 93% know that if you exercise well during the day, you sleep better.

53% does not exercise well enough during the day. — **53%**

78% — 78% know that getting up and going to bed just as late as on weekdays helps you sleep better.

73% do not get up at the same time every day.

67% do not go to bed at the same time every day. — **73%**

Figure 1.2
A sleep study conducted by
Hersenstichting, Trimbos-instituut and
IKEA Nederland (Hersenstichting, 2019).
Translated from Dutch to English.

Parental reasons that lead to sleep deprivation

There are a lot of factors why people are sleep deprived. According to recent research, the result is that Dutch adults are not the best role model in sleep.

"63% of the Dutch population is negative about their sleep quality but do not take action to improve." (Hersenstichting, 2019)

As shown in figure 1.2, the factor that affects sleep the most is the smartphone. 94% looks at screens one hour before sleeping, and 73% knows that looking at the smartphone before sleeping decreases the falling asleep moment. The same goes the factors of consuming caffeinated drinks, alcohol, not exercising, and sleeping in during weekends.

From this research, it seems like knowing what to do, and taking actions are not aligned. Thus, there is a lot of chance to adjust sleeping behavior.

Insomnia can be hard on parents because taking care of children while managing work requires so much energy. While insomnia is integrated into parenthood, especially in the first five years, bad sleep should not become the way of life. Resilience and learning how to cope with lack of sleep is adviced during the day. Additionally, parents do not only deal with the factors mentioned in the previous paragraph, but also with the reasons listed below (National Sleep Foundation, 2019).

Worrying about small, big or conflicting concerns
Worrying about issues concerning work, children and daily organization can drive parents to worry, to stress and mental energy depletion.

Children wake up during the night
Babies (0-2 months), infants (2 months to 1 year) and toddlers (1 to 4 year) and children up to 5 years old will wake up during the night for various reasons: crying due to hunger, thirst or nightmares. The lack of sleep for parents will grow more prominent if the children wake up during the night. This affects their energy level during the day.

Multitasking
Multitasking heightens brain activity. When someone is multitasking, they are switching task A and task B quick and while it seems normal, multitasking for a more extended period of time without proper resting

leads to energy depletion during the day (Leviton, D. J., 2014).

Hard to disconnect
Adults have their smartphones in reach when waking up and before sleeping. Being connected all the time leads to an active brain before sleeping. And the blue emitted light decreases the production of melatonin that also leads to an active brain.

Sounds from the environment
Snoring sounds from the partner - Chronic snoring or sleep apnea can disturb the other parent during the night and reduce sleep quality and leads to sleep deprivation.

Strategies that increase energy

Now we know the reasons why parents (and people in general), don't sleep well. Professor Marie Asberg from the Karolinska Institute came with a theory described as the exhaustion funnel, see figure 1.3. In short, this theory elaborates on that when sleep problems become chronic, that it will lead to lack of energy and funneling down to depression and burn-outs in the long term (Langer, C., 2016).
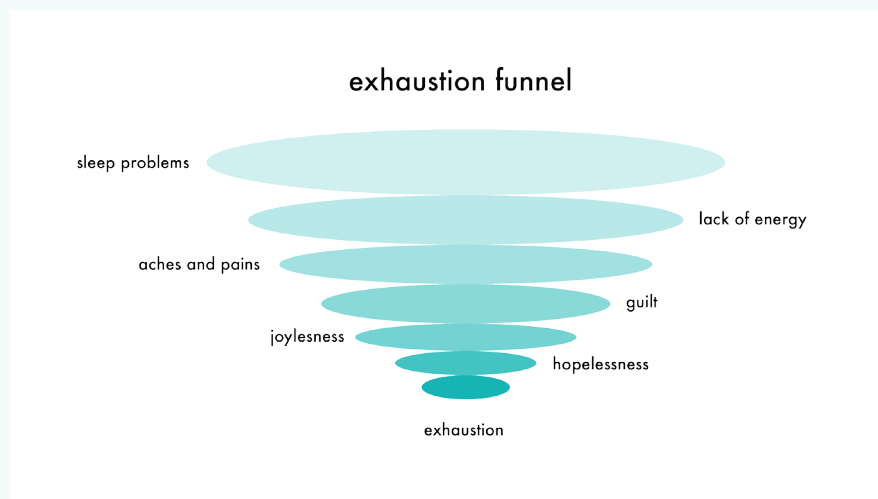
Figure 1.3
The exhaustion funnel by Marie Asberg

The list below suggests strategies that increase energy, mentioned in the literature (Harvard medical school, 2019; Shippers, M.C., & Hogenes, R., (2011); Harris, S., 2018).

Enough food and water consumption during the day
Plenty of nutritious and healthy food is the foundation the recharge your body.

Avoid sugar, smoking, and alcohol
Consuming too much of these leads to energy high peaks, as well that the energy levels drop down quickly.

Optimistic attitude
Conserve emotional energy by being more relaxed and optimistic facing daily problems and disappointments.

Reduce stress and worry
With all the multitasking you are dealing with, it can cause stress, anxiety, and burnout. Conflicting concerns drain mental energy.

Set boundaries
Be conscious of what you need and what you want. Saying no is a form of self-care.

Build rituals into your daily life
By focussing on doing what you like and what makes it memorable. It can restore especially mental energy.

What does it mean for my project?

These strategies will be used as a guide to look into what re-energizes parents during the day. Thus, this project explores another way to design and to improve energy care for parents, and so to improve sleep. So, assuming that rituals have energy regaining properties, this graduation project takes its focus to research about rituals that stimulate support, to cope and stay resilient for parents despite having a lack of sleep.

1.2 Mindfulness

What is mindfulness? What is the difference between mindfulness and mindlessness?

Definition

"Mindfulness means maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment, through a gentle nurturing lens." (Berkeley, 2019)

In the paragraph about increasing energy on page 31, I explained about different strategies that regain energy. Mindfulness is one way to do so.

Mindfulness in the modern everyday

Technology innovation makes our daily tasks efficient; therefore, we are keen on achieving more and doing tasks quicker, also known as multitasking. What studies have found is that we don't multitask, but switch these different tasks very quickly from one to another (Levitin, D. J., 2014). This drains our energy, especially mental energy. Mental energy contributes to focus; it powers ideas, thinking, and decision-making.

We think faster, make quicker decisions, and repeat. This can lead to a state called: mindless, also known as 'being on autopilot'. This state of being unconscious is due to being busy in the head all the time. Another reason is, as explained in figure 1.4, the exhaustion funnel. It takes time, effort, and attention to become mindful.

Mindlesness

They are paying attention to the essential aspects of life that people take granted for or ignore. Mindfulness means paying attention to things as they are in any given moment. However, they are, rather than as people want them to be. This way of paying attention helps energy care and its three types of energy in a positive way (Teasdale, J. D., & Segal, Z. V., 2007).

Teasdale et al. elaborated on the characteristics of mindfulness:
- Mindfulness is intentional. Cultivating mindfulness is being more aware of present reality and the choices available in life.
- Mindfulness is experiential. It focuses directly on the present-moment experience.
- Mindfulness is non-judgemental.

Hedonic adaptation

So, mindfulness is about being in the moment and about focus. In the research of positive psychology, the term hedonic treadmill is frequently used (Jimenez, S., Pohlmeyer, A. E., & Desmet, P. M. A. (2015). The hedonic treadmill describes people's tendency to maintain a stable baseline level of happiness despite both positive and negative events, as shown in figure 1.4. Improved circumstances may be rewarding at first, however, their impact on happiness diminishes over time because we rapidly get used to them. This effect is called the hedonic adaptation effect. This adaptation effect is becoming the standard, so we live life quicker and quicker without looking back. Only to realize that it seems to bring some consequences like, information overload, poor decision making and sleep deprivation, because your brain is always active (Leviton, D. J. (2014). Thus, to counter this multitasking standard, mindfulness is the direction to focus on.
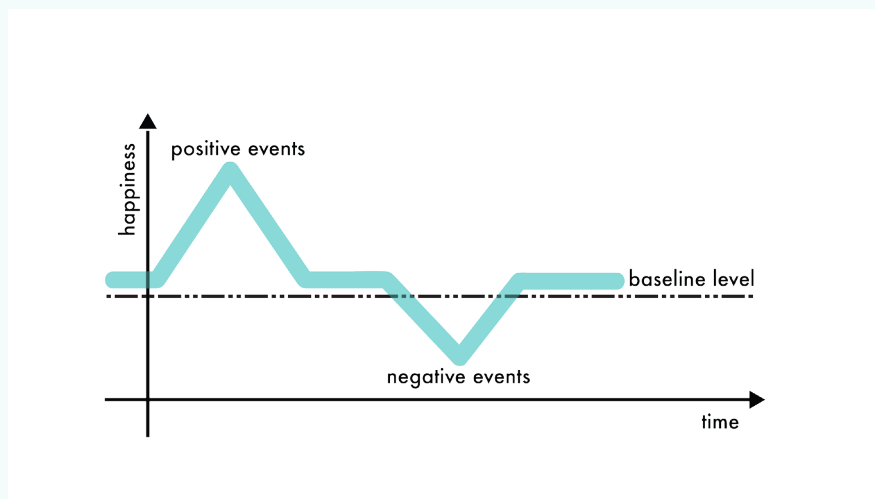
Figure 1.4
The hedonic adaptataton model (Positive Reference Guide, 2015)

Figure 1.5
Visuals of different rituals: 1) tea ceremony,
2) Sunday church, 3) Wedding ceremony
and 4) watching the newspaper in the
morning.

1.3 Rituals

What are rituals? Are there different types of rituals? What are the core-elements of rituals? What is the difference between rituals and habits?

When you say 'morning' to each other when you wake up, take time to prepare tea, read a bedtime story before children sleep is examples of the many rituals that exist. Rituals structure our everyday lives.

Definition

According to Myerhoff B. (1977), rituals are: *"actions performed by people that bring higher – perhaps illogical, magical and delightful – meaning into their experiences."*

In other words, rituals are (a set of) actions or behaviors of becoming mindful or having an awareness of a specific time of moment. Rituals can be grand or small; occasionally occurring, weekly, yearly, or even daily.

Types of rituals

There are different types of rituals in daily life: religious rituals, collective rituals, ceremonial rituals, and secular rituals, as shown in figure 1.5 and 1.6. In this project, we research about rituals that happen in the daily life of parenthood. These secular rituals have a significant impact on restoring energy and mindfulness for parents.
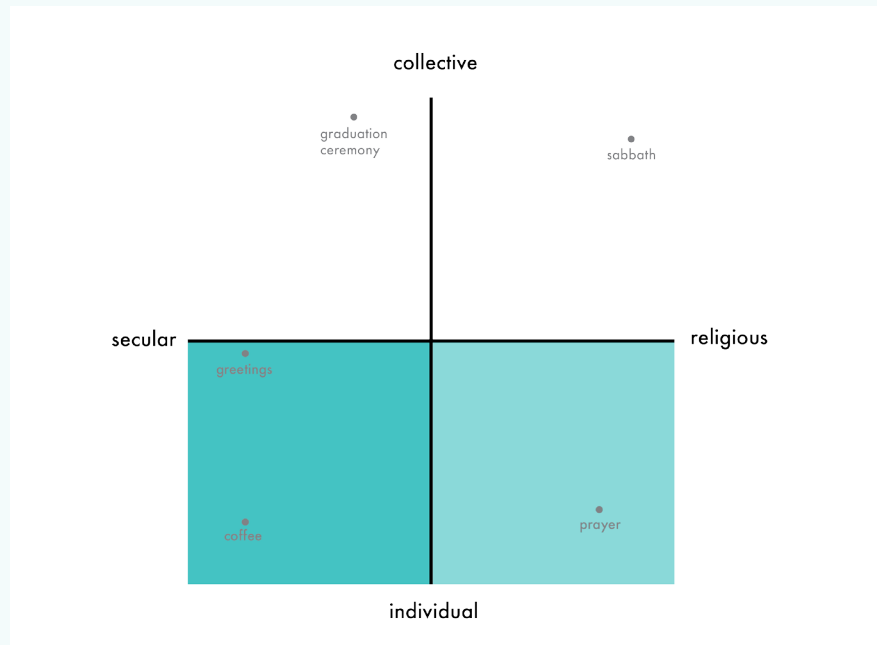
Quote
This quote is by Yumi Sakugawa

*"Rituals = positive thinking + positive doing; and results in a positive impact."
- Yumi Sakugawa*

Figure 1.6
Ritual matrix with examples of different types of rituals. In this project we focus on rituals in the second quadrant as presented in the lower part of the matrix

Difference between rituals and routines

What is the difference between rituals and routines? Routines and secular rituals vary according to the value and the focus put into the activity (Lévy, 2015). Routines are valued by the quality of their result and often of their efficiency. Daily rituals are valued by the experience and meaningfulness of the process to reach this result.

Examples found by literature of showing the difference between routines and rituals are shown below (Nairan, N. & Nairan Philips, K., 2018):

Routine (habit)	Rituals
Eating on the run	Giving thanks before you eat
Scrolling through social media	Reading an inspirational book
Grabbing a takeaway croissant	Sitting down to a homemade breakfast
Switching on the TV every night	Writing in a gratitude journal

Core-elements of a ritual

According to Coyne & Mathers (2011):
"A ritual has some unique characteristic or property that makes it easily noticeable to those involved." Moreover, a few qualities of rituals have created the way they can be mapped over time. Rituals are often 'sticky' once established independence and identity (Lévy, P., 2015).

During this project, literature research about rituals and several ritual explanations and models provided the core-elements of what defines a ritual.

The ritual theory model that will be used is adapted from Durkheim's ritual theory (Couldry, N., 2005). Durkheim claimed that collective, ceremonial and secular rituals have certain factors in common that defines a ritual. According to him, a ritual should have a focus, mood, and space, as shown in figure 1.7.
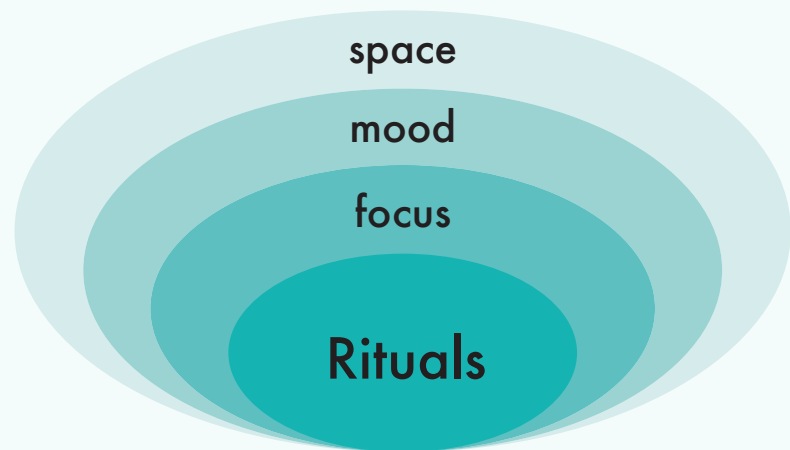
Figure 1.7
The three core-elements of a ritual by Durkheim

space

mood

focus

Rituals

Below, these elements are explained:

Focus

As mentioned earlier, a ritual is a meaningful behavior with awareness of what intended value that the person wants to achieve. This behavior should come from a voluntary aspect. Otherwise, it is will become a mindless routine. A ritual has a clear beginning and a clear end. That beginning is the trigger to initiate the ritual.

Mood

The mood plays an important role in a ritual. What intended mood or state of mind does the person want to achieve? With this internal focus on the mood, a good ritual can be made.

Space

To make the ritual possible, certain 'mediums' are essential. A medium can be anything, as long it seems logical to the user. Examples of mediums are physical objects, interactions, sensory stimuli, light, sound, vibration, and more. It can be a candle, to a smartphone or a necklace.

What does it mean for my project?

In this project, I will focus on designing for secular rituals. These rituals are done every day. Furthermore, the three core-elements will be taken into account for in the in-depth insight generation and the idea generation phase for concepts.

Chapter summary

Energy care in the home environment is significant for people's wellbeing. Sleep-deprived parents lack sleep and energy during the day. By looking at why and how to re-energize parents, it is possible to use it as an opportunity to design for. We found in the literature that there are three types of energies: mental, emotional, and physical. When these three energies are aligned, people feel a high level of energy in their daily life. Some activities drain and regain energy. The parental reasons why they are sleep deprived consist of multiple factors and depends on the context. For a parent, some reasons for sleep deprivation cannot be avoided. In that case, it is essential for them to build resilience and to cope with the lack of sleep and lack of energy during the day. To deal with the lack of energy, there are existing strategies that increase energy levels. By consuming enough food and drinks and avoid smoking and alcohol, physical energy can be improved. For emotional and mental energy, having an optimistic attitude and building rituals into daily life can re-energize mental and emotional energies.

In its essence, mindfulness is to live-in-the-moment, be conscious of own thoughts and feelings, through a nurturing perspective. One of the many reasons why people seek mindfulness is because of the overwhelming information we daily receive in our brain. This is possible through everyday technology. And can be seen as an indirect affecting the sleep quality, as the brain is on the active mode before sleeping. To implement mindfulness in daily life to find moments to be in the moment and slow down is through looking at rituals. Secular rituals are one of the four types of rituals and which will affect energy care. Secular rituals have three distinctive core-elements: focus, mood, and space. In conclusion, we are aiming to look for energy regaining rituals in daily life.

Designing for sleep-deprived parents in the perspective of using everyday rituals is promising for both the research and design point of view. First, because research on energy regaining rituals is limited from a parents perspective. Second, the positive impact and mindfulness industry is growing and trending nowadays.

> "
> *I always shower with my daughter before she goes to bed. She likes to play with water and we both get relaxed from the hot shower. A daily ritual we like.*
> "

A ritual that my child enjoys ...

Place the emotion/ ritual sticker here!
Desribe the ritual as detailed as possible. What happened? What was the context? Who was involved? What object was involved? How did it make you feel? etc.

Shower with kid
I always shower with my daughter before she goes to bed.
She likes to play with water and we both get relaxed from the hot shower.
A daily ritual that we like.

Did any (digital) object play a role in
No

This ritual made me feel:
Relaxed

Chapter 2
Applied models

This project applied two behavior forming models that is explained in this chapter. These models acted as a guide to approach energy care and rituals in a more systematic way. In chapter 6, you see the implementation of the two behavior forming models. Here, it explains in detail how these models work with examples. And in chapter 6, the implementation of the two models is elaborated.
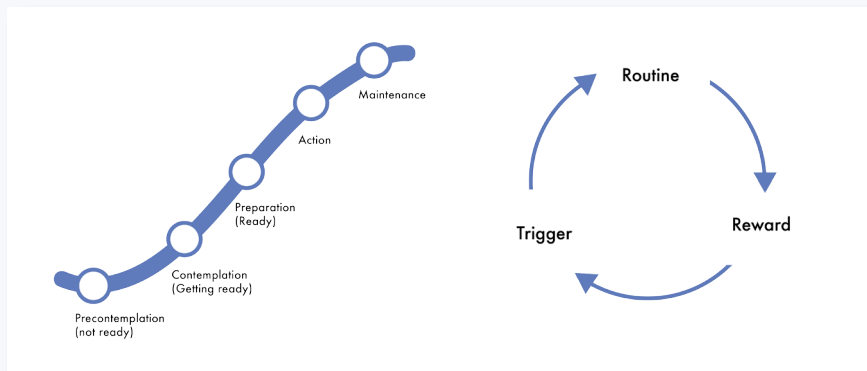
Applied models

2.1 Habit forming models

What are healthy, sustainable habit forming models that can be used??

Earlier behavior models

As mentioned in paragraph 1.3, a ritual is a kind of behavior. This chapter analyzes into different behavior models. Eventually, two behavior forming models are used. In figure 2.1, you see the Transtheoretical Model (Prochaska, J. O., & Velicer, W. F., 1997) and the Behavior Loop model (Fogg, B. J., 2009). The transtheoretical model elaborates on different stages and the people's intention in forming their behavior. On the other hand, the Behavior loop model focuses on the continuity of routine, trigger, and reward.

Figure 2.1
Left: Transtheoretical model
Right: Behavior Loop model

These two models are behavior forming models that will not be used but placed here because they relate to the applied models.

Given how fast paced we live nowadays, with quick and efficient digital tools, we become faster accustomed to the new standard, so that we seek more and more, as explained about the hedonic treadmill in figure 1.4. People, in general, are easily bored and want more and new surprise in their lives, as mentioned about the energy flow model on page 26. With this in mind, the hooked model is used as one of the habit-forming models in this project. This model is similar to the behavior loop model. The reward stage is different and turned into the variable reward system, just like how slot machines work in the casino.
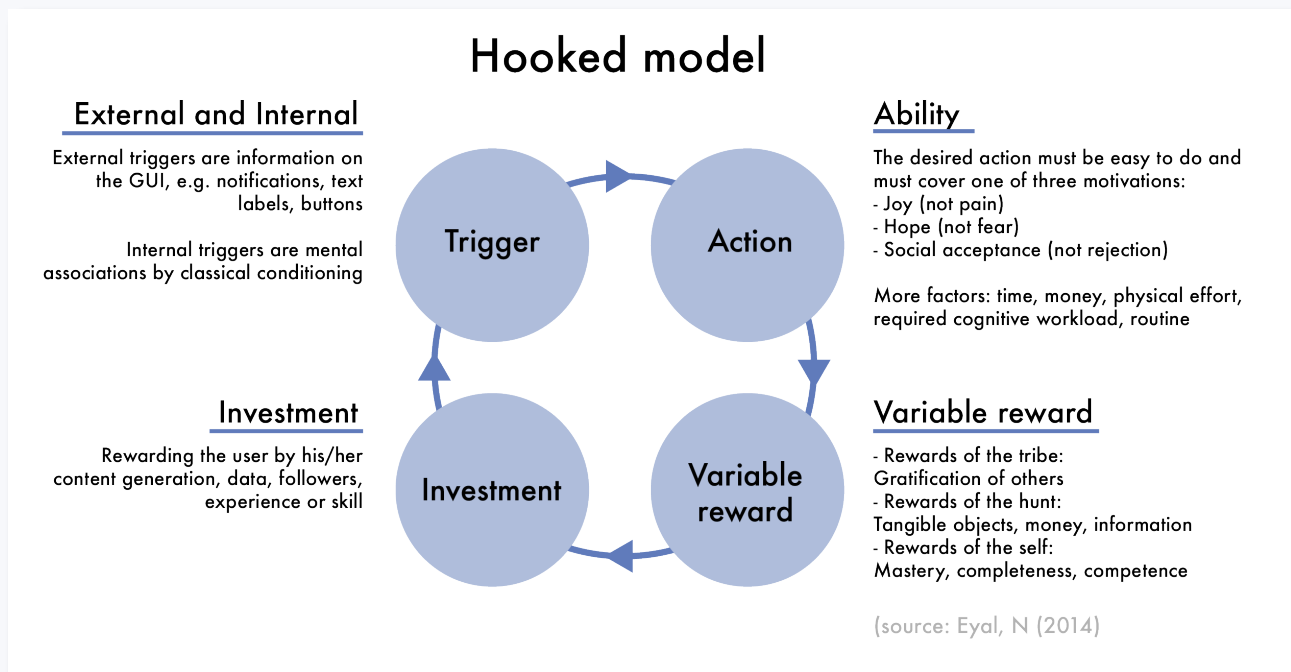
Hooked model

What is the hooked model? Why are you using this model?

Definition

The first model that is applied here in this project is called the hooked model. The hooked Model (Nir Eyal, 2014), builds habit-forming products and services, see figure 2.2. Its strength lies in using the product more often during a longer period of time, sometimes without the user realizing. The hooked model consists of four stages:

1. **Trigger**
   a. External trigger - what gets the user to the product?
   b. Internal trigger - what does the user really want?
2. **Action** - What is the simplest behavior in anticipation of reward?
3. **Variable reward** - Is the reward fulfilling, yet leaves the user wanting for more?
4. **Investment** - What is the 'bit of work' done to increase the likelihood of returning?

Figure 2.2
The Hooked model explained. (Eyal, N., 2014)

Hooked model

External and Internal

External triggers are information on the GUI, e.g. notifications, text labels, buttons

Internal triggers are mental associations by classical conditioning

Ability

The desired action must be easy to do and must cover one of three motivations:
- Joy (not pain)
- Hope (not fear)
- Social acceptance (not rejection)

More factors: time, money, physical effort, required cognitive workload, routine

Investment

Rewarding the user by his/her content generation, data, followers, experience or skill

Variable reward

- Rewards of the tribe:
Gratification of others
- Rewards of the hunt:
Tangible objects, money, information
- Rewards of the self:
Mastery, completeness, competence

(source: Eyal, N (2014)

Trigger · Action · Variable reward · Investment

Two examples of the hooked model is detailed below.
Example 1:

Facebook
1. **Trigger**
   External trigger: get notifications
   Internal trigger: feeling lonely, bored.
   "What are my friends up to?"
2. **Actions**
   Search for friends, comment, like, share, check to see if someone liked your post
3. **Variable rewards**
   Get likes, comments, friend requests, invites and get contacted by old friends
4. **Investment**
   Develop profile, friend network grows, meet people, create relationships

Example 2:
Pinterest
1. Trigger
   External trigger: get notifications and emails
   Internal trigger: fear of losing content, boredom.
   "What new inspiration can I get?"
2. **Actions**
   visit website/application, log-in, pin photos
3. **Variable rewards**
   Interesting and surprising images
4. **Investment**
   Install extension, pin, re-pin, follow, comment

WHY this model?

The hooked model mostly is applied to get users hooked to digital services, mainly social media. What if the same model can be applied to unhook boredom or unlock energiziting activities and use it to motivate tired parents?

The aesthetics of friction model

What is the model about? What does the friction mean?

Definition

The second model used in this thesis is called the aesthetics of friction model. From now on, I will call it the friction model. This theory developed by Laschke, M. et al. (2014). Is another way to suggest behavioral alternatives by presenting two choices. By choosing one of the two, friction is created, and so awareness is created during decision making, as shown in figure 2.3. Furthermore, when the user is making a decision, it does so in an understanding and even in an ironic way. The products that are from this model are called "pleasurable troublemakers". These pleasurable troublemakers know what is right for you; they also understand the moments when changing a habit seems just not possible.

Principles that a pleasurable troublemaker evokes:
Situatedness - Troublemakers are situated - They flourish on the intimate understanding and knowledge of a situation and practices at hand. They are part of a story.
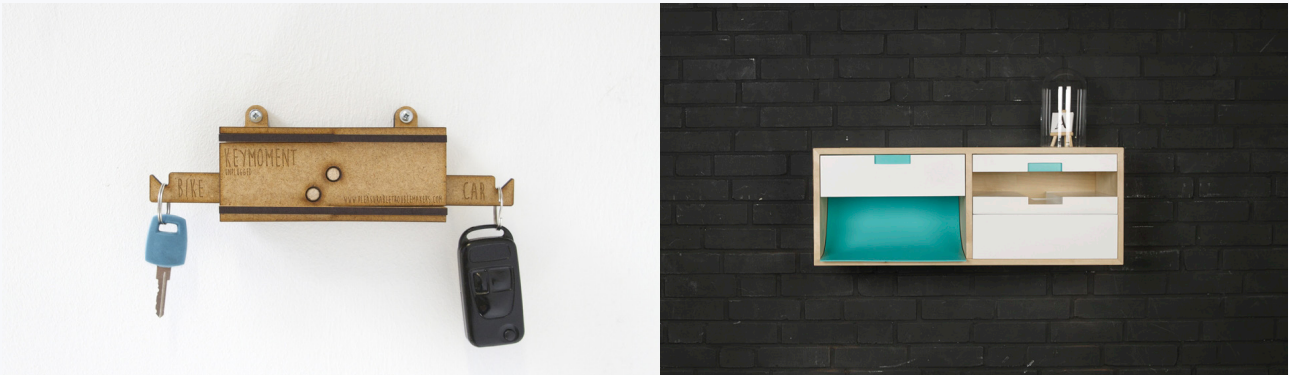**Freedom** - Troublemakers recript moments of choice - they neither simplify nor restrict.
Alternative - Troublemakers offers an alternative in line with an ideal self
Meaning-making - Trouble nudge people into meaning-making - the
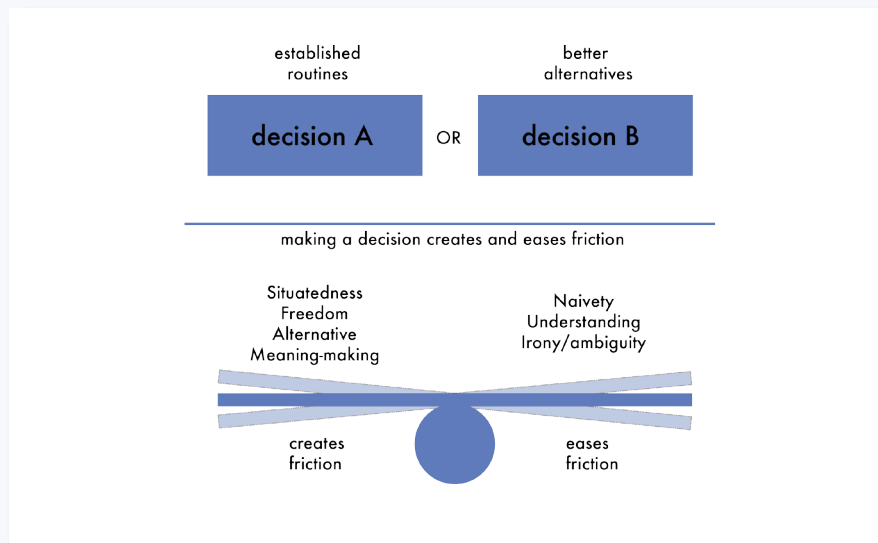
Figure 2.3
Self visualized image of the Aesthetics of friction (Laschke, M., & Hassenzahl, M., 2013)

Figure 2.4
Examples of Pleasureable Troublemakers.
Left: Keymoment (2014)
Right: Order and Chaos (2016)
Both images are retrieved from (Laschke, M., 2018)

friction creates reflection at least for those, who do not already share the goal. Each one of the principles created friction, that engages people into reflection. However, it is likely to create reactance. Therefore, three design principles are suggested to ease the friction.

Principles that eases friction are:
Naivety - Not especially smart, they can be regarded as a partner.
Understanding - Cheating of not completing is part of the concept. It embodies a better self, but allows transgressions.
Irony/Ambiguity - Rather soft and subservice than strict and explicit.

In figure 2.4 are two examples of existing troublemakers. On the left, the Keymoment is visualized. Through the keys, two choices are presented: Going by bike or going by car? Going by car is efficient and fast while going by is more sustainable and healthier. Depending on the mood of the user, weather, etc., the user can make a decision. If the user chooses the car key, the bike key drops on the ground (irony). This irony eases decision making. On the right, 'Order and Chaos' is presented. One represents order, thus keeping. The other decision represents chaos, thus throwing away. Like Key moment, by making a clear decision creates friction and consciousness of own behavior.

WHY this model?

This friction behavior model that creates friction is a good way to bring up awareness. Making decisions is part of the daily life, and with this model, it creates friction, thus mindfulness. Furthermore, mental energy explained in chapter 1, is demanded. This model will be as a guide and inspiration for the design phase.

Chapter summary

In order to change or improve the behavior of other people, it is essential for them to be mindful and be aware of their own behavior. The second part is mindfully to change and take action. Here, in this project we focus on getting the parents aware of their mindless behavior. There is potential behavior forming models in the field, in this project the hooked model and the friction model are used. In order to 'unhook' routinized behavior in a comfortable way is by the use of the variable reward system that the model consists of.

> " *Having a smartphone in the camera mode and taking pictures of herself* "

Place the emotion/ ritual sticker here!

A ritual that my child enjoy ...

Desribe the ritual as detailed as possible. What happened? What was the context? Who was involved? What object was involved? How did it make you feel? etc.
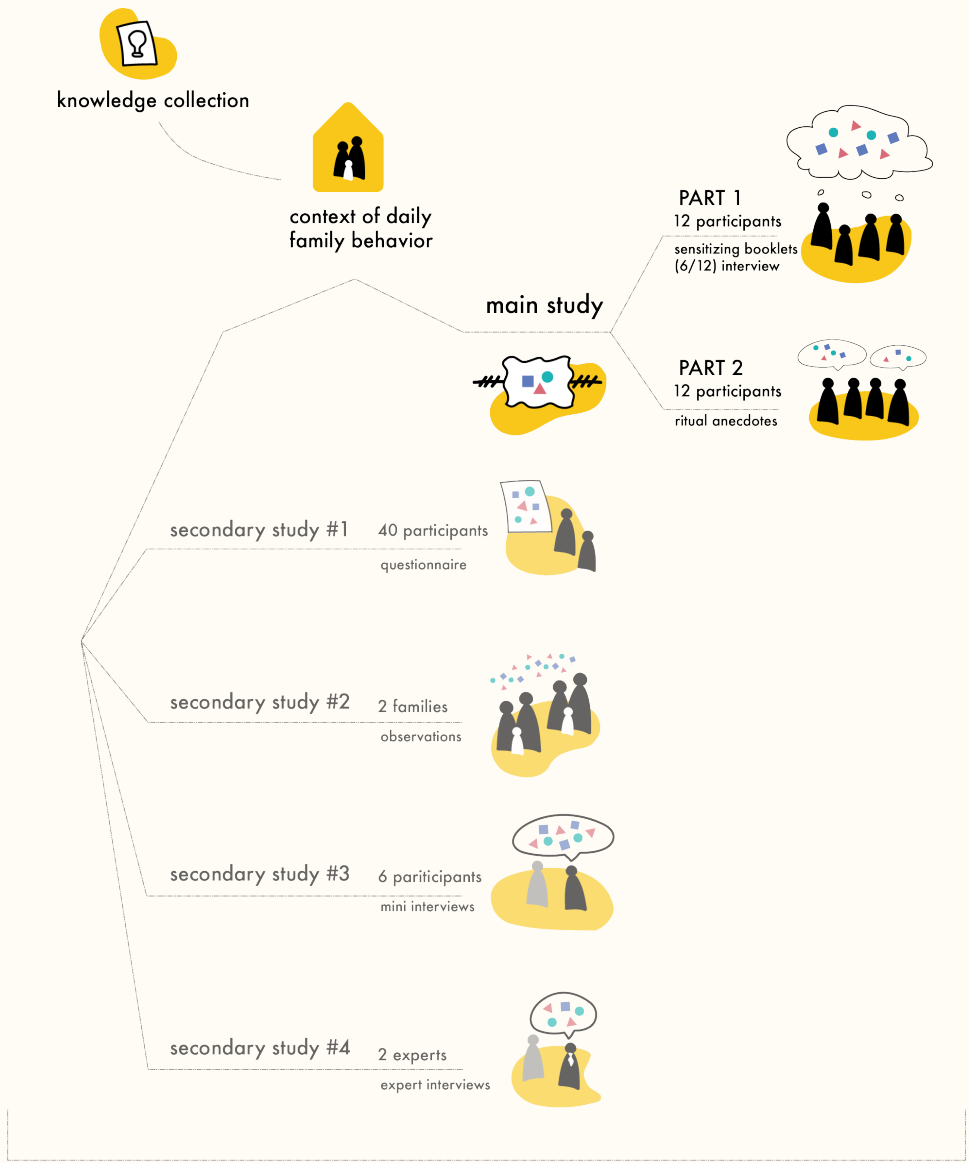
having a smartphone in camera mode and taking pictures of herself

Chapter 3
Insight generation

In this chapter, we have done user-centric research to explore the experience of the daily life of working parents. These studies aim to explore current rituals of modern parents within everyday life. We will elaborate on the main insights of the studies. Furthermore, secondary studies, such as expert interviews, mini-interviews with parents, observations, and questionnaire, have been done to collect additional information. The outcomes of this research are parents dilemmas, parent ritual touchpoints, and the ritual categorization list. This chapter ends with answering the research questions of the user study and a preliminary design goal.

knowledge collection

context of daily
family behavior

main study

PART 1
12 participants
sensitizing booklets
(6/12) interview

PART 2
12 participants
ritual anecdotes

secondary study #1   40 participants
questionnaire

secondary study #2   2 families
observations

secondary study #3   6 pariticipants
mini interviews

secondary study #4   2 experts
expert interviews

User research outcomes

parent dilemmas

ritual touchpoints

ritual
categorization list

Insight generation

What research activities has been done to answer the research questions?

The goal of this chapter is to answer the formulated research questions and find the opportunity to design for parents to be mindful about their personal energy care. This is done through different research activities. The overview shown in figure 3.1 gives an outline of the user research process. In this chapter, I include the main outcomes and insights that contributed to the design opportunity.

3.1 Research questions

Research questions

In this section, the research questions I aim to answer is detailed. These research questions are mentioned in Chapter 0 and based on the previous chapters. The research questions are as follows:

- **1. What are the concerns of working parents?**
  - What are the daily struggles they deal with?
  - What role do children play in relation to personal energy care?

- **2. What touchpoints in a day influences energy care to regain energy?**
  - What opportunity can be created from the touchpoints?

- **3. What rituals do parents perform in their daily life?**
  - What personal rituals do parents do in their daily life?
  - What family rituals do parents do in their daily life?
  - What rituals happens in the evenings?

Figure 3.1
User research process and activities overview

- **4. What (technological) activities drain or regain energy from parents?**
  - What role does a smartphone play for parents in relation to personal energy care?

Research question 1 is focused in paragraph 3.2. Research question two and four are answered in the main study: part one in paragraph 3.4, and research question three is answered in paragraph 3.5. Answering all the research questions happens at the end of the chapter.

Figure 3.2
Conflicting concerns as daily struggles that parents deal with on a daily basis. These thoughts come from observation and the main study.

3.2 Context research

What are the parents daily concerns? What daily struggles do they deal with? And what role does the children play in relation with personal energy care?

In this paragraph, I aim to find out what sleep-deprived parents struggle with daily in the current situation. The approach for this research exploration is done with observations, mini interviews with parents and interview with an expert. Both research activities provided rich insights, not only about the parents but about the children as well. While the focus of this project is about parents with young children, but insights about the children served as an inspiration for this project. By looking at the struggles parents have in daily life, opportunities can be explored and chosen to form a design opportunity.

Parents with young children as target group

From the evening observations with two different families and the mini interview with parents about routines and rituals. Several concerns that happen in daily life have been discovered. Like, their children's safety at home and at work, how good of a parent they are and the role of technology and what it does to their children. Parents did not grow up with technology but learned to use it at a later stage of their lives during growing up. While their children are digital natives (born with technology). Parents have voiced their opportunities and concerns about their children's behavior with screen devices. For example, with the smartphone and iPads taking attention from the children, so the parent can take a moment of rest, or using the devices as a tool to reward their children. Screen time does not only take the attention of children but also for the adults. These screen devices are made so that they will be used more and more. So it becomes a fixed and established routine.

Conflicting concerns

Early parenthood with small children is joyful yet challenging. In this section, I explored with the help of observations and mini interviews the concerns of parents. When two concerns are against each other, it creates a dilemma. In figure 3.2 are some of the collected parent dilemmas. Some concerns include the children against the parent themselves, while the majority of the dilemmas is about concerns within a parent themselves. Energy is depleted when people have difficulties with making decisions, as explained in chapter 1.1. These different thoughts both have different intentions. And at that moment, these intentions conflict with each other, that results in indecisiveness and mental and emotional energy depletion without the person even knowing.

> "
> *Hmmm, I don't like to say this, but I intstantly get lazy when I have my own time in the evening.*
> " - M2

> "
> *I deserve my relax time with my favorite series.*
> " - M1

> "
> *In the evening we lie on the couch and do our own stuff. Sometimes we talk, sometimes we don't.*
> " - M5

From exploring and collection the daily conflicting concerns of parents, there are two I want to elaborate on 1) I want to be mindful before sleeping / I want to see what my friends are up to, and 2) I am tired, I want to sleep / I want to watch more series. Both parent dilemmas are conflicting concerns about their self and the usage of everyday technology. Figure 3.3 illustrated some of these dilemma's with quotes of the mini interviews

Children from three to five

When a child is 3 to 5 years old, parents play a significant role in setting a good growing environment for the children (Davis-Kean, P. E., 2005). Because children mimic parents behavior, what is done at home, children will see it as 'normal' and standard. From an interview with an expert as a child pedagogue in Delft, I found some insights.

"Rituals and routines are needed for small children. Apart from doing the same action every day, which develops in a habit. Rituals provide meaning for the children." - S. Rijnenberg

According to Rijnenberg, rituals and routines are the best learned for children just before going to school and going to school. Because this transition can cause discomfort, therefore, creating comforting and meaningful rituals can help and support their daily life. When children have proper established rituals and habits, parents will have it a bit easier.

Figure 3.3
Quotes from the mini interviews regarding their evening activities with tv or smartphones. The participants are named as M(number) of mini-interviews.

Even though the ritual designed is meant to improve the personal energy care of parents. Their children will be eventually impacted and influenced by their parents behavior. So, it is essential to remember that the study will only involve parents, not children.

What does this mean for my project?

In this research exploration of the context research, I found that personal parent dilemmas regarding the screen device usage affect the behavior. That leads to mental and emotional energy depletion, explained in chapter 1.1.

Additionally, I found that children between the age of three and five are in a transition phase from home to going to school. Therefore, parents having these young children between three to five is extra energy draining for them.

3.3 Research method

What approach is used to explore and collect information? What is the set up of the main study? What are the requirements of the participants?

Context mapping

This section will explain how contextmapping studies (Sleeswijk-Visser, et al. 2005) is used to gain in-depth knowledge about the daily life of the parents. Through this user research method, explicit as well as tacit and latent needs are researched. This research method is suitable to get rich and qualitative data. It explores the 'why' behind their everyday rituals. This allows me to understand and emphasize the motivations of the parents.

General set up of user research

I used the contextmapping skills method to expose tacit and latent knowledge, which are hard to extract with other research methods (Sleeswijk Visser et al., 2005). Besides contextmapping, a questionnaire, expert interviews, mini-interviews with parents, and observations were conducted to get more insights that are fruitful to be used in the design phase, see the overview image figure 3.1.

The contextmapping research focused on the parents' rituals that they practice throughout their day. The research study was set up in two parts and with both Dutch and English language available. Part 1 contained sensitizing booklets, and Part 2 consisted of empty anecdotes that participants could fill in. The information and consent form was provided to the participants, and due to the updated GDPR, it was explicitly asked about visual material, shown in appendix A.

The set up of main study part 1 consisted of a sensitizing booklet with small assignments and trigger stickers. Parents had to fill in the booklet for five days, which was designed as a diary with assignments requiring 3-5 minutes each day. Busy schedules of parents were taken into account, and premade trigger sticker sets were made to help the parents with the assignments. The parents were stimulated to think about their current routines, their ideal daily life, challenges, conflicts, rituals, their evening activities, which had a positive impact and interactions with their child. The sensitizing booklets containing both part 1 and part 2 were sent with posting mail to the participants and back.

Main study part 2 contained empty anecdote cards that participants could fill in. There were instructions provided in both Dutch and English. The content of both parts of the main study and an overview of some anecdotes is shown in figure 3.8 and appendix A.

Then, followed by individual interviews approximately one week later in person or on the telephone due to busy schedules. Parents were asked to explain their completed studies, and they could elaborate on more ritual or routine examples.

Both part 1 and part 2 were made in a way that both Dutch and English were incorporated in it. For analyzing, the Dutch part was translated into English, to support the analysis part better.

Participants

Participants from the main study fits in the target group. The characteristics are.
- Full-time or part time working parent with young child(ren)
- Born between 1980-1999 (millennial parent)
- Willing to participate
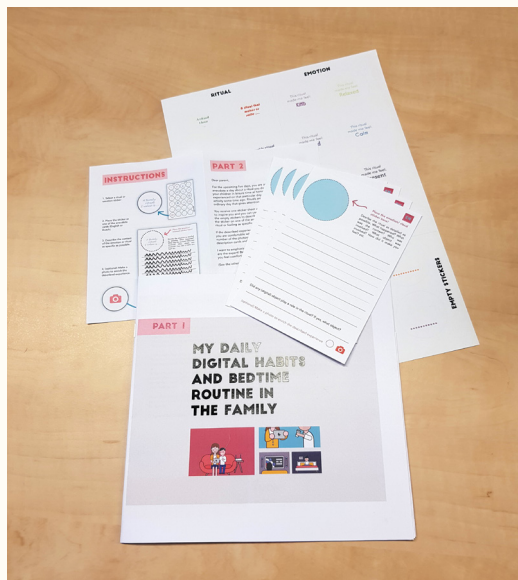
Figure 3.4
Main study part 1 and 2: sensitizing booklet and anecdote cards

3.4 Main study: Part 1

What are the touchpoints in a day that influences energy care? What activities regain and drain energy for parents? This section is dedicated to the analysis of ritual touchpoints.

Research aim

In the first part of the main study, the daily interactions of a typical working day were described by the participants. In total, twelve participants participated in this study: seven females and five males are high-educated with (part-time) jobs with child(ren) between 3-5 years old and run the household as co-parents.

The research questions of this main study: part 1 are,
- **What touchpoints in a day influences energy care to regain energy?**
  - What opportunity can be created from the touchpoints?
- **What (technological) activities drain or regain energy from parents?**
  - What role does a smartphone play for parents in relation to personal energy care?

Analysis

As a result, all twelve participants reported in their assignments about their current and ideal day, how they felt, what activities they do daily. An example of a filled-in assignment is given in figure 3.5.

For the outcome of this study, I made ritual touchpoints to see if there is an opportunity to design for rituals to improve energy care. This resulted in a parent ritual touchpoints map that is shown on the next two pages, figure 3.6. The six touchpoints are **1) getting up, 2) breakfast time, 3) lunchtime, 4) dinner time, 5) children's bedtime, and 6) parents bedtime.** Ritualized activities happen more often during these touchpoints. Participants reported that having routines and rituals gives a sense of structure and the meaning of the day. This allows parents to be more in control of their situation. In a way, it is a transition between two activities, and to make the transition with a more meaningful intention, secular rituals are there to highlight those moments. But the mindfulness it brings is eventually the intention of these rituals.

Figure 3.5
Example of an exercise in the sensitizing booklet

Figure 3.6
Parent ritual touchpoints map

Now that the ritual touchpoints are visualized, the insights that I got from this will be shortly elaborated.
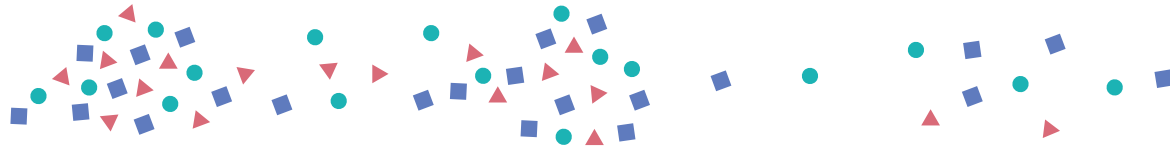
- **Getting up**
  This happens in the morning and is a good opportunity for rituals to start the day with positivity and energy.
- **Dinner time and bedtime**
  This timeframe happens in the evening and a good time for secular rituals.
- **Mornings and evening** is the time when people feel vulnerable to new and content loaded information. For example, like social media and news.
- **In the evening**
  The mental, emotional and physical energies are low. This is why people have less willpower in the evening. They are more prone to have negative thoughts, more worries and stress, which affects them before sleeping.

What does this mean for my project?

With the parent ritual touchpoints, there are three opportunities described. Which one is in the morning and two is in the evening. The ritual touchpoints map validated that what people do in the evenings are essential to get a good nights rest and get recharged for the next day.

In this project, I choose to focus on the opportunity of parents bedtime to continue with.
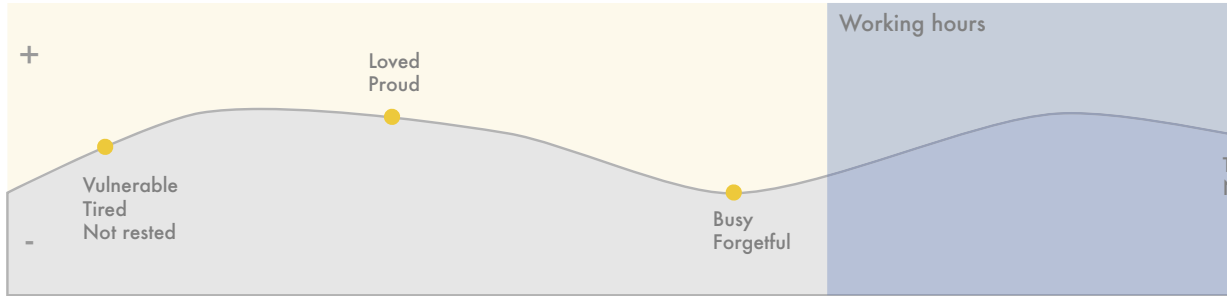
PARENTS RITUAL TOUCHPOINTS

GETTING UP
06:30-07:30

BREAKFAST TIME
07:30-08:00

LUNCH TIME
12:30-13:30

Feelings

+

Loved
Proud

Vulnerable
Tired
Not rested

Busy
Forgetful

-

Working hours

Thoughts and quotes

"Some mornings I wake up grumpy and take it out on my family. It is those times that I want to have more self-care."
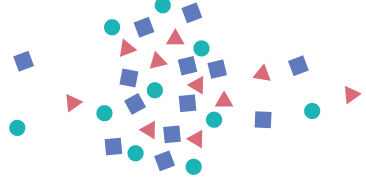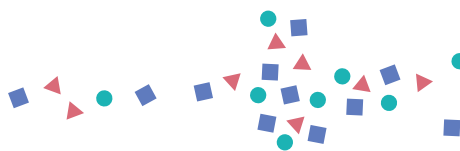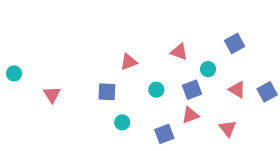
"Mornings and breakfast are so busy, everyone wants my attention."

"I gladly put on youtube for the kids when they wake up, so I have time to prepare their breakfast, before they go to school."

"I turn on the radio or music I or my children like to start the breakfast. We become more happy and sing along the songs we know."

"When it is luncht look forward talki my colleagues abo our children and a other stuff."

Opportunity
Mornings and the time during getting up is an opportunity to be aware and add in small rituals, before starting the busy day.
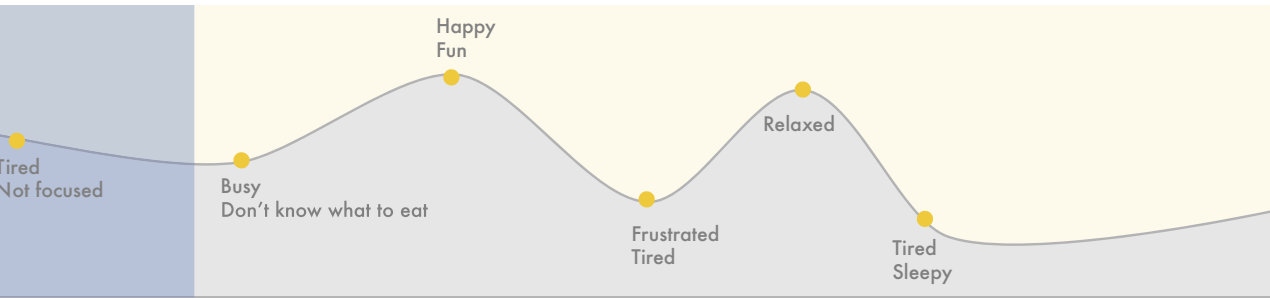
DINNER TIME
17:30-19:30

CHILDRENS BEDTIME
19:30-20:30

PARENTS BEDTIME
23:00-01:00

Happy
Fun

Relaxed

Tired
Not focused

Busy
Don't know what to eat

Frustrated
Tired

Tired
Sleepy

"...time, I ...ng to ...ut life, ...ll"

"From Mondays to Fridays, at least two days I order take out. I simply don't have time and energy to cook."

"I deliberately schedule the time after dinner to have time together with my children. It makes me smile and gives a purpose to do my best as a parent."

"A day goes by so fast. The time that I have for myself is in the evening. Then most of the time I am spending with my wife or on my smartphone."

"It is so rewarding to see my children quiet in bed. But the before bed routine just takes a lot of energy from me."

"I wish I could spend more time with myself. Sometimes I forget that. When I realize, I am too tired."
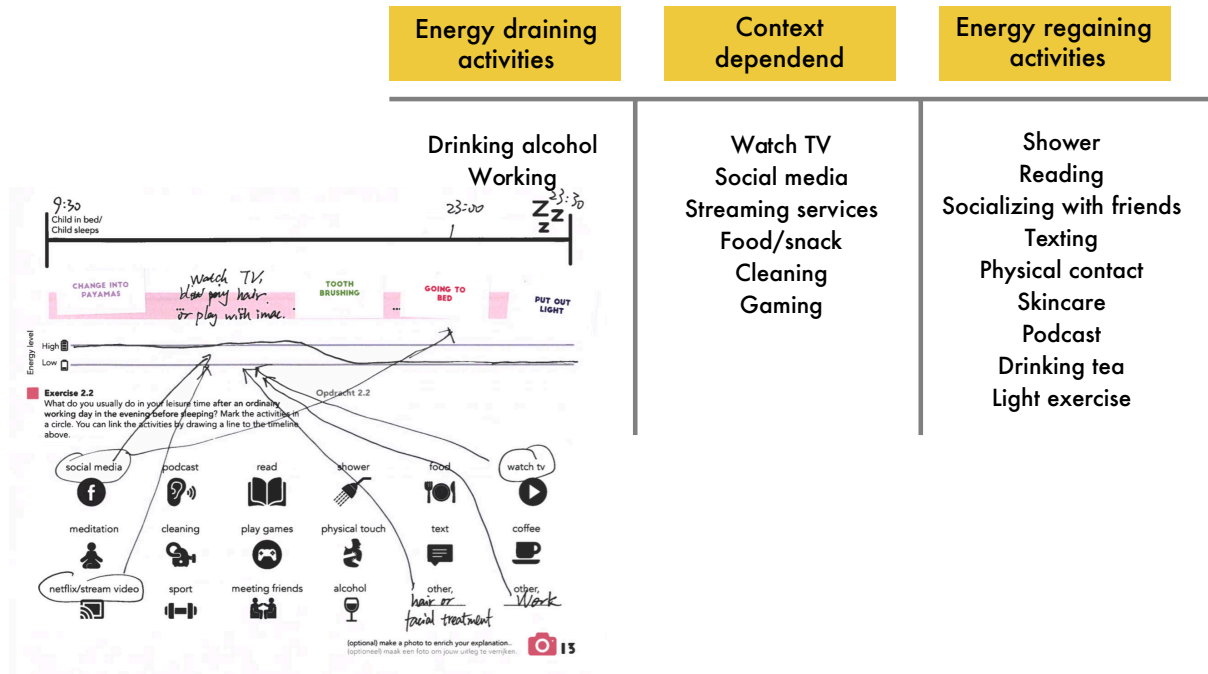
Opportunity
The before-sleeping routine of children is a good time for parents to bond with children. When they wind down, parents also become more relaxed.

Opportunity
Parents have some personal time during the evening before going to bed. This is an ideal time to be mindful and add in re-energizing activties.

Parents current evening activities

Energy draining activities	Context dependend	Energy regaining activities
Drinking alcohol	Watch TV	Shower
Working	Social media	Reading
	Streaming services	Socializing with friends
	Food/snack	Texting
	Cleaning	Physical contact
	Gaming	Skincare
		Podcast
		Drinking tea
		Light exercise

Evening activities

Figure 3.7
Example of an exercise in the sensitizing booklet

Another assignment the participants had to complete was to map out their daily evenings like shown in figure 3.7. The table in figure 3.7 shows the results of evening activities that drain and regain energy. A fascinating insight here is that four of the six evening activities that use technology is context dependent, which means that it depends on the situation of its drains or regains energy for the parents.

What does this mean for my project?

These activities that parents do in the evening can serve as an inspiration for the design phase. I now think that rituals are energizing activities done in the evening.

3.5 Main study: Part 2

What kind of rituals do parents do on the daily basis? Are the rituals personal or with the family? Are there any evening rituals?

Research aim

The purpose of this main study part 2 is to collect daily rituals done by the parents. This is done with writing on anecdote cards. The same twelve parents were asked to share at least one ritual anecdote of their daily lives for five days. Stickers with emotions and situations as triggers were used as inspiration to stimulate parents as a starting point to write the anecdote. The instructions, content of the sensitizing package, and an overview of some anecdotes are shown in appendix B. Filled-in anecdote cards are illustrated in figure 3.9.

- **What rituals do parents perform in their daily life?**
  - What personal rituals do parents do in their daily life?
  - What family rituals do parents do in their daily life?
  - What rituals do parents do in their evening?

Analysis

In total, 116 rituals are collected from the 12 participants. With the affinity diagram clustering method, I had in total four iteration rounds before arriving at the final categorization characteristics. In the first iteration, I grouped them in what kind of emotion the rituals evoked. Then, in the second iteration round, I clustered them on the touchpoints (on page 60 and 61). The third round, I clustered them on the intention of what they wanted to feel at doing the ritual, and at the final iteration, I clustered them by the sub research questions: from personal to family member rituals.
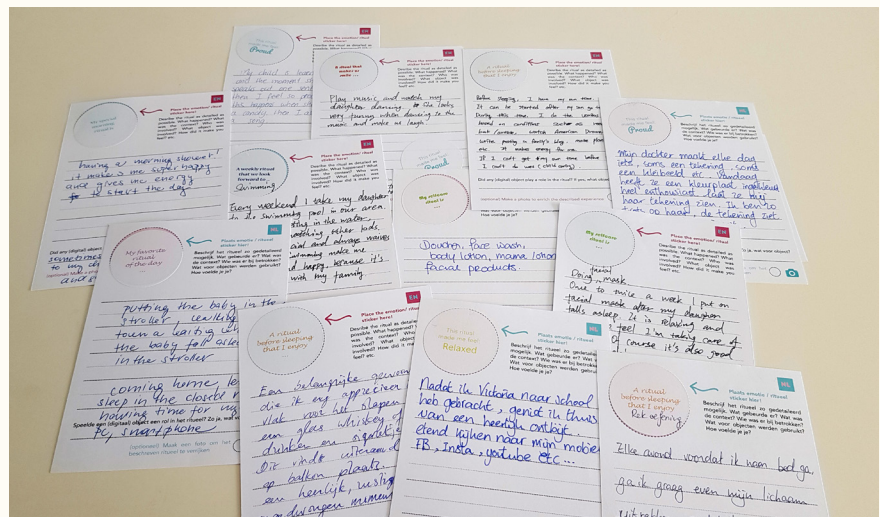

Figure 3.8
Analysing the results

Figure 3.9
Filled in ritual anecdote cards

Ritual categorization

Seek relief
- Doing pleasureable activities that gives instant gratification
- Thinking in a positive way
- Taking care of own body
- Performing relaxing activities
- Treating self for reward

Restore balance
- Eliminating stimuli before sleeping
- Needing sleep to recharge
- Energizing activities during the day

Seek control
- Seeking outer order inner calm
- Reflecting as a form of being mindful

Feeling rewarded
- Perceiving growth and skills of child

Anticipated activity
- Looking forward to a future event

Nurture relationship
- Connecting parent-child relationship
- Connecting in a distance
- Daily family bonding time
- Connecting to family and friends
- Special communication with child
- Seeking (spiritual/religious) support

The Ritual categorization list

Figure 3.10
Ritual categorization list

This is the final categorization list out of the 116 ritual anecdote cards. The list is sorted from personal to family rituals (from up to down), as illustrated in figure 3.10. The six groups are **1) Seek relief, 2) Restore balance, 3) Seek control, 4) Feeling rewarded, 5) Anticipated activity, and 6) Nurture relationships.** These ritual categorizations are the intention people aiming to achieve by doing the ritual. Mentioned in figure 1.7, it relates to the intention of the ritual from the three ritual core-elements. For more details about the iteration cluster, please see appendix B.

In figure 3.11, the ritual type framework is presented with the 116 collected rituals. This framework is also shown in figure 1.6. As you can see, the 116 rituals are mostly in the second quadrant of secular and individual rituals. The horizontal axis ranges from daily rituals to religious rituals. The vertical axis of the framework is about collective at the one end, and individual at the other end. Collective here means a number of people. While these collected rituals with more people are more family-member rituals. The unused areas are grey. The nurture relationship group is seen twice, considering there are individual prayers and prayers with child(ren).
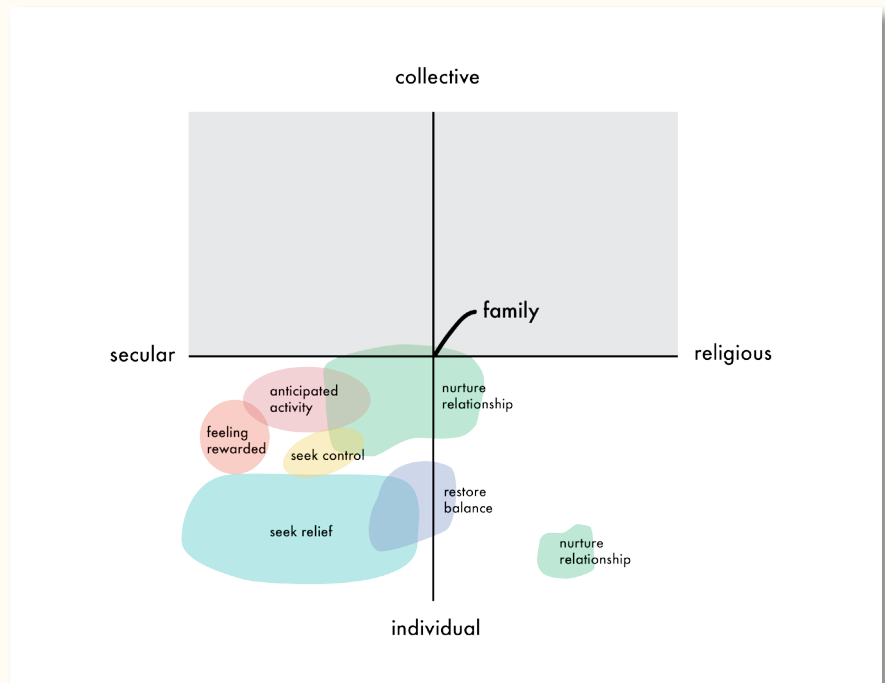
Figure 3.11
Ritual type matrix. With the differen categorizations mapped out

There are two big categories, 1) Seek relief, and 2) Nurture relationships. While seek relief are mostly of individual rituals, nurture relationships are rituals for bonding and sharing connections with other individuals, namely the spouse and children.

A ritual before sleeping that I enjoy: "Every evening before I go to bed, I like to stretch my body. So when I sleep my body doesn't feel so stiff."

"I played with my two children before they slept. Then I read a bedtime story to them. They where slowly trying to fall asleep. Then my husband came home, he gave the children kisses and hugs before they really dozed off. I felt so loved and proud of my family."

This ritual makes me feel relaxed: "Before I sleep, I listen to a podcast. The voice makes me very relaxed. This happens before bed, but also in bed."

"A ritual that my child enjoys: Every night I read a bedtime story for my daughter before she sleeps in bed. She chooses her own book for me to read. Her favorite book is 'The bossy tin soldier'. I intensely enjoy reading the story for her and she also enjoys it."

"After I put my daughter in bed, I take a warm and nice shower. Then I thouroughly do my skincare routine that I see as a ritual. When I eventually am in my clean payama in my soft bed. At that moment I feel reborn."

"Before the children really go to sleep and I put out the light in their rooms, we always have a short moment to pray to God. We do this a frequent as possible. This lets me realize to appreciate that we are blessed!"

Restore balance   Seek relief

"Before sleeping, I have my own time. It can be started after my son go to the bed. During this time, I do various things. It makes energy for me. If I can't get my own time before sleeping, I can't do well (child caring)."

Nurture relationship   Seek control

"When I feel slow or just not in sync with myself, I meditate. Sometimes without any sound. But sometimes I use Headspace to guide me. Often I feel energized again so I can take on the remaining day."

A ritual that makes me feel relaxed: "Quiet time before sleeping is my ritual. Removing all sound makes me feel relaxed. So I can sleep well."

Evening rituals

Since I am focusing on rituals for in the evening to re-energize sleep-deprived parents, I asked the participants over the phone to tell me which of the rituals were performed in the evening. Out of the 116 rituals, 44 rituals were reported to be performed in the evening and before sleeping. These rituals were mostly individual and not likely to involve children.

Figure 3.12
Evening and before sleeping ritual quotes by participants. The two colored circles indicates a ritual that uses the smartphone

The ritual anecdote cards that were completed in the evenings are mainly out of four of the six ritual categories. These are **1) Seek relief, with 21 ritual anecdotes, 2) Restore balance with six evening rituals, 3) Seek control, with two rituals and 4) Nurture relationships**, with 15 evening rituals reported. Some of the ritual cards are illustrated in figure 3.12.

At the beginning of each chapter, I added a ritual anecdote card quote from evening rituals.

What does this mean for my project?

With the ritual categorization list, six different intentions of why people are doing rituals are listed. For my project, I will mainly use the four categories to initiate the design phase to design a ritual for sleep-deprived parents and energize them.

Answering the research questions

- **What are the concerns of working parents?**
  Parents concerns are very broad and relatable. To name a few: safety and happiness of the children, financial stability, work-related concerns.

  - **What are the daily struggles they deal with?**
    The daily struggles that people deal with are interesting when it comes to conflicting concerns. Two different valued concerns are weighted against each other, and this process in the mind depletes mental and emotional energy. The daily struggle I decided to focus on is the dilemma for parents to take care of themselves and while being distracted by less healthy habits.

  - **What role do children play in relation to personal energy care?**
    Children from 3 to 5 years old are growing physically and mentally quick, and parents need even more energy to take care of their children.

- **What touchpoints in a day influences energy care to regain energy?**
  In the parent ritual touchpoints, I found that there are six touchpoints that influenced energy care with rituals. We have: 1) getting up, 2) breakfast, 3) lunch time, 4) dinner, 5) childrens bedtime and 6) parents bedtime. These touchpoints in a day influences energy care for regaining purposes.

  - **What opportunity can be created from the touchpoints?**
    From the parent ritual touchpoint map I found three opportunities that can be taken into when designing for a new ritual.

- **What rituals do parents perform in their daily life?**
  These rituals are personal and based on focus, mood, and space. It can be any activity. As long as it re-energizes them. With collecting and exploring the ritual anecdote cards, I made a ritual categorization list with six categories: 1) seek relief, 2) restore balance, 3) seek control, 4) feeling rewarded, 5) anticipated activity and 6) nurture relationship.

  - **What personal rituals do parents do in their daily life?**
    Personal rituals are individual rituals that the effect is mainly seen by the person doing the ritual itself. Mainly from the categories seek relief, restore balance, and seek control.

  - **What family rituals do parents do in their daily life?**
    Family rituals mean that the ritual affects more than one person. Family rituals mainly come from the ritual categorization feeling rewarded, anticipated activity, and nurture relationship.

- **What rituals do parents do in the evening?**
  Parents in the evening perform rituals to relax and to energize themselves. These rituals mainly fit into four categories of the six, which are: seek control, restore balance, seek control, and nurture relationships.

- **What (technological) activities drain or regain energy for parents?**
  Activities that use mental and emotional energy excessively will drain energy. Examples would be: working, doing administrative work, and drinking alcohol. Activities that re-energizes people are activities like taking showers, reading books, doing hobbies, and walking outside. There is a group of evening activities that either drain or regain energy. Most of them are technological related, like watching tv or using social media. In my opinion, if these activities and done too much, it will become something like a fixed routine.

- **What role does a smartphone play for parents in relation to personal energy care?**
  Smartphones are indispensable for parents in daily life. They are a tool to help parents in a lot of ways, from navigation to ask everything on the internet.

Conclusion

With this user research, I explored and collected a lot of insights about rituals and personal energy care. The insights turned into three outcomes: parents dilemmas, parent ritual touchpoints, and ritual categorization list. With parent dilemma, I know that parents are struggling with daily concerns and that making choices can deplete their energy, even more, when small children are involved — also their dilemma regarding using devices in the evenings. The outcome of the parent ritual touchpoints resulted in three opportunities. I decided to choose for the evening time, where parents have more personal time to do rituals. This opportunity is also selected because it has a more profound effect on their sleep. The third outcome is the ritual categorization list. For evening rituals, the four categories are essential to start the design ideation with.

All these outcomes and insights about rituals and personal energy care will be taken into account, to design a new ritual fitting for re-energizing parents for in the evening. This resulted in the following preliminary design goal:

How to let parents with young children take care of their energy in the evening?

> **"**
> *Once to twice a week I put on a facial mask after my daughter falls asleep. It is relaxing and make me feel I'm taking care of myself. Of course it's also good for my skin.*
> **"**

My selfcare ritual is
...

EN

Place the emotion/ ritual sticker here!

Describe the ritual as detailed as possible. What happened? What was the context? Who was involved? What object was involved? How did it make you feel? etc.

Doing facial mask.
Once to twice a week I put on facial mask after my daughter falls asleep. It is relaxing and make me feel I'm taking care of myself. Of course it's also good for my skin.

Chapter 4
Defining the brief

This chapter defines the design brief from the user research insights and the knowledge collection to design activities. We start with the definition of the final design goal. Then the current situation is detailed in this chapter. Finally, we end this chapter with the desired interactions and the design criteria that sets the focus for the creation and ideation phase.

I want to …

create a modern secular ritual for working parents[1] with young children[2] (3-5 years) to manage[1] their personal energy care[2] at home in the evening.

WHAT?

A secular ritual can provide mindfulness in daily life, to improve wellbeing and self-improvement. A ritual is a recurring and mindful habit, its focus, mood, and space can be adjusted. A modern secular ritual means an everyday ritual that is embodied by modern means. With growing digital attention and distractions, a modern secular ritual can provide a solution from a different perspective.
(from chapter 0 and 1)

WHO? 1

Nowadays, modern, working parents is one group of people that do not get enough rest. This could be due to work, bad sleeping habits, children, etc. Balancing work-family-life leaves too little time for the 'self.' In this project, I want to highlight their daily struggles and propose a design opportunity to support their attention to their wellbeing. They are the role model for their children, and therefore, the well-rested parents raise well-rested children. (from chapter 1)

WHO? 2

Young children from 3-5 years old are discovering the world from their perspectives. They are constantly learning, moving, and growing. To oversee this process, it requires attention and energy from parents. Children between this age are the best to introduce good routines and rituals. (from chapter 3)

Defining the brief

4.1 Design brief

What is the design goal of this project?

Design opportunity

In the previous chapter, I choose the opportunity to design for tired parents for re-energizing their evenings with mindful and secular rituals.

Design goal (Final)

On the left page, the final design goal is presented. The previous chapter ended with a preliminary design goal and during the whole design phase, I adjusted the design goal to the one below, for the overview, go to figure 5.1. Essential parts of the final design goal is detailed in the text boxes below. This information is summarized from their respective chapters and form the foundation of this final design goal.

HOW? 1

Rituals create consciousness. However, to think that a ritual works and to do the ritual is a different case. Every day, a parent can feel different, depending on their situation, time, and mood. So managing is the next step after getting aware of their behavior.
(from chapter 1 and 2)

HOW? 2

People, in general, are required to be vital, proactive, and productive during working hours. Most of their energy is gone at the end of the day, above all if you are a parent and have to take care of a child. In the long run, this causes built-up stress, instant fatigue, and frustration. To thrive in the work-life environment, managing personal energy care is essential.
(from chapter 0)

WHEN&WHERE?

There is one time of the day where a parent can relax and regain their personal energy: the evening. The evenings and before bed rituals can prepare them for sleep, so to restore their energy (see it as the same as recharging batteries) and be fit for the next day. In most of the cases, parents are in their own homes during the evening.
(from chapter 0 and 3)

Current interactions

three reasons are identified why it could
be that parents are not mindful of their
personal energy care in the evening.

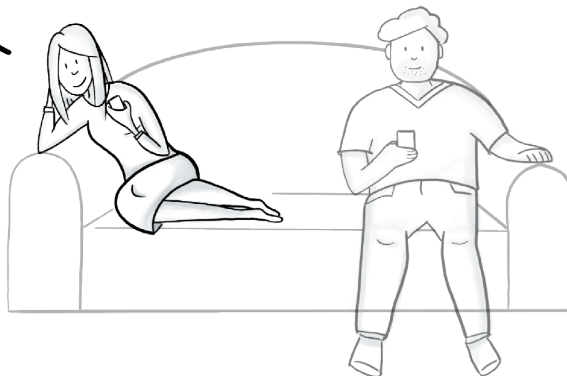This is Emma after putting the
children in bed.

Reason 1

not mindful
tired, exhausted - energy depletion

Reason 2

not mindful
do not see that it is meaningful
at the moment

Reason 3

not mindful, boredom, distraction
seeking leisure and entertainment
on the smartphones and tv shows

Figure 4.1
The current situation in the evening at
home

4.3 Interactions

Current interactions

Starting in chapter 1, I started looking for the current interaction and the context to focus on. In chapter 4, during the context study. I found the current parent dilemmas for parents in their evenings and how they currently felt about that. Figure 4.1 illustrated the process.

To understand and empathize with these parents, I detail their daily activities up until what figure 4,1 visualizes. Emma is the parent in the story.

...Emma works part-time at a elderly facility and takes care of the elderly by making food and cleaning their rooms. Emma has two children and a husband. One is 4 years old and the younger one is 2 years old. After work around 17:30, she goes to the daycare and school to pick up the children. Her husband Jamie works till 18:00. Then after Emma picked up her children, she drives home. The moment they got into the house, the children play and scream. Emma decides to cook immediately, because she wanted the children to eat. During cooking, the husband comes home and plays with the children for a bit. Then it is dinner time. Fast forwarding to after dinner, Emma puts the dishes in the dishwasher and cleans the kitchen. Then at 20:30, she brings her two children to bed and tells a short bedtime story...

In total, I found three reasons why parents behavior is like this.

Reason 1 (chapter 1, chapter 3.2)
Parents are at the end of the day so tired and exhausted that they don't notice how tired they are. They can react with anger and frustration if they do not rest.

Reason 2 (chapter 3.2)
The second reason why parents act like this in the evening is that they are not mindful and do not see that improving themselves at the moment.

Reason 3 (chapter 1, chapter 3.2)
The third reason is that they are currently not in the state of flow, as described in chapter 1,1 and figure 1.1. Therefore, they might feel bored without even knowing it. They seek distraction and entertainment leisure on their smartphones and tv screens. As illustrated in figure 4.1.

Intended interactions

The intended interaction
for the parents to get mindful
of their actions in the evening
activities.

Choice 1

aware of energy level,
yet chooses to use
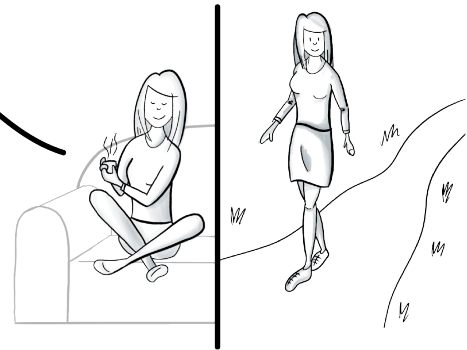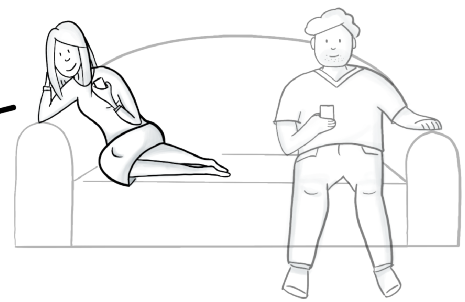smartphone/ tv and
not feel bad a bout it.

This is Emma
after putting the
children in bed.

Emma realises she is exhausted
and thinks of what to do in the
evening to energize herself
for the next day.

Choice 2

aware of energy level,
she decides to do activities
that energizes her in the evening.

Figure 4.2
Intended and ideal interactions of parents
in the evening at home

Figure 4.3
Visual from mindlessness to mindfulness
and doing the ritual

Intended interactions
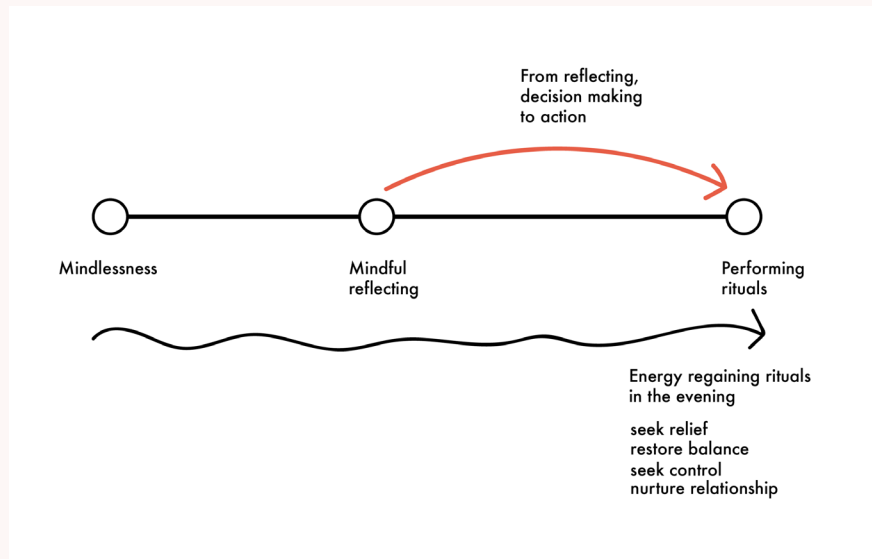
Here, in this situation. I describe my intended interaction parents can have, still with the same context story on page 77.

First, I want to explain that mindfulness and being in the moment to focus on the now is not achieved in one or two days. Just like any other habits and behavior, it takes time to cultivate and change the lifestyle. Figure 4.3 illustrates briefly that during the current situation, they are at 'mindlessness'. With the new ritual I intend to design, I want them to be at 'mindful reflecting' and even doing the rituals in the evening. These rituals are energizing them to prepare them for the next day.

Now I will explain the intended interactions, illustrated in figure 4.2. In chapter 2, I talked about the friction model by presenting two choices. Choosing either one will let the person reflect. That moment is called friction because you are questioning yourself to choose between something.

Choice 1
The figure 4.2 and choosing to be aware, but still able to relax and enjoy digital screens without feeling bad or guilty, is choice 1, Or rather, one of the parents intended interaction I want to achieve.

Choice 2
The other choice is that Emma is being aware of her situation, but also motivated to perform rituals. This would be the ideal interaction I wanted to achieve in my ritual design.

The intended interaction should be like...

"...looking in a telescope with a view."

Desired interactions

With the intended scenario, and the interaction scenario on the left in figure 4.4. I found four desired interactions that are the criteria for my design. While intended interactions are showing how I intend to solve the problem, and the desired interactions are rephrased in the perspective of the parent.

Personal
Rituals are different and special for every individual. There are some categorizations in which these personal rituals fit in. I want the desired interaction to be personal. So that people feel that the ritual is made for them.

Surprise
While rituals are a magical and meaningful highlight in your daily life, when you do not perform the ritual mindfully with focus, the chance is there that it becomes part of a routine. To avoid that, I want the user to see a ritual straightforward from a different viewpoint so that it creates a bit of a surprise for them.

Mindful
When a ritual is performed mindfully, it makes them feel better. The user is aware of the current situation and their mood, so they can decide to do a ritual to energize themselves or not. It is up to them.

Focused
With a clear and intended focus, a ritual is expected to restore energy to make the people performing it, feel better. For the desired interaction, I want the users to feel mindful before they perform a ritual.

Figure 4.4
Interaction vision; Image of the desired interactions

Evening ritual

"

Every evening before I go to bed, I like to stretch my body, so when I sleep it is more flexible.
"

A ritual before sleeping that I enjoy
Rek oefening

NL Plaats emotie / ritueel sticker hier!
Beschrijf het ritueel zo gedetailleerd mogelijk. Wat gebeurde er? Wat was de context? Wie was er bij betrokken? Wat voor objecten werden gebruikt? Hoe voelde je je?

Elke avond voordat ik naar bed ga, ga ik graag even mijn lichaam uitrekken, zodat ik soepele word als ik slaap...
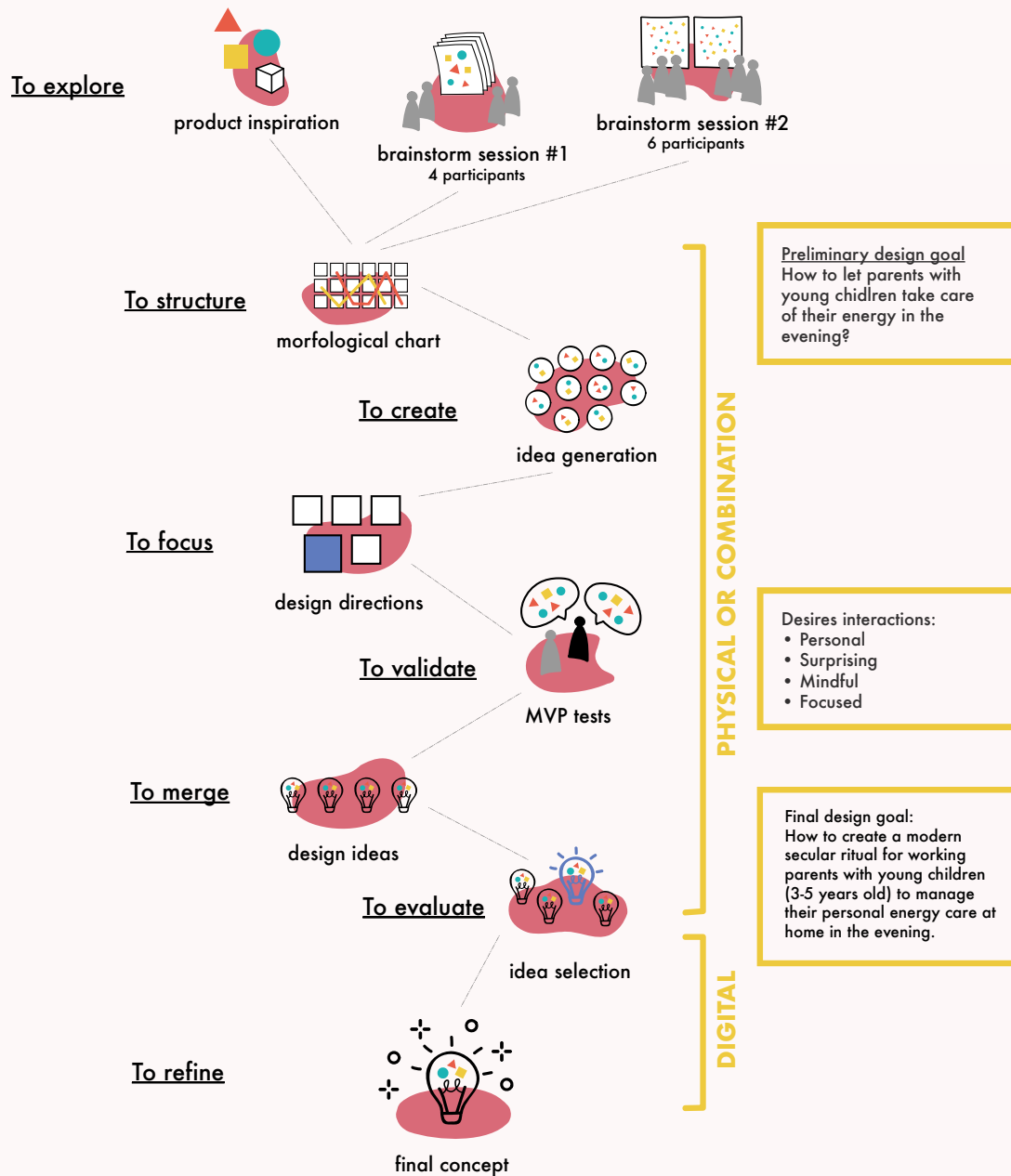
Chapter 5
Create and Iterate

In this create and iterate chapter, the process of the design phase is elaborated after defining the design brief. This process is done with multiple iterations. However, for the purpose it to follow the process is presented chronologically. In reality, it involved several rounds of ideation. This chapter ends with the selected design concept.

To explore

product inspiration

brainstorm session #1
4 participants

brainstorm session #2
6 participants

To structure

morfological chart

To create

idea generation

To focus

design directions

To validate

MVP tests

To merge

design ideas

To evaluate

idea selection

To refine

final concept

PHYSICAL OR COMBINATION

DIGITAL

Preliminary design goal
How to let parents with
young chidlren take care
of their energy in the
evening?

Desires interactions:
• Personal
• Surprising
• Mindful
• Focused

Final design goal:
How to create a modern
secular ritual for working
parents with young children
(3-5 years old) to manage
their personal energy care at
home in the evening.

Figure 5.1
Illustrated creation and iteration process
during the project

Creation and ideation

How to achieve the design goal to let parents manage their personal energy care? What design activities are done to come up with one meaningful yet functional design?

5.1 Design exploration

In this chapter, I will highlight the main decisions that led to my final concept. In reality, a creation and ideation phase is not chronological, that was also the case for this project. Figure 5.1 and 5.2 shows visually how the process went.

Process overview

When thinking to design for a modern secular ritual, my first thought goes to design a tangible product with elements of technology in it. I thought that would make it a modern ritual like a product service combination system. Rituals are about the actions that make it personal with an intention for the person that is doing it. As long as the design concept is the right instrument to achieve personal energy care. Thus, during one of the last ideation iterations, I decided to consider digital solutions as a final concept. This is also shown in figure 5.1 in the latest part.

Figure 5.2
My thought process of the design phase
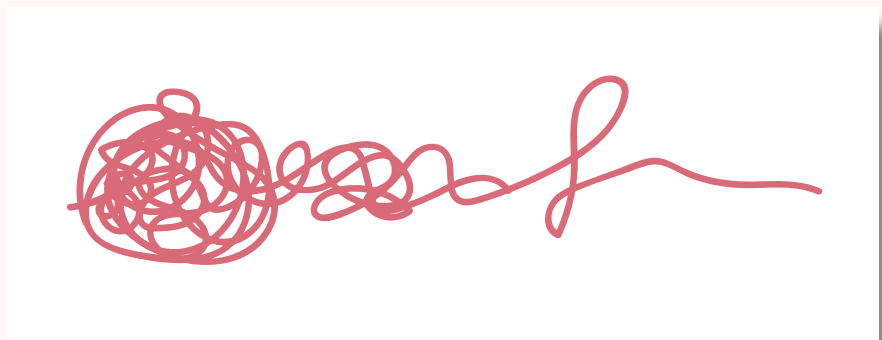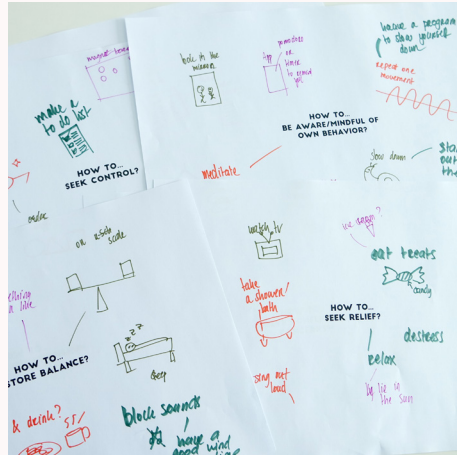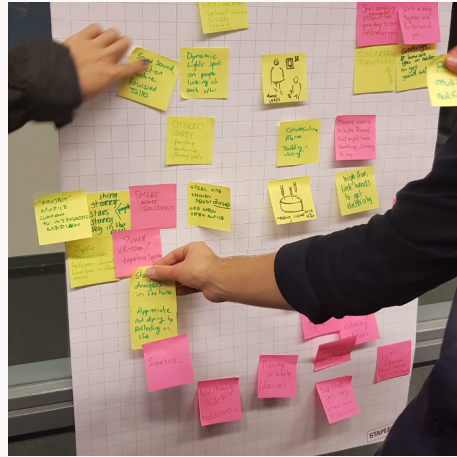
5.2 Create

How to's

Participants brainstorm #1

P1	Master DFI student
P2	Master DFI student
P3	Master DFI student
P4	Master DFI student

Participants brainstorm #2

P1	Master DFI student
P2	Master DFI student
P3	Master IPD student
P4	Master IPD student
P5	Master DFI student
P6	Master IPD student

Figure 5.3
Visual process of the brainstorm activities
to genereture ideas

To kick start the idea generation, two brainstorm sessions with fellow designers were organized. See figure 5.3 for the process of both brainstorms.

Brainstorm session #1
The first brainstorm session was with How to's. In total, seven how to's were circulated amongst the four design students from the Master Design for Interaction. With the idea generating brainstorm, it was essential that people were open about their ideas.

Brainstorm session #2
The second brainstorm was with design students from both the Master Design for Interaction and Integrated Product Design. Using the creative facilitation method, ideas were generated. By proposing the design goal, the general concepts were clustered and led to few of the design directions presented later in this chapter. After this brainstorm session, it became clear what design directions I would not like to continue.

Product inspiration
In figure 5.1, you can see that one of the activities is to collect inspiration from existing products that were beneficial for my design ideations. Eventually, I was intrigued by digital tools, like Tinder and Fabulous. Both are digital tools that have tons of users. It is because both use behavior forming models. Especially Tinder, the thought model behind this application is the hooked model. For more information about other products, please see appendix C.

Morfological chart by How-To's

Concept idea 1　　Concept idea 2　　Concept idea 3　　Concept idea 4

HOW TO...

... be mindful	... motivate?	... visualize personal energy 1/2	... visualize personal energy 2/2	... get in flow	... make someone do something often?	... seek relief	... seek control	... nurture relationship	... restore balance	... place it
meditate	reward system	battery	scale	solving easy problems	attention	seek distraction	planning	bedtime story	sleep	wearable
slow down	punishment system	colors	sound	drawing	pair with routine	think positively	reflecting	make photos	nap	pillow
one movement	triggers	with metrics	vibration	games	listen attentively	seek refreshment	tyding	greetings	coffee or tea	lamp
monotasking	instant gratification	light	bar	work you love	shine a spotlight	seek relaxation	control environment	help with tasks	quiet time	sofa
storytelling		time	notifications	pers. valued activity	easy tasks	self reward	to do list		energizing activities	smartphone
sing song		words	touch	daydream	If... finishing sentences					watch
N/A do nothing		smell	heat		see result immediately					space

Morfological chart

A morfological chart is created with the two brainstorm sessions. It provides a structure to create and explore ideas. Since every 'how to' solves part of the problem, I mainly created my ideas (Around 50 ideas) in the first iteration round with this morfological chart in figure 5.4. The four colored lines illustrated the possibilities of this morfological chart and these four concept ideas are further detailed on page 90 and 91.

What does it mean for my project?

I realized that by generating ideas using the morfological chart that only part of the design goal was achieved. With that, I adjusted the design goal to be less broad. Around this period of the design phase, I tried multiple iterations with only products, product-service combinations, and at last digital concepts.

Design directions

After clustering all the concept ideas created and explored from the morfological chart, there are seven design directions created. Not all ideas belonged in one direction, but even two directions.

1. Sensory
This design direction is focused on the human sensory system (look, feel, smell, taste, and hear). By mindfully bringing attention to one of the five senses, people are more relaxed and grounded. The purpose of this direction is to let users interact with the design to get aware of themselves and rest in the evening.

2. Time
This design direction is focused on visualizing the time aspect. When time is visualized, people will focus on the movement. This direction is also fascinating because, in the current situation, people are using the time management concept instead of energy management concept in the working environment.

3. Structuring
Inspired by the morfological chart, this design direction is about finding a way to organize or clean up can be rewarding and uplifting. By clearing out clutter, you have a sense of control, and that makes you mindful. When you are clearing clutter, the sense of accomplishment during the evening is high.

4. Compassion
This direction is about self-compassion. People can unconsciously talk bad about themselves without noticing. This design direction explores compassion for people. After a day of working hard, self-compassion is needed in the evening to recharge.

5. Energy
As mentioned in chapter 1, we have three types of energies. This design direction explores the different energy types and what ideas there are if you focus on improving the three kinds of energies or try to balance the energies in the evening.

6. Playful
With this design direction, there are several ideas about making the intended user more playful. Parents can be playful, especially when they are parents. This design direction zooms in the playful aspect and balances out the seriousness of the role of a parent.

7. Storytelling

This design direction is based on bedtime stories. When adults were children, often their parents would read bedtime stories to them. As this interaction is nostalgic, parents can use this activity as a ritual to make them more energized and relaxed in the evening.

Figure 5.5
Selecting design directions visualized
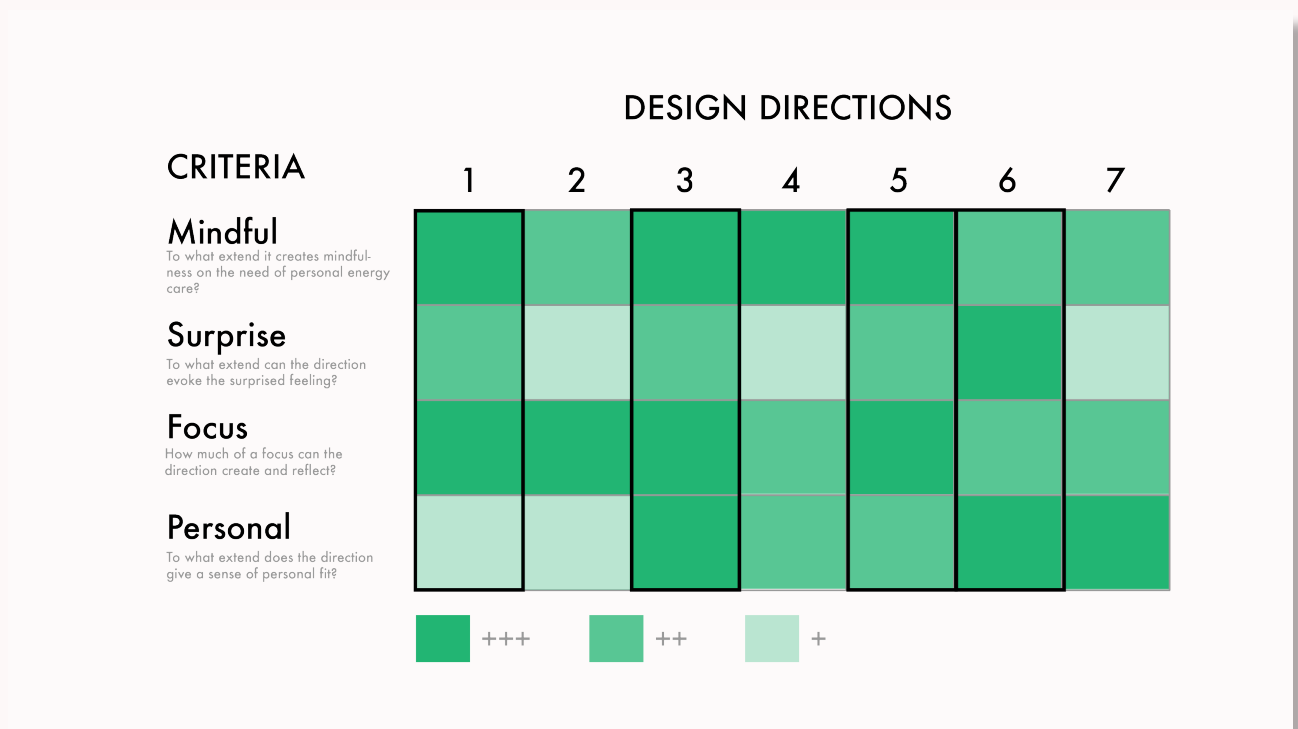
What does it mean for my project?

For selecting which design directions and its ideas were suitable for the design goal, I used the desired interactions, described and explained in chapter 4, as the criteria to select the design directions. The most promising ones are 1) Sensory, 3) Structuring, 5) Energy, and 6) Playful. The insight that digital solutions can create a modern secular ritual became apparent in this phase.

5.3 Ideation

Four concept ideas

Thanks to the How-to's, and inspiration from brainstorm and the web, many ideas were thought of with the design goal as the focus. Four concepts will be elaborated with what, how, and why.

Idea 1: Pulsing light

WHAT?
A pulsing light that can be placed in the living room. The light beam can be projected on the ceiling or wall, that instantly turns the ambiance of the living room into different moods.

HOW does it work?
Within the product, there is a sensor embedded. The moment the local pulsating light senses movement in the living room in the evening. The pulsating light has different modes.

WHY?
Regulated and small repetitive movement can make you feel relaxed. Just like breathing exercises, it calms your mind and body. The focus is shifted towards looking and mimicking the pulsating light.
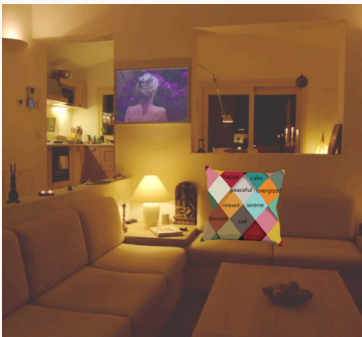
Figure 5.6
Local pulsating light

Idea 2: Mood pillow

WHAT?
Mood pillow is an interactive pillow with different buttons where you can push on. The product is placed on the couch in the living room. With a sensor, it senses movement that the intended users are sitting on the coach. It gives a vibration signal as an external trigger to remind users about their current state of mood.

HOW does it work?
The user's input is to press a certain mood that they are currently in. The mood ranges from sad, relaxed, joy, rested to calm, etc. By pressing and acknowledging their current mood, they can do something about it.

WHY?
When parents are tired, they spend significant time on comfortable places, such as couches or soft chairs. It is cozy, and most of the time, they don't want to get up. The mood cushion acts as a reminder about the users' current state. So they can act accordingly with what they want.

Figure 5.7
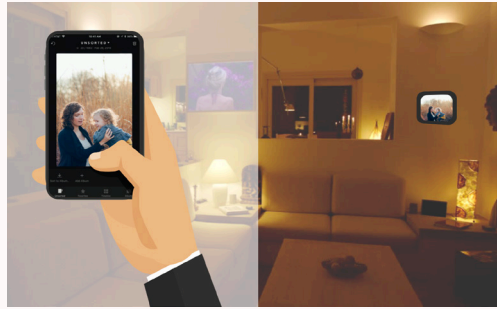Mood pillow

Idea 3: Digital photo organizer

Figure 5.8
Digital photo organizer

WHAT?
An application to sort photos together with a connected digital photo frame. Often adults do not sort their taken pictures enough. Children grow up so fast, and the parents want to record and preserve the time they were in. However, smartphone storage is not infinite. So with this application design, parents can relive their moments with the photos. They can 'cast' the photo album to the connected digital photo frame so that the rest of the family can enjoy too.

HOW does it work?
When the user opens the application, he can easily save or delete the photos that he has made before. With moving up, the photo is removed, with swiping down, the photo is saved to an album.

WHY?
Organizing clutter, thus also includes digital clutter, can make certain people feel calm and organized. The content of the photos is personalized, so the internal motivation to organize photos can already be an energizing evening ritual to energize them.

Idea 4: Energy reminders

WHAT?
A set of three objects for on the salon table, or on a shelf. As long as the set is visible. Each interactive decoration represents a type of energy, as found in chapter 2. (physical, mental, emotional energy)

HOW does it work?
The plate where the three objects rest on serves two functions, one is to charge the individual objects, and the other function is that it has light underneath it. So when it is evening the lights will give a subtle trigger to remind the intended user of their energy care.

Physical energy object: A malleable stress ball that can be used when the user wants to relieve stress. Mental energy object: this object has a breathing input. The moment you want to practice breathing, you breather on the object, then the color will grow more saturated. Emotional energy object: for the emotional energy, this has namely to do with decision making and personal values.
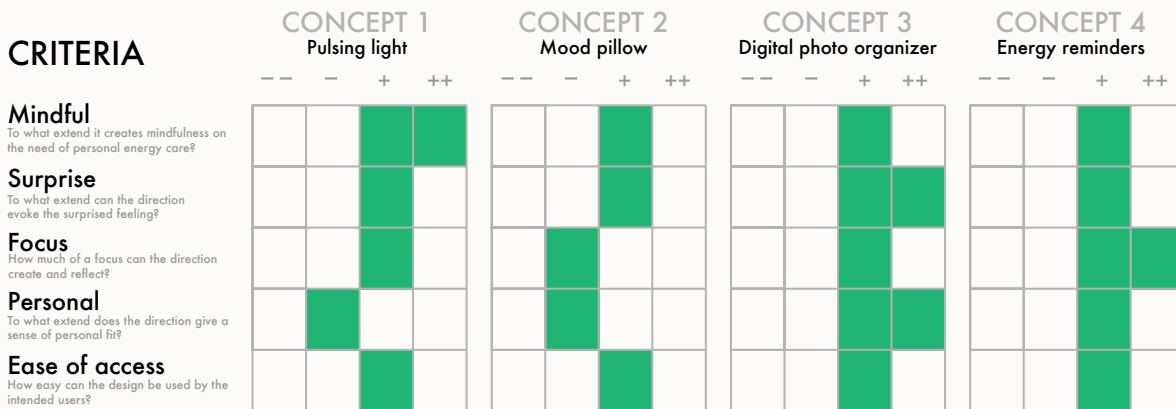

Figure 5.9
Energy reminders

WHY?
The set that displays three different energy types is to create awareness of the personal energy care in the evening to energize them before sleeping. To be aware of their energy care, that can be done through interacting with the three separated objects.

Selecting the concept

I discussed the four concepts with two parents and one design practitioner to select the most promising one. I showed them the visuals and went through the scenario of each concept to explain the purpose behind each concept. Based on their opinions, the Harris profile selection illustrated in figure 5.10 and my design intuition, concept three is the chosen one. The design criteria used for selecting with the Harris profile come from the desired interactions derived from the interaction vision in Chapter 4. I added the criteria of ease of access because I found out that during the discussion with parents with the concepts that ease of access was essential to them.

Figure 5.10
Selection of the concepts illustrated

CRITERIA

Criteria	Concept 1 — Pulsing light				Concept 2 — Mood pillow				Concept 3 — Digital photo organizer				Concept 4 — Energy reminders			
	− −	−	+	+ +	− −	−	+	+ +	− −	−	+	+ +	− −	−	+	+ +
Mindful — To what extend it creates mindfulness on the need of personal energy care?			✓	✓			✓				✓				✓	
Surprise — To what extend can the direction evoke the surprised feeling?			✓				✓					✓			✓	
Focus — How much of a focus can the direction create and reflect?			✓			✓					✓					✓
Personal — To what extend does the direction give a sense of personal fit?		✓				✓					✓					
Ease of access — How easy can the design be used by the intended users?			✓				✓				✓				✓	

Concept three fits the design goal and the design criteria as intended. Mindfulness is created by selecting and deleting photos. Beside meaningful, it is functional too. A surprising feeling comes from how easy and efficient it is to organize digital photos and even feeling a sense of accomplishment. Additionally, to be able to see the selected photos in the digital photo frame. The sense of focus is there because the intended user looks at the picture before deciding. Concept three is also personal because each photo is unique and meaningful for them. If not, they can delete it.

The discussion with the parents was fruitful. For example, concept four was about three small objects lying on the table. But with curious, small children roaming in the house. The products could endanger the safety of the children and vice versa. The design practitioner found concept three fruitful and fitting on the design goal.

Final concept: Ritual suggestion design concept

Even though concept three fitted the design goal, I still was hesitant if the concept could manage personal energy care as I wanted in my design. So with one last design iteration and discussing with fellow design students, I decided to use the intention behind concept three and make it into a ritual suggestion application for sleep-deprived parents to energize them in the evening with rituals.

The reasoning behind this is because, firstly organizing photos is not the highest priority and it is performing just one ritual. Fathers do not particularly like to organize photos on their phones. Unconsciously, I was finding a way for tired parents to find different energizing activities to do. So they are mindful and in control of their activities in the evening as I envisioned the intended interaction in Chapter 4.

Secondly, behavior formation is difficult. The users will eventually get tired of the photo sorting. The desired interactions 'surprise' and 'personal' will be fitting even more in combination with the hooked and friction model, explained in Chapter 2. With behavior, it needs a long term perspective, so if the intended users quit using concept three already in a short period, then it beats the purpose of behavior formation.

Thirdly, while looking at existing solutions for in the evening to energize people, the idea behind Tinder inspired me to choose for the ritual suggestion design.

In conclusion, The final chosen concept comes from concept three, the digital photo organizer.

The final concept:
A ritual suggestion design concept for sleep-deprived parents to energize them in the evening with personal rituals.

> "
> *Before sleeping, I have my own
> time. It can start after my son
> goes to bed. During this time,
> I do various things, such as
> reading book/article, watch
> American drama, write/post in
> family's blog, make plan for
> travel etc.
> It makes energy for me.
> If I can't get my own time
> before sleeping, I can't do well.
> (child caring)*
> "

A ritual
before sleeping
that I enjoy

Place the emotion/ ritual sticker here!

Desribe the ritual as detailed as possible. What happened? What was the context? Who was involved? What object was involved? How did it make you feel? etc.

Before sleeping, I have my own time.
It can be started after my son go to the bed.
During this time, I do the various things
based on conditions sucher as reading
book/article, watch American Drama,
write posting in family's blog, make plan for travel
etc. It makes energy for me.
If I can't get my own time before sleeping,
I can't do well (child caring).

Chapter 6
Design specified

This chapter details the chosen design concept. We will first start with explaining the purpose and idea behind the Tada design, together with the integrated two models of the applied models in chapter 2. After that, the process from user flow to wireframing is explained. Finally, the concept will be elaborated in this chapter with two scenarios in use.

Design specified

6.1 The Tada design concept

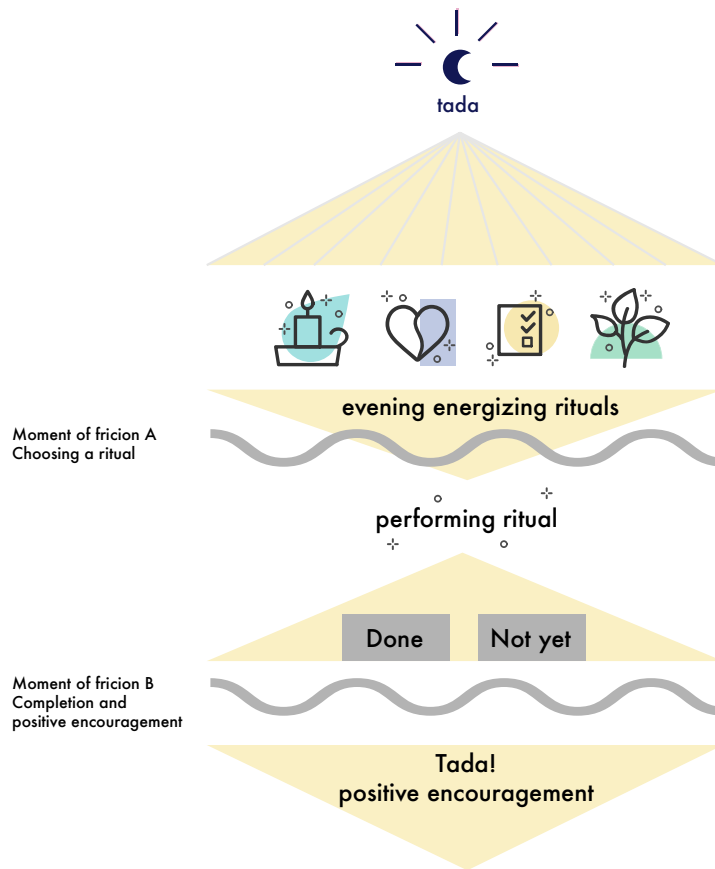What is the purpose of the design concept? How is the Tada design used?

The Tada design is a digital application to let parents do activities to energize them during the evening, in their personal time before sleeping. The application consists of daily rituals that are practical and personal. In essence, the idea behind Tada is to make the users think about how to spend their evenings mindfully and reflectively, instead of doing their established and fixed routines.

The digital application is called Tada since the focus of using the application is not about completing or finishing the ritual, but to honor and appreciate what the user has done throughout the day. The rituals provided in the application is a new way of showing possibilities in rituals, in which parents have not thought of yet. Even when the parents do not perform the ritual. The moment of friction happens when the user changes the attitude from a 'To Do' to a 'Ta Da'. That is why this design is called Tada.

Purpose

The core feature of Tada is the personalized ritual suggestions through supervised machine learning that is embedded in the design. The power of doing daily rituals lies in the frequency and consistency and when the user is doing the rituals. When doing personal rituals in the evening, the users get energized from it and it will benefit their energy care in a sustainable and healthy way. That is the aim of the project I want to achieve. Tada intends to find a ritual, perform it, and get the benefit effect after doing it. The results can be different for everyone, but slowing down (focus) and feeling energized after that are the main benefits I want. And the focus and intention of doing the ritual is an instrument to achieve that.

Figure 6.1
Tada design

tada

evening energizing rituals

Moment of friction A
Choosing a ritual

performing ritual

Done   Not yet

Moment of friction B
Completion and
positive encouragement

Tada!
positive encouragement

Unlocking parents evenings

The Tada design uses the hooked model and the friction model for behavior forming that are explained in chapter 2. While many applications use the same hooked model to grab users attention to use their application more often. Users unconsciously use the application on their smartphone without realizing and using more time on it than expected.

Moments of friction

Instead, I use the hooked model with the friction model to do the opposite (figure 6.2 and 6.3). From now on, I will call this the moment of friction. To make parents aware of their own behavior in the evening, I use Tada to unhook (nudge mindfulness through rituals) the hook (routinized and fixed habits) with the purpose to let the users have the opportunity to energize their evenings before sleeping. Through them making a deliberate choice and them taking control of their evenings in form of presenting different rituals. This quick yet easy form of decision making is made popular in applications such as Tinder. First, the user does not know what to expect, so it will trigger them into wanting to know the next 'card' or in this case, the next 'ritual' is. After they focus and reflect on the card, they can accept or ignore. To make this choice, the brain unconsciously makes the user aware and mindful of themselves and their situation, this is illustrated in figure 6.3. This is the attitude shift I envision to happen when parents are using this application. These moments of frictions can be placed in any stage of the model, as long as they get a short moment of friction, that creates mindful reflection.

Figure 6.2
Tada design using the original hook theory, and application using the 'unhook the hook' theory.

Figure 6.3
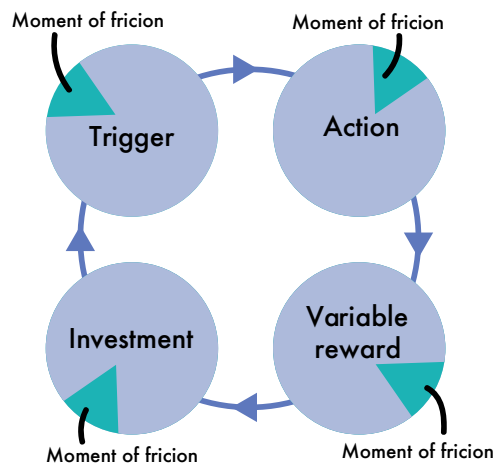The moment of friction model used in the Tada design

Figure 6.3 illustrates the discussed moments of friction as the two wave lines. With this model, I hope to achieve mindful choices and awareness of own current state and behavior of the intended users.

So how will the ritual suggestions work? Like mentioned before, through supervised machine learning it is possible to let the system predict what kind of rituals you like, based on the rituals the user chooses and completes. Figure 6.4 shows the process of the ritual suggestions in a time frame. The intention behind presenting randomized rituals keeps users attention, just like how the hooked model is created for.

Tada ritual criteria

What determines a ritual in Tada? In the knowledge collection chapter, I mentioned about what secular rituals are. Also, in chapter 3, I found existing rituals from the main study part 1 and part 2 that was in four of the six categories. These categories are: seek relief, restore balance, seek control and nurture relationship. These four ritual categories have energy regaining elements for in the evening, and the rituals in Tada design should fit in one of these categories.

For making the Tada concept understandable, I used five rituals that were more on the broadside (more on the left side is shown in figure 6.4) but were mentioned by the participants more than once. These are: Walking outside, taking a shower, to read a book, do breathing exercises and drinking tea. This is done to let the users relate more to the concept of secular rituals instead of rituals like lighting a scented candle or make an altar with daily objects (Nairan, N. & Nairan Philips, K., 2018). These rituals and its intention are already more personalized to the user that enjoys smelling scented candles (these rituals would be on the right side of figure 6.4).
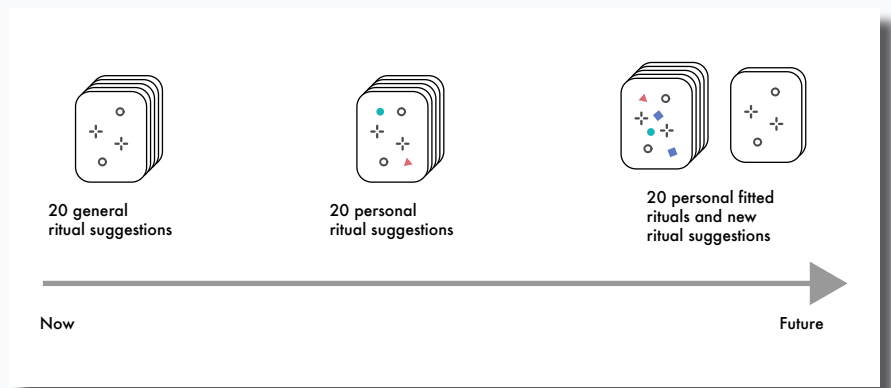
Figure 6.4
The ritual suggestions illustrated from general rituals to more customized rituals

20 general ritual suggestions

20 personal ritual suggestions

20 personal fitted rituals and new ritual suggestions

Now

Future

6.2 User experience and user interface process

What is the user experience of Tada? How will the Tada concept look like?

Moodboards

User experience moodboard
To illustrate the personal energy care in a straightforward yet abstract way, I use the metaphor of a flowing lava lamp. The user experience I want to evoke within the design is direct and smooth. Figure 6.5 on the left visualizes the user experience. The interaction between the user and the application should stimulate a relaxing evening to get sparked by rituals.

Look and feel moodboard
I use the moodboard showed in figure 6.5 to get inspired. I want the Tada application to feel modern, direct, vibrant and playful. The design is inspired by flat vector style, it has a soothing night color palette with colorful accents that indicates a bit of playfulness and surprise. A gradient tone brings out a subtle relaxing atmosphere. A clean and minimal layout throughout with a hint of 2D blobs from the lava lamp that mimics the natural energy flow.

Figure 6.5
Image with the energy flow effect from a lava lamp
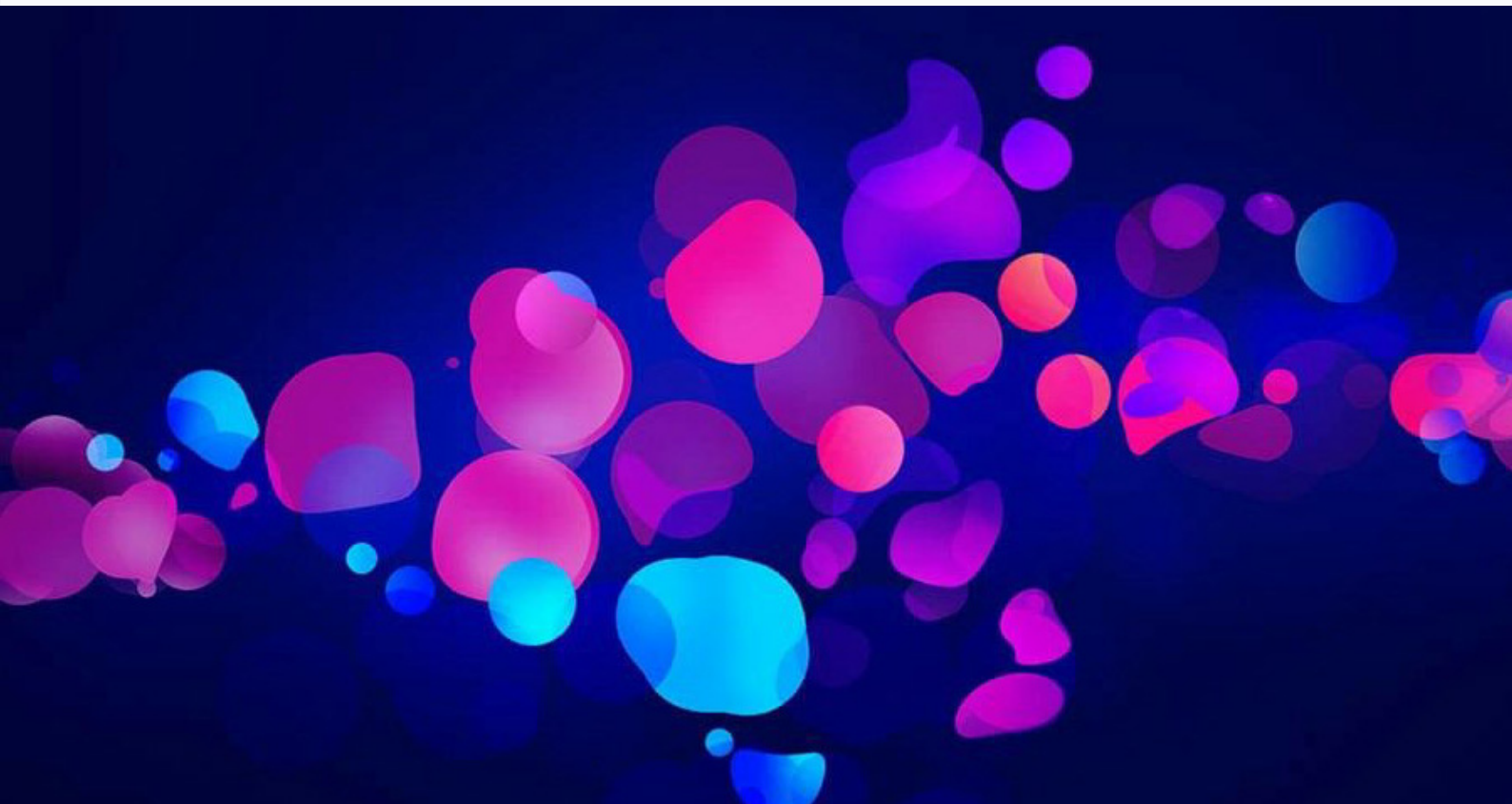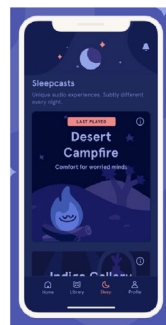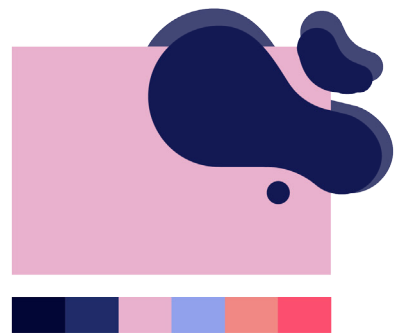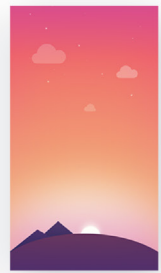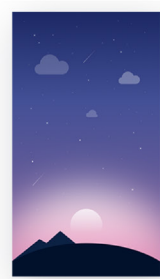
Tone of Tada
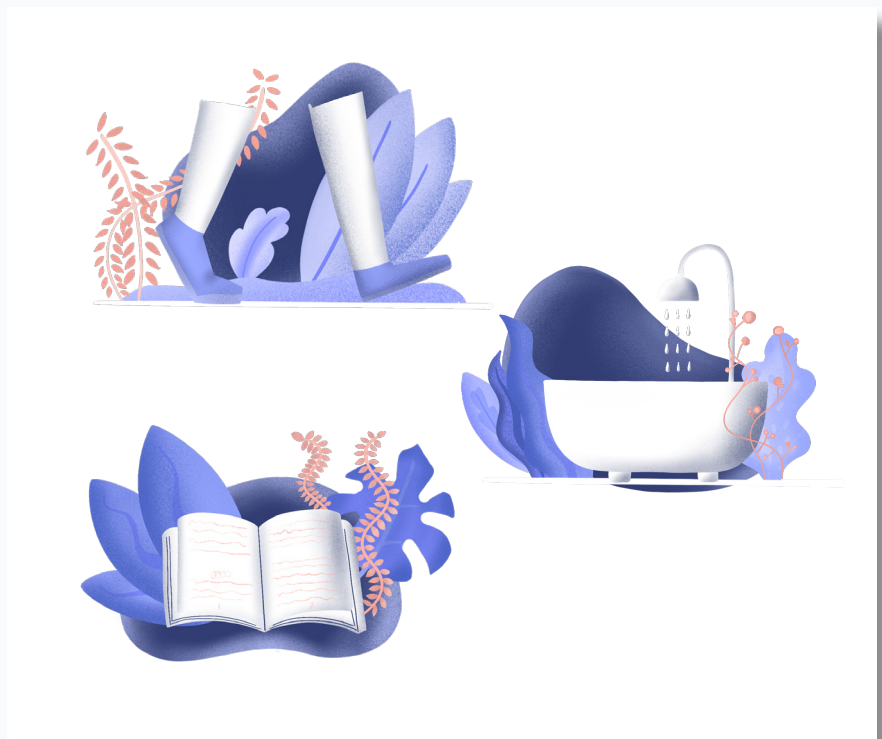
The tone of voice of interacting with Tada is that of a friendly narrator that gently suggests rituals to you. The Tada design wants the best for you, but knows that forcing rituals upon you is not the right way to do so. I want the Tada to be persuasive and getting the intended user to do rituals in the evening in a non forcing and guilt pressuring digital application, that makes users to come back mindfully and not because of they should feel to and have to. This is an example of imbalance of the mental energy I explained in chapter 1.

Figure 6.6
Look and feel moodboard as inspiration for the story and design
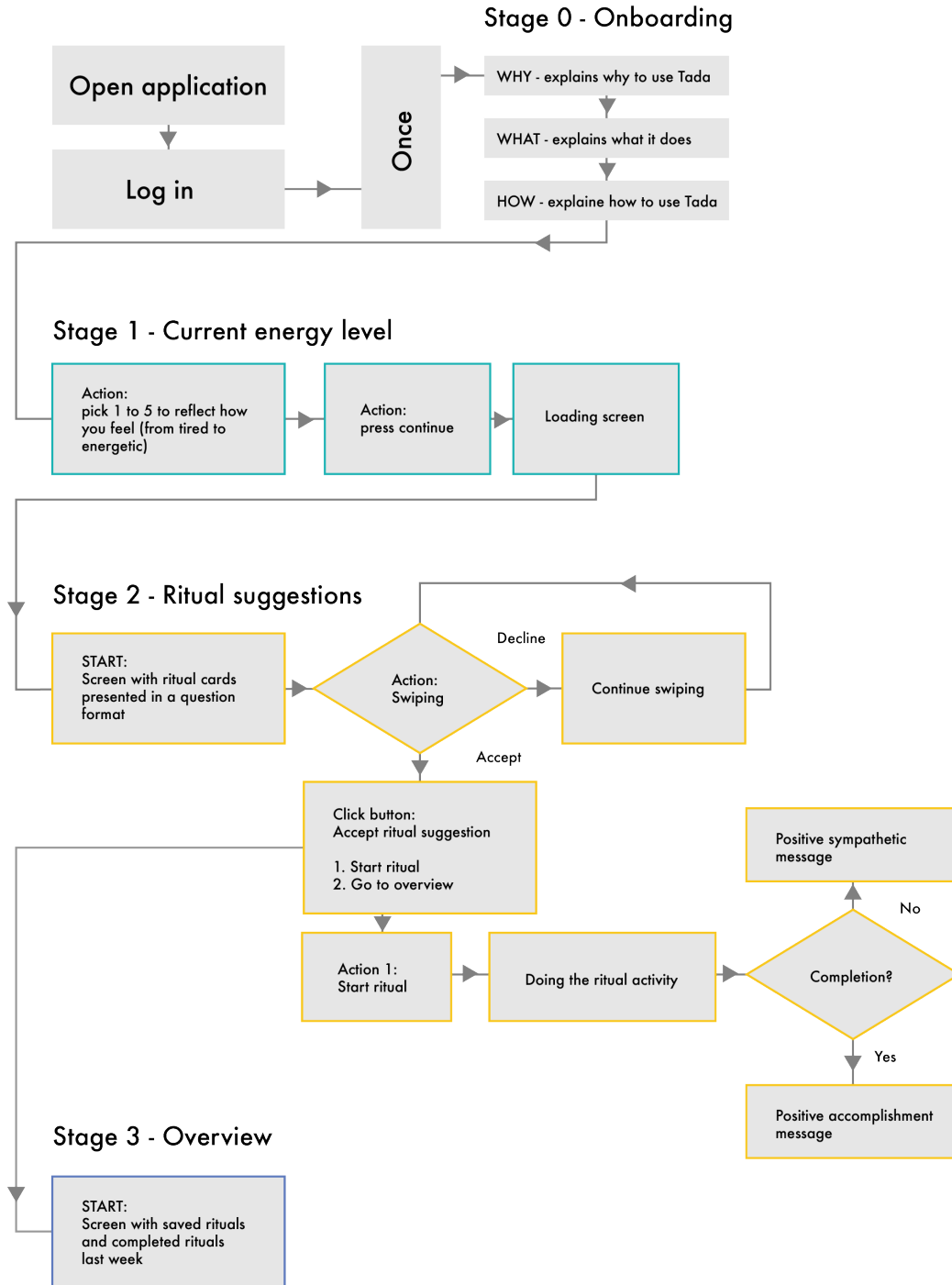
Ritual visuals

Combining the selected rituals mentioned on page 100 and the moodboard showed in figure 6.6. Figure 6.7 illustrates the ritual visualization style.

Figure 6.7
Tada rituals inspired by figure 6.6

Use flow Tada

Stage 0 - Onboarding

Open application

Log in

Once

WHY - explains why to use Tada

WHAT - explains what it does

HOW - explaine how to use Tada

Stage 1 - Current energy level

Action:
pick 1 to 5 to reflect how you feel (from tired to energetic)

Action:
press continue

Loading screen

Stage 2 - Ritual suggestions

START:
Screen with ritual cards presented in a question format

Action:
Swiping

Decline

Continue swiping

Accept

Click button:
Accept ritual suggestion

1. Start ritual
2. Go to overview

Action 1:
Start ritual

Doing the ritual activity

Completion?

No

Positive sympathetic message

Yes

Positive accomplishment message

Stage 3 - Overview

START:
Screen with saved rituals and completed rituals last week

Use flow of Tada

On figure 6.8, the use flow overview of the Tada design is illustrated. In this section, I explain in short what each stage do regarding the intention of the stages in the Tada application.

Stage 0
Onboarding experience

Onboarding experience will be shown at the beginning of installing Tada and after updates. After the intended user, in this case we call her Emma, has signed in her account for the first time. She gets an onboarding experience with a few screens that explain WHY, WHAT, and HOW to use this application.

Stage 1
Current energy level

During this stage, Emma can take a moment and visualize how much energy she has left for the evening. The intention behind this stage is to let Emma be aware of how she currently feels. Here, a moment of friction is created.

Stage 2
Suggestions of energy regaining rituals

Stage 2 is the main feature of the Tada design, and within this stage, the moment of friction is intertwined when rituals are suggested.
Imagine 20 cards with random rituals that are shuffled. And Emma can choose a ritual to start by clicking on the select button.

The third moment of friction takes place when Emma decides to have completed or not completed the ritual. Then on both decisions, positive and personal messages will be shown. The important tone of this message is that Emma does not need to feel pressured or guilty about completing the ritual if she decides not to.

Stage 3
Overview

To see what rituals Emma has done, she can go to her overview and look at what her saved rituals are. This overview is visually playful because this application is called Tada and not Todo.

Figure 6.8
User flow of the Tada deisgn

Rapid prototyping

Question format or task format?

The tone of 'how' the ritual suggestions are presented is essential. Here, I used A/B testing to test one variable, which is one set with asking the question and one set with the task format, as seen in figure 6.9 and 6.10. The question I had during this A/B testing: Will the question or the task format be more persuasive and motivational for the Tada design? In total, six Master design students participated in this A/B test. Here below, I will elaborate on the summary and improvements.

The assumption is that the question format is more persuasive and suggestive.

After the A/B tests, it became clear that the question form is more suggestive and gentle in communicating in the Tada application than the task form. Four out of the six participants found that question form fits more with the nature of the Tada concept. Although three participants mentioned that the task form is more active, another insight is that the more personal a ritual becomes, that it requires time and depends on the context and how tired the intended user feels.

The improvements that the participants suggested are listed below:
• Make the sentence more noticeable
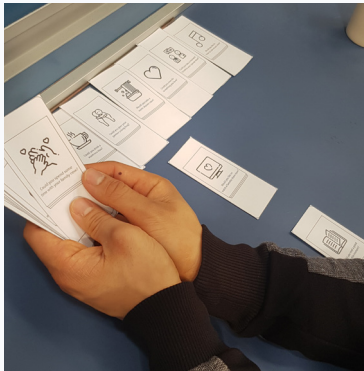• Try to make the icon or image more relatable
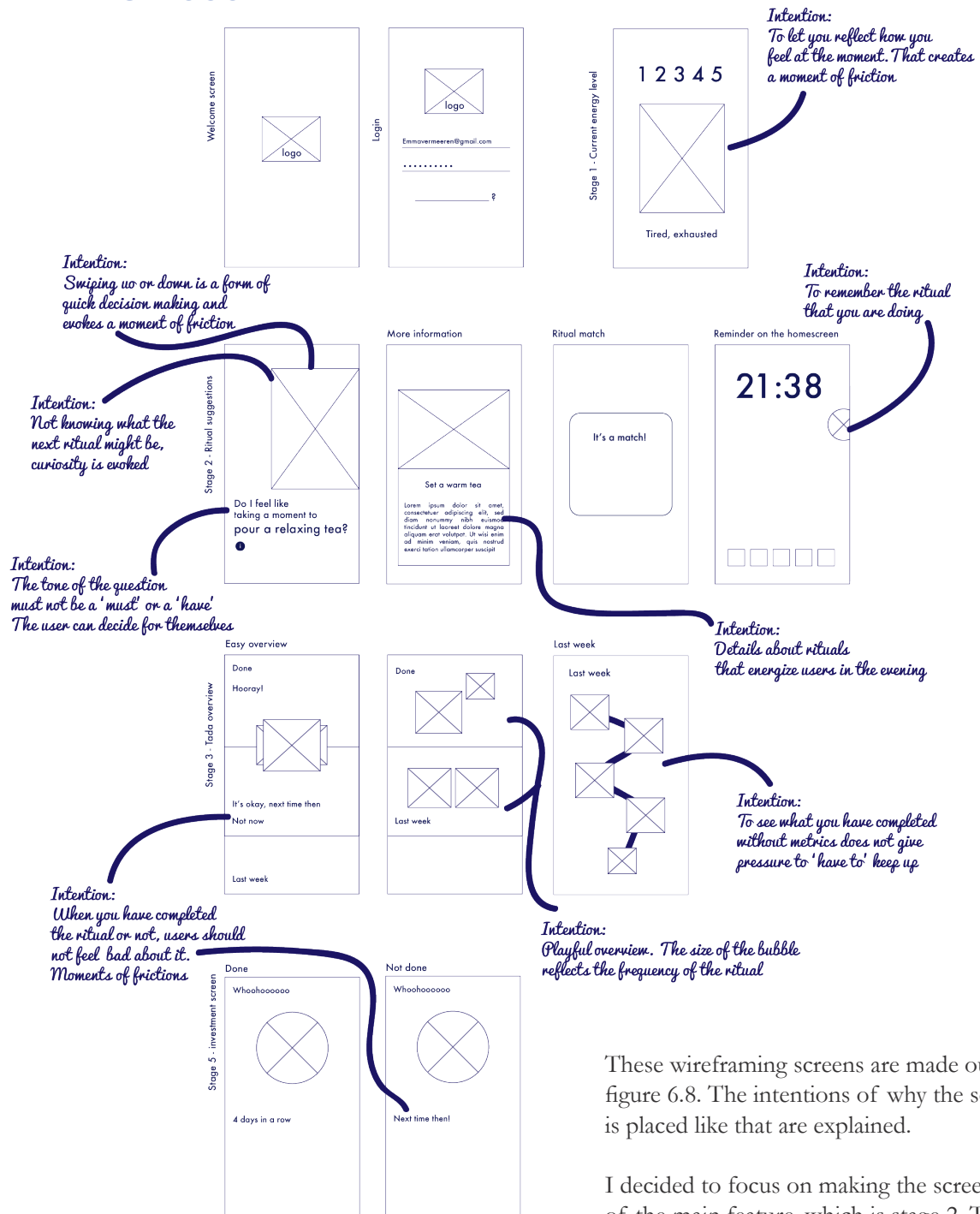

Figure 6.9
A/B testing with participant

A/B test discussion
Even for a paper prototype A/B test, where the variable factor was the tone of the sentence, there were limitations about this research study. The first I would like to discuss is the number of rituals that were displayed. The first time they went through, they took more time than the second set. During the second set they were quicker to decide, because of the same presented visuals. And even with 'think out loud' method, some participants had trouble with speaking out loud about what they were thinking.

Figure 6.10
Examples of the question and task format with three ritual activities

Take a warm shower now

Would you take a warm shower now?

Listen to calm music now

Would you like to listen to calm music now?

Do something you love this moment

Could you now do something you love?

Wireframes
of Tada

Welcome screen

logo

Login

logo

Emmavermeeren@gmail.com

....

?

Stage 1 - Current energy level

1 2 3 4 5

Tired, exhausted

Intention:
To let you reflect how you
feel at the moment. That creates
a moment of friction

Intention:
Swiping up or down is a form of
quick decision making and
evokes a moment of friction

Intention:
Not knowing what the
next ritual might be,
curiosity is evoked

Stage 2 - Ritual suggestions

Do I feel like
taking a moment to
pour a relaxing tea?

More information

Set a warm tea

Lorem ipsum dolor sit amet,
consectetuer adipiscing elit, sed
diam nonummy nibh euismod
tincidunt ut laoreet dolore magna
aliquam erat volutpat. Ut wisi enim
ad minim veniam, quis nostrud
exerci tation ullamcorper suscipit

Ritual match

It's a match!

Reminder on the homescreen

21:38

Intention:
To remember the ritual
that you are doing

Intention:
The tone of the question
must not be a 'must' or a 'have'
The user can decide for themselves

Intention:
Details about rituals
that energize users in the evening

Stage 3 - Tada overview

Easy overview

Done

Hooray!

It's okay, next time then!

Not now

Last week

Done

Last week

Last week

Last week

Intention:
To see what you have completed
without metrics does not give
pressure to 'have to' keep up

Intention:
When you have completed
the ritual or not, users should
not feel bad about it.
Moments of frictions

Intention:
Playful overview. The size of the bubble
reflects the frequency of the ritual

Stage 5 - investment screen

Done

Whoohoooooo

4 days in a row

Not done

Whoohoooooo

Next time then!

These wireframing screens are made out of
figure 6.8. The intentions of why the screen
is placed like that are explained.

I decided to focus on making the screens
of the main feature, which is stage 2. This
core function will be tested in the user
evaluation.

Figure 6.11
The wireframes of the Tada design

Scenario in use - Ritual completion

In this part, the use of the Tada design is explained through a user scenario. The user scenarios of Tada are based on the current situations described in chapter 4. The first time use of Tada can be found in appendix E, as well as the detailed version of the screens in this scenario. These scenarios illustrate the ideal use of the Tada design.

Figure 6.12
The ritual suggestion completion scenario with example screens

Emma just put her two children in bed. She is tired from the whole day since she was non stop busy at work and home. Although her husband helped her a lot with chores, her children still wanted Emma's attention the whole time. After she cleans the toys of the children, she sits on the comfortable sofa and starts to look at her smartphone, replying at messages she could not respond and scrolling through the news and social media she missed that day. Around 20:30 in the evening, she receives a notification from the Tada application.

In this situation, Emma opens the Tada application based on the notification. Figure 6.12 shows the scenario and interaction Emma has with the Tada design.

1. After logging in the Tada app, she sees a screen with a question: "How do you feel now?" Seeing this question reminded her how tired she is. She started to reflect back on what made her day tired and presses 2 on the scale of 5.

2. Since Emma is already in the Tada application, she wants to see if there are any ritual activity she can do at the moment to feel more lively and energized. She opened the ritual suggestion screen and went through a few suggested rituals. She eventually is interested in the ritual 'take a walk' Because the weather is still nice and good to take a walk. She decides to get up and get out of her house to take a walk.

3. During the walk, Emma enjoys her view and the nature around her. She feels positive and good when she decides to go back home. After she is home. Tada reminds Emma with a visual message to complete the ritual in the Tada application.

4. With a positive feeling of accomplishment that she took a twenty-minute walk, she completed the ritual by tapping on 'done'. A personal Tada message appears and congratulates her on completing the ritual. She feels not as tired anymore in her evening and felt recharged.

Scenario in use - Ritual incompletion

Here, another scenario with Emma is illustrated. As observed during the user research and defined in the current situation in chapter 4. Sometimes people - in this case- Emma, is not in the mood to do anything and decides not to complete the ritual, even though she started already.

Figure 6.13
The ritual suggestion incompletion scenario with example screens

Ritual incompletion scenario

A few days later, during an evening: Emma completed a project during work and after reading a bedtime story to her children, she goes to her living room. Suddenly she feels and acknowledges how tired she is and crashed down on the sofa. She felt overwhelmed and needed to relax. She grabs the tv remote and zaps through the channels while regularly looking at her smartphone for notifications. Again, around 20:30 in the evening, she receives a notification from the Tada application.

In this scenario, Emma is not motivated to do a ritual activity, but she realizes that she has to be mindful, wind down, and relax. And eventually opens the Tada application. Figure 6.13 shows the scenario and interaction Emma has with the Tada concept.

1. She sees a screen with a question: "How do you feel now?" Emma answered with a 1 - "tired, exhausted".

2. Emma goes through her ritual suggestions, but she is not interested in doing the ritual activities. After the third round of choosing a ritual activity (of the 20). She focused on the swiping, and in her head, this happened: "no, no, no, this one? Maybe, no, no, no." In this process, she focuses on the ritual suggestions and then wanted to drink tea, because she was feeling thirsty already.

3. Emma chooses her favorite tea that has calming effects and went back to the living room. Then, she is distracted by her husband for asking questions about the planning of the weekend. After a while, she forgets about the tea, and it got cold. "Oh no, my tea is cold..." and sat back in the sofa. In the Tada application, she acknowledges that she did not complete the ritual activity and presses "not now".

4. Another personal Tada message appears, and Tada said: "It's okay, next time then." After reading this, Emma felt not as sorry as before. The sympathetic made her feel not guilty. And after a while, she rebrews her tea and this time, she could finish her ritual activity.

> "
> *After I put my daughter in bed,*
> *I take a warm and nice shower.*
> *Then I thouroughly do my*
> *skincare routine that I see as a*
> *ritual. When I eventually am in*
> *my clean pajama and land in my*
> *cozy bed, I feel reborn.*
> "
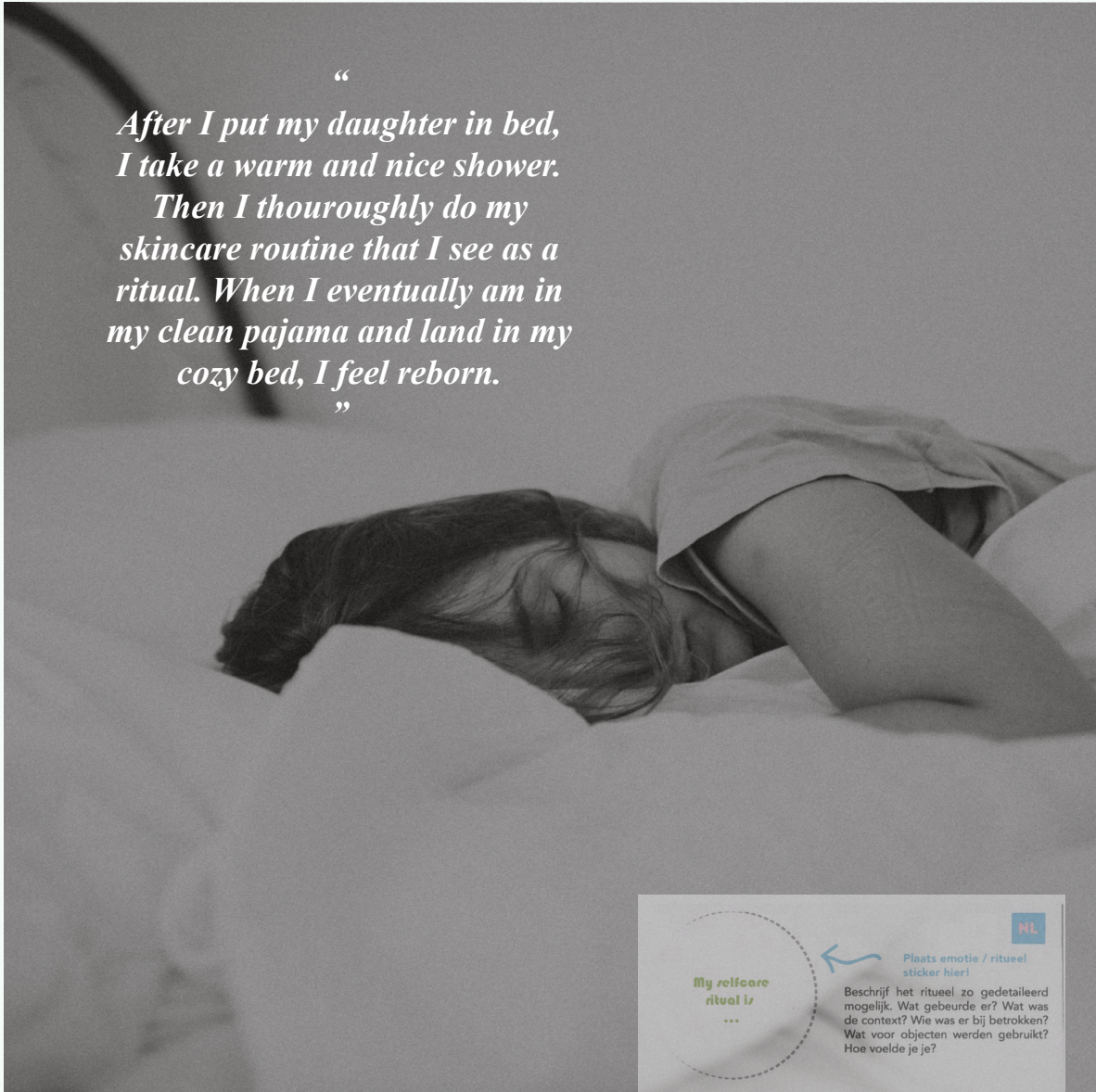
My selfcare ritual is …

Plaats emotie / ritueel sticker hier!

Beschrijf het ritueel zo gedetaileerd mogelijk. Wat gebeurde er? Wat was de context? Wie was er bij betrokken? Wat voor objecten werden gebruikt? Hoe voelde je je?

Nadat ik mijn dochter naar bed heb gebracht, ga ik heerlijk uitgebreid onder de douche. Daarna doe ik uitgebreid de skincare routine. Als ik éindelijk met mijn schone pyama in lekker zachte bed lig, voel ik me heel wedergeboren.

Chapter 7
Evaluation

This chapter evaluates the Tada design concept with its main functions with the usability and the intended user experience of interacting with the design. After the user test, recommendations about the application will be discussed. Then in the project closure chapter, the final Tada design concept is detailed.

Evaluation

7.1 User evaluation

How will intended users experience the Tada design? What will be discovered?

Purpose

With this user evaluation, the main goal is to evaluate the effect of Tada by the experience of interacting and the usability of the design. The result was assessed based on the design goal and the desired qualities. I decided to focus and evaluate the ritual suggestion and the completion/ without completion scenario, which will be described later since it is the main function of the concept. The following evaluation questions were formulated:

User evaluation questions

Does the Tada design evoke the feeling of managing personal energy care in the evening at home?

- **Does the design stimulate energizing rituals in the evening?**
  - Does the design make them aware of their energy care?

- **To what extent does the design stimulate to complete the ritual activity?**
  - How do they feel when the ritual activity is completed or not completed?
  - What kind of emotion is evoked when they look back on what they have done?

- **Does the design fulfill the four desired interactions? -personal, -surprise, -focus, - mindful**
  - To what extent does the design presents personalized information?
  - Does the design give the intended user a feeling of surprise?
  - Are the intended users focused on the ritual suggestions while choosing?
  - To what extent does the design stimulates mindfulness?

Participants

In total, six parents participated in the study. All of the participants had young children between 0-5. And all of them were working full time or part-time.

Dynamic prototype

The digital screens were made interactive with a program called Principle. For the process of developing these screens on user experience and user interface, please go to chapter 6 for more details about the design concept idea. Before testing the dynamic prototype with the participants, there were iterations on the dynamic interactions in the program.

Method

I made sure that the dynamic Tada prototype was tested in a comfortable place for the participants. All the tests were done in situ. Figure 7.1 visualizes the set up of the study. First, an introduction was given about the project and the design. Then the participants were introduced to the scenarios and could perform the tasks. After the tests, questions regarding the Tada concept and how they experienced the design were asked. Finally, I asked them to fill a questionnaire with the desired interactions, that initiated more explanation of how they felt about the experience of the desired interactions. In appendix E, the detailed user evaluation test plan is elaborated there.

Figure 7.1
User evaluation set up. This illustrated the general set up of the pilot study. The user evaluation of the participants were executed in their homes

Tasks and scenarios

The participants were given three scenarios to complete. Within each scenario, there was a task given. For writing the scenario, it was important that the scenario was easy to follow by using simple words. By describing the context without giving the clues and intended, I made three scenarios described below.

Task 1 - Onboarding and what their energy level is
1.1 - Login
1.2 - Onboarding
1.3 - How do you feel - current energy level

Task 2 - Interactive ritual swiping and completing the ritual
2.1 - Ritual suggestion
2.2 - Complete the ritual

Task 3 - Not completing the ritual, going to your overview and last week rituals
3.1 - Ritual suggestion
3.2 - Don't complete the ritual
3.3 - Go to overview and last week

- **Scenario for task 1**
  To let the participants discover by themselves what the Tada design is about, scenario 1 is about the first experience with the Tada app. Reading the onboarding and rating how they are actually feeling in energy levels.

  Please navigate through the introduction pages and you are looking for a way to know how you feel now.

- **Scenario for task 2**
  In this scenario, I want to let the participants experience the ritual suggestion interaction and how they feel about it. The scenario is based on the intended scenario used in chapter 6, the ritual completion scenario.

  Please find a way to complete the outside ritual.

- **Scenario for task 3**

  For scenario three and the tasks that come along with it. I let the participants go though the ritual suggestions again, but this time with the intention of not completing the ritual. Then they are invited to explore the overview of the rituals and the completed rituals in the 'last week'.

  Now, find a way to finish the task in the Tada app and go to your overview to see what you did last week.

7.2 Tada concept review

What are the impressions of the intended users? Could Tada evoke the feeling of taking their of their own energy levels?

In this section, I will analyse the user evalutaion of the six participants. For collecting and presenting the data, a task completion table and a frequency by issues will be illustrated for the next few pages. First, the next two pages will be a summary of the user evaluation test of the Tada design concept. After that, frequent issues are elaborated in more detail.

First impressions

"I have not seen such a design yet. Interesting." - P2

"This is called Tada? Haha. I like that name." P3

"Honestly, I would not use it, unless some other mothers suggested it to me. I am not even sure if I will find it in the app market." - P6

Login

P1 P2 P3 P4 P5 P6

Introduction pages

P1 P2 P3 P4 P5 P6

Current feeling

P1 P2 P3 P4 P5 P6

Scenario 1 - Task 1.1-1.3

9:41

tada.

emmavermeeren@gmail.com

....

forgot your password?

Log in

9:41

We get it

Being a parent is not an easy job. You often are exhausted at the end of the day, while wanting to spend as much time with your children.

Continue >

9:41

How do you feel now?

1 2 3 4 5

Normal

Continue >
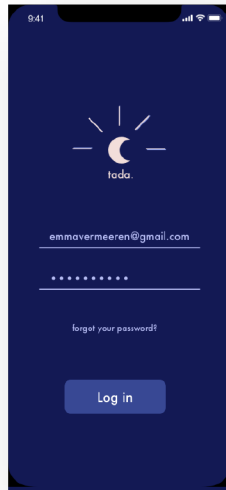
" *This screen gives an night or evening vibe.*" . - P3
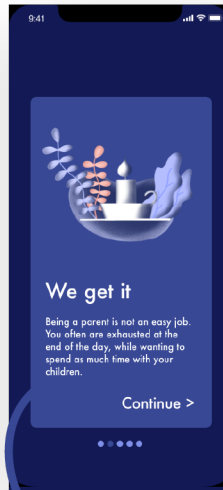
" *I can relate to the text, short and powerful.*" - P5

" *So I assume that 1 is no energy and 5 is a lot of energy*" - P6

Ritual suggestion

P1 P2 P3 P4 P5 P6

Complete ritual

P1 P2 P3 P4 P5 P6

Scenario 2 - Task 2.1-2.2

9:41

Do I feel like taking a moment to

take a walk?

more info

Clock Photos Camera

Photography Utilities Settings

TV/Radio Games Vivint

Twitter Instagram Fantasy

9:41

Tap here for

Done

∧

∨

Not now

Tap here for

9:41

Whohoooo

Good job, Emma!

Fourth ritual this week Keep it going!

Tap here for

" *Instructions are clear, I have to say that the swiping of ritual suggestions is really efficient. I only need to click if I want to do it, otherwise I don't have to and can swipe other cards.*" - P2

" *I just tap done when I am done.*" P3

" *The message makes me feel accomplished, I just wonder if the content of the messages will change or not?.*" P1

" *It was nice to see the bubble reminder on the screen. You get invited to click on it.*" P5

Ritual suggestion
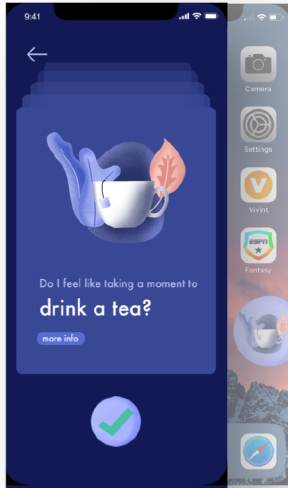
P1 P2 P3 P4 P5 P6

Incompletion ritual

P1 P2 P3 P4 P5 P6

Scenario 3 - Task 3.1-3.2

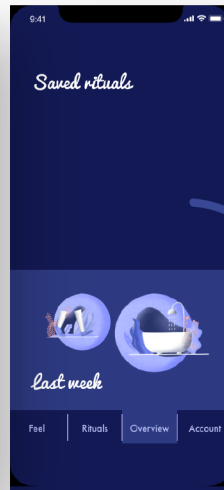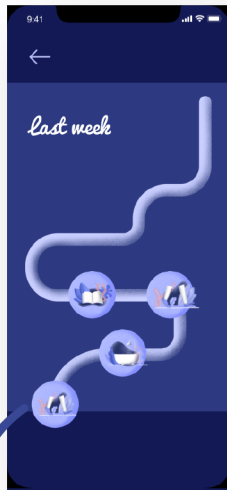" Hmm, not now, does it mean not done? I am a bit confused" P2

" It is nice to receive such a symphathetic message when I have not done the ritual." P3

Last week

P1 P2 P3 P4 P5 P6

Overview

Scenario 3 - Task 3.3

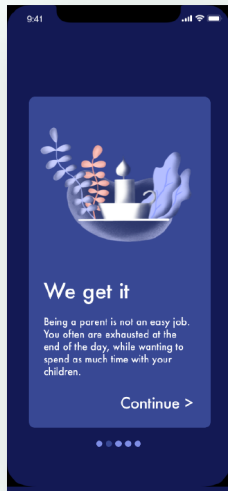" I like how playful it is visualized, I can click on it right? P5

" This overview makes me a bit confused, I don't know where to look at..." P2

Reflection on their energy level

Task 1
1.1 - Login
1.2 - Onboarding
1.3 - How do you feel?

P1 P2 P3 P4 P5 P6

P1 P2 P3 P4 P5 P6
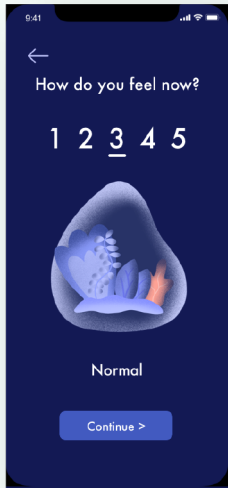
Quotes by participants about task 1.2
"It feels good to read this." - P5

"I can totally relate with the presented introduction." - P2

"I like that it is short and direct. The visuals are also attractive." P1

Quotes by participants about task 1.3
"How do I feel right now? Normal? Wait, now I think a bit longer I feel tired actually." - P3

"The visual difference of the plants for each number helps a lot. Not like the overused emoji icons." - P5

"It would be nice to move the visual as well, instead of only tapping on the numbers." - P1

The main goal of task 1 is to introduce and explain the Tada design in a short and catchy way. After that, they get to the first stage of the application, which is to reflect on how they are feeling at the current moment of the scenario.

In total, all six participants had a completion rate of 100% for task 1.1 and 1.2. For task 1.3, P6 perceived that the numbers were levels of energy. And translated into how energetic or tired they are. But P6 did not reflect on her energy level and clicked to continue directly.

Successes of task 1
• Onboarding (introduction pages) were understandable and relatable.
• Participants could reflect on their own level of energy care and proceeded to continue.

Recommendations for task 1
• Make the numbers more noticeable through a change in colors
• Find a way to make the energy level visuals to be able to interact as well.

Participants were able to ask themselves to reflect on how they were feeling on energy care while reading the question. While there are points of improvement, like the numbers can change color or the visuals can be interacted with when swiping. Overall, all participants could complete task 1.
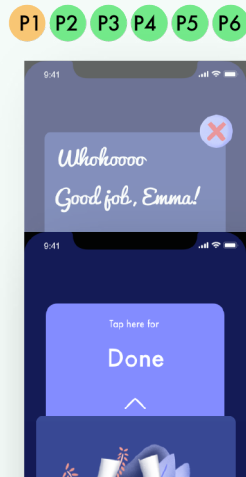
Figure 7.2
Task completion and screens of task 1

Ritual suggestion and completion

Task 2
2.1 - Ritual suggestion
2.2 - Complete the ritual

P1 P2 P3 P4 P5 P6

P1 P2 P3 P4 P5 P6

Figure 7.3
Task completion and screens of task 2

Quotes by participants about task 2.1
"It was easy to navigate through the suggestions. I wish there was more options of rituals. Because I am curious what to see on the screen." - P1

"I want it in the same order, but shuffle the rituals when I want. What if I wanted to go back to the previous ritual?." - P4

"Both visual and the text ask me to pay attention I am absorbed by the suggestions and thinking what ritual I can do." - P3

Quotes by participants about task 2.2
"It was nice to see the bubble reminder on the side of the screen You get invited to click on it." - P5

"The message gave a sense of a small accomplishment, Like a pat on my shoulder of taking care of myself." - P1

"The subtle message when you press done does something, it makes me feel good." - P2

The main feature (the moment of friction model) of the Tada design was tested in task 2. Participants were asked in the scenario to go through the rituals and complete the energizing activity. This process of choosing makes the intended user the focus on choosing what to do in the evening, and that creates a moment of friction in reflection.

For task 2.1, P3, P4, and P5 had a bit of a struggle when navigating through the ritual suggestions. They were confused when swiping up and down, that it was not the same order — that created confusion. But after my instructions, they were able to complete to task 2.2. The main issue for P1 during task 2.2 was that it took a moment of realization to move the ritual to 'done'. All participants were pleasantly surprised by the message after completing the ritual.

Successes of task 2
• Reading the text on the ritual suggestion and looking at the visual made them think about what they could do during the evening.
• The positive messages after completion were well received

Recommendations for task 2
• Prioritize the 'choose' button at the ritual suggestion
• Reflect on their energy level again after they completed the ritual activity

Participants were feeling surprised and focused when various rituals were suggested. P1, P2, P4, and P6 asked if the rituals were more personalized after a long time of use, which is also the idea behind this Tada concept. They felt positive and a sense of accomplishment when they completed the ritual.
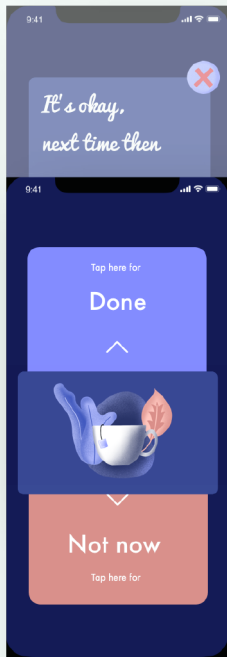
Ritual suggestions and incompletion

Task 3
3.1 - Ritual suggestion
3.2 - Don't complete the ritual
3.3 - Go to overview and last week

P1 P2 P3 P4 P5 P6

P1 P2 P3 P4 P5 P6

Figure 7.4
Task completion and screens of task 3
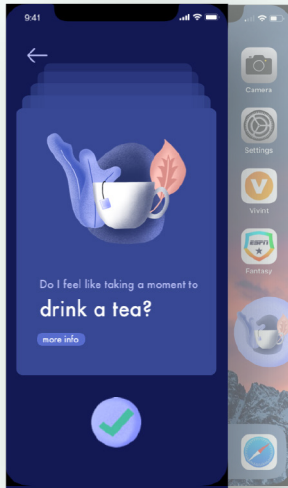
Quotes by participants about task 3.1 and 3.2

"I assume that the ritual cards will change everytime I click on ritual suggestions. I get it now." - P6

"It is nice when you did not do it [ritual], that it gives you a symphathetic message that it is okay. Other existing apps will always try to force you to complete it. But I do not get that from Tada." - P1, P5

"I like that this app has an frienly reminder type of message. It does not give me the feeling of being guilty when I do not complete it." - P2

"But can I still complete the activity [ritual], when I forgot to do it?." - P3

The goal of task 3 is to let the participants experience when they have not completed their chosen ritual, how they react when they see the message after not doing the energizing activity.

The success rate for task 3.1 is high. Only P4 had a moment of struggle and eventually completed the task. P4 thought initially that moving the cards up was choosing already. After a few tries, P4 understood the meaning of the ritual suggestion. For task 3.2, P1 could not complete the ritual. The reason was that she didn't see the 'not now' function. P1 scanned through the screen rather quickly and though she completed the ritual. P2 and P3 completed task 3.2 with recommendations on the encouraging texts. And that the 'not now' does not communicate the intention.

Successes of task 3.1 and 3.2
- Mindful reflection from participants when not doing a ritual
- Participants received a positive message and felt good about that even though they have not completed the ritual activity.

Recommendations for task 3.1 and 3.2
- Make the encouraging message when not completed more intuitive

Participants first felt uncomfortable to have to acknowledge to click 'not now' as to confirm that they did not complete the ritual. When they saw the message of encouragement, they were reassured and started to smile or laugh a bit. This moment of reflection and realization is what I hoped to achieve in the Tada design with the moment if friction model behind the concept.
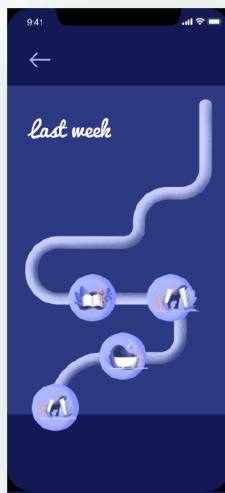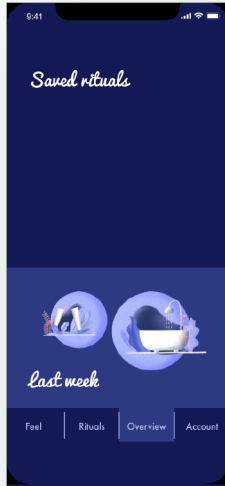
Overview and last week

Task 3
3.1 - Ritual suggestion
3.2 - Don't complete the ritual
3.3 - Go to overview and last week

P1 P2 P3 P4 P5 P6

Quotes by participants about task 3.3
"I like that the overview is not presented as a list, is it maybe the reason that it is called Tada and not Todo?" - P4

"I have to think and process too much information on this screen, which I do not want in the evening." - P2

"The path is a nice representation, instead of a list." - P3

"I wanted to add personal information when I click on the done activities [in the last week screen]. Like, time or one sentence of how I felt after the ritual." - P1, P2, P4 and P6

"Is there a monthly overview to reflect on my energy? I hoped to see if my energy level was improved or not." - P5

The objective to evaluate task 3.3 is to see if they understood that the Tada design is not about completion, but showing that choosing either completing the ritual or not completing it, that it creates a feeling of positive message and accomplishment. And that through the thought-model I proposed in Chapter 6, that two friction moment were created.

P1, P2, and P3 had difficulty to complete the task on their own. Mainly because the screens were too chaotic and less structured. The sentences could be better phrased. With help, they could understand the intended screens more.

Successes of task 1
• Illustrating the bubbles made the overview more playful and less like a todo list
• The path displayed on 'last week' was well understood

Recommendations for task 1
• Present the overview more intuitively
• Adjust certain wordings in the overview and last week screen
• Personalize the completed rituals with their own input

Figure 7.5
Task completion and screens of task 3

Tada overall impression

Quotes regarding the Tada design in general:

"I am not sure if I will keep on using this design all day long." - P6

"What you are trying to do, is very noble of you." - P3

"I think I got your intention behind this Tada application. You want us [intended users] to enjoy the little moments during the day more? Then, doing these rituals on a regular basis, that it energizes us?" - P2

"I really can relate to the situation [scenario], because in the evening I am really exhausted, so I just lazy around and watch tv or scroll on my phone all evening, but instead I sometimes want to do activities that makes my energy come back." - P1

Participants expressed that they did not expect the Tada design to be like this. They thought that it is different from the existing applications that they used. Not in the way how it was visually represented, but more the message behind Tada. For some participants, it was a way to keep track of their energy level. One participant mentioned that it could be like a personal journal. When I explained that the rituals would be more personalized, the more frequent and consistent they used, all participants were positively surprised.

Although they were positive, they mentioned some concerns regarding their experience with using Tada and further implications. First, suggesting rituals in the different order and adjust the sentences according to how I envisioned is practical on the 'now'. They expressed their concerns about if the Tada design is sustainable enough to be used in the future and can adjust behavior for sleep-deprived parents. Second, what if they wanted to use the Tada ritual suggestions not only in the evening but also during the day? Lastly, one participant mentioned about the privacy of the Tada data. Since personal data is put in, the participant said how the information would be handled.

Answering the user evaluation questions

At the beginning of chapter 7, I presented user evaluation questions that I wanted to evaluate with the Tada design. In this section, I aim to answer these questions.

- **Does the design stimulate energizing rituals in the evening?**
  The Tada design intended use is to suggest different energizing rituals in the evening. With the way how it is created, it stimulates the intended user to try out new rituals. The moment of friction during going through the suggestions motivates them to focus and read what can be presented and what they would like to do in the evening.

  - Does the design make them aware of their energy care?
    The participated parents were asked to estimate how they were feeling their amount of energy level. They reflected and took a moment to feel how tired or how energetic they were. This process made them aware of their energy level, and with more mindfulness, this can be transitioned into energy care.

- **To what extent does the design stimulate to complete the ritual activity?**
  Perceived from the participants, the gentle and friendly way of the Tada design stimulated them to complete the ritual. The visual reminder on the home screen made them aware of clicking and returning to the Tada application to choose to complete or not complete.

  - How do they feel when the ritual activity is completed or not completed?
    From observing the participants and after interviewing them after the user evaluation of the Tada design, I perceived that the messages that popped up were essential in the closing of the ritual and left a positive impression on them. Feelings such as accomplishment, feeling good, not feeling guilty/bad were mentioned.

  - What emotion is evoked when they look back on what they have done?
    Participants communicated that the overview and the last week screens were very valuable for them. With every input of ritual activity, it seems like it made the application more personal. They mentioned that it is a new way of reviewing what you have accomplished. That it was good to celebrate small moments in life.

- **Does the design fulfill the four desired interactions? -personal, -surprise, -focus, - mindful**

  - To what extent does the design present personalised information?
    With the different ritual suggestions that the Tada design presents and the input of the intended users, it makes the Tada application more personal, each time Tada is used. Participants mentioned that it could even be more personal if they could put in their messages after completing or not completing the ritual.

  - Does the design give the intended user a feeling of surprise?
    Not knowing what rituals to expect and that the ritual cards can be shuffled, I perceived a level of surprise. For this desired interaction, the embedded machine learning in the Tada design plays a big role.

  - Are the intended users focused on the ritual suggestions while choosing?
    The desired interaction 'focus' is aimed at taking a moment to look at each ritual and think if they wanted to do it or not. Here, I observed that participants took a moment to read and evaluate if they needed to do this ritual. While the participants had the intention to focus, some participants focused more on the reading than other participants.

  - To what extent does the design stimulates mindfulness?
    The thought-model behind Tada is embedded with two moments of friction. To be mindful and conscious when choosing what ritual fits the current need for that particular parent. Participants mentioned that they had moments of realization about their energy level, and the ritual suggestions made them aware if they wanted to improve their energy through a suggested ritual. Or not, though not doing the ritual and not to feel bad about it.

> "
> *My favorite ritual of the day is to put my child in the stroller, walking in the town to wait til the baby child sleeps in the stroller. And when coming home, having the house for myself.*
> "

My favorite
ritual
of the day

NL

Plaats emotie / ritueel sticker hier!

Beschrijf het ritueel zo gedetailleerd mogelijk. Wat gebeurde er? Wat was de context? Wie was er bij betrokken? Wat voor objecten werden gebruikt? Hoe voelde je je?

putting the baby in the
stroller, walking in the
town & waiting when
the baby fell asleep
in the stroller

coming home lether
sleep in the closed room.
having time for myself.

Speelde een (digitaal) object een rol in het ritueel? Zo ja, welke en

Chapter 8
Tada and
project closure

The final chapter of this thesis report details one last iteration of the Tada design concept. Then the recommendations are discussed. The limitations, discussion, and conclusion of the overall project will be explained after that. Finally, with the project closure of this graduation project, I share my personal reflection about the whole project on the milestones and the lessons learned.
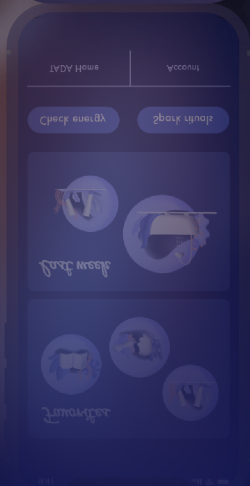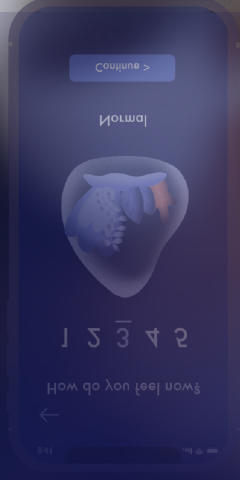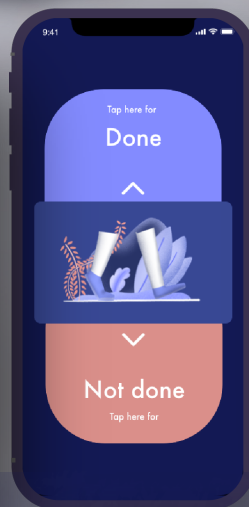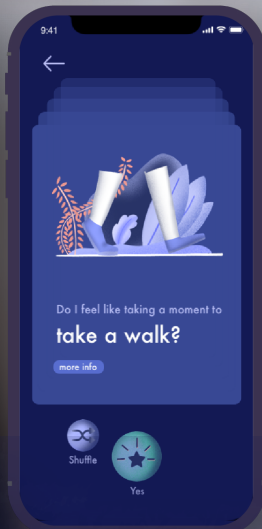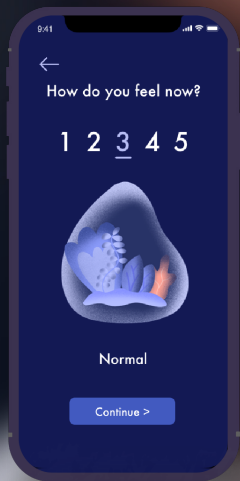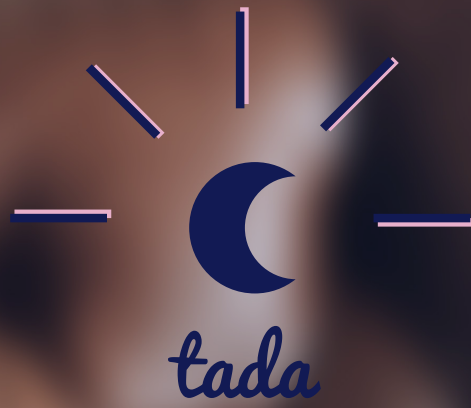
Tada and project closure

8.1 Tada concept after user evaluation

What are the adaptations and the further implementations of the Tada concept?

Purpose

With the collected insights from the user evaluation with the participants, I made a new iteration, mainly on the understandability of the core function and the general user flow. The next two pages shows the overview of the new adaptations.

Figure 8.1
Tada concept screens

Adaptations

Here, I will illustrate five of the frequent high problems that occurred during the user evaluation (ranged from high to low frequent usability issues). After that, adaptations have been made to make the user interaction with the Tada design more intuitive and more understandable. The whole list of frequent issues is detailed in appendix D.

1. Making the moment of friction clear

Figure 8.2
For all the visuals presented on these two pages means that the left image: Tada before adaptation and the right image: Tada proposed design
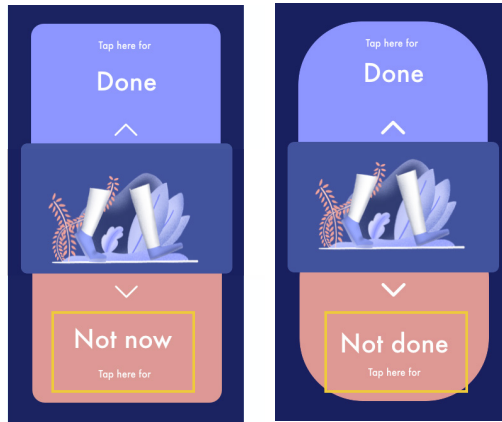
Two participants perceived that 'not now' did not reflect the meaning of the interaction it should have intended. And one participant did not see the 'not now' choice. I changed the words into 'not done'. Additionally, I made this moment of friction screen more clear through rounding off the corners.

### 2. Making the ritual suggestions more intuitive
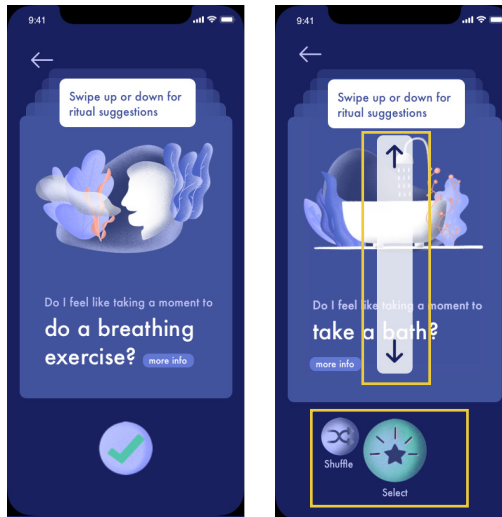
Some participants had difficulties with choosing the ritual. So to make this ritual suggestions more intuitive, I made the 'how to swipe' more explicit. A shuffle button was added. And lastly, the select button is made green, and both buttons are with text. To make the intended user know where to click when choosing.

3. Making the home overview more structured
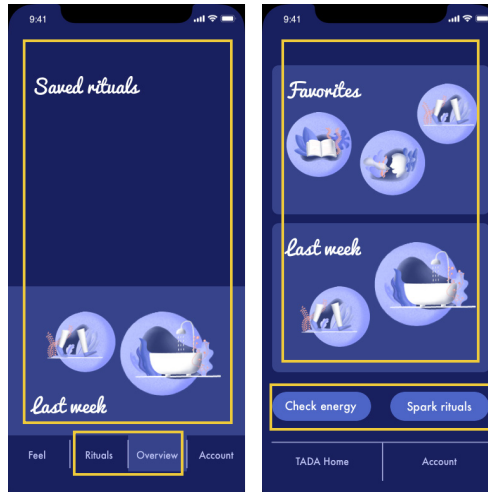
Another screen that confused participants was the overview screen. Now it is called the 'home'. I brought structure in the home screen of the Tada concept and made the core functions more explicit: which are 'check energy' and 'spark rituals'. By doing this, intended users will be more prompted to press.

4. Making the path direction clear
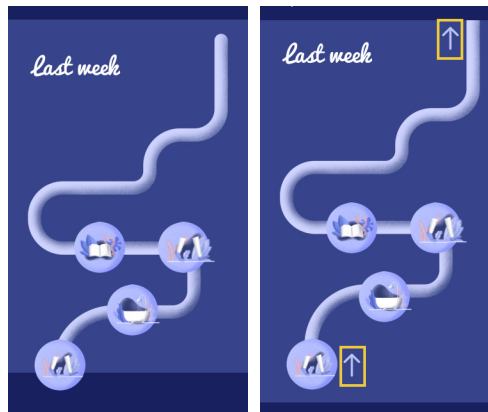
One participant pointed out that she was confused by the direction of the completed rituals in 'last week'. By adding arrows, the direction is easy to understand.

5. Making the numbers more noticeable
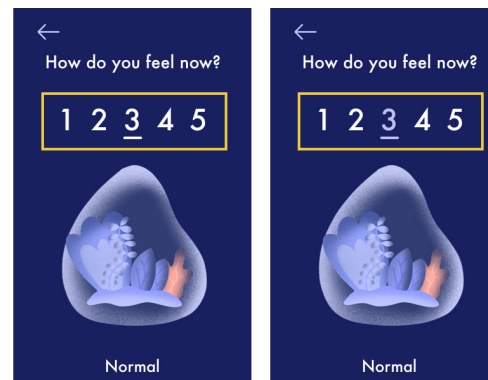
By making the color of the number a different one, it is more explicit this way and more intuitive to touch the numbers.

Further implementation of Tada design

Besides the small fixes presented in the previous two pages, participants gave useful insights into further implementations if the Tada concept. Below, I will list them and shortly explain why the intention of the implementation is good.

Make the ritual bubbles at the path more interactive
Several participants noticed that the application would give more a feeling of surprise of the bubbles of each ritual activity were, in a way interactive on the home overview.

Adjust the rituals based on the indicated energy level
Two participants said that if it would be possible, that the rituals can be adjusted to the indicated energy level during stage one.

Make it even more personal by adding quotes and personal messages
One participant mentioned that the more personal the Tada becomes, it feels like a ritual diary. It fits to imagine the use of the Tada application to be seen as a ritual itself.

Have a clear monthly overview
Besides suggesting rituals, Tada has the feature to check how the intended user feels before and after the ritual with the energy levels. This can be visualized in a monthly overview, like an energy tracker.

Make use of the Tada community
Like other existing digital designs that uses the hooked model, they make use of the community using the application. If Tada users could connect and perform rituals together, that would motivate the intended user, even more, to do rituals together with spouses, and friends.

Add own ritual
The Tada design will be even more personal if in the later stage that parents can add their rituals in the application. And it might inspire other people too.

8.3 Project closure

Overall recommendations

Looking back at the project with a critical perspective. What were the limitations of the used approaches of the process?

Design for parents with young children
The following points are recommended to take into account when designing for parents with young children in general.

Reach out in time
Because every working parent is busy, you and the test might not be a priority for them. There is a limited resource of participants who has time and lives nearby to do user tests with, especially in the evenings. Therefore, discussing and reaching out to them is time-consuming. Nonetheless, try to reach out to parents when they are not busy. Also, instead of meeting them in real person, try to reach them by email, Whatsapp, or through phone calls.

Test in their comfort zone
Go to the participants when they are unable to come to you. Test in their homes and appreciate their time and help. Testing in their own home environment makes them comfortable and more open to deliver feedback.

Ask for peer opinions about ideas
Turn to peers and friends that you can discuss your idea about. This can inspire you through a good concept and have a fresh perspective.

Design for secular rituals in the home environment
I suggest taking these points into account when designing for secular rituals.

For which specific context are you designing for?
It is of utmost importance that the context is specified and clear when you are designing for everyday rituals. Because each ritual is personal and special for each. By having a really specific focus on a current ritual or habit, even more potential in conceptualization can be unlocked. It can be difficult to design for a group of users with a solution that is not personal enough.

Look beyond tangible solutions
The first impression when you design for rituals is to think of tangible solutions. As a designer, I invite you to think beyond tangible solutions, and with the age of digitalization, digital solutions are more welcome than ever.

Can the Tada application be used for other groups than parents?

Adults
Besides parents, I can see that adults in general use this design. Especially the adults that are in need of mindfulness or people that need reenergized evenings. Or people that are curious about what they can do to energize their evenings for self-improvement or add a new ritual to their daily lives.

Children
Mentioned by several participants in the user test: If this activity suggestion could also be applied for suggestions of physical activities for children. So there is a surprising element for children too.

Limitations

Which limitations has the taken approach and the Tada concept?

Limitations of the project approach/method
The approach is to design for energize sleep-deprived parents with mindful and secular rituals in the evening. Here, I will discuss the limitations of the project approach used with the hooked model and part of the friction theory.

In general, the method of this project is guided by the positive design approach in combination with the double diamond model. That led to a design for rituals for sleep-deprived parents. This project has been a personal and intuitive process. By looking up and choosing different theoretical models to form healthy habits. It is hard to picture this whole process for people that have not gone through this process. While the method acted as a guide, I saw and utilized it more as an inspiration in this graduation project. Besides, I believe that every project has different methods and approaches for execution.

Once a fellow design peer mentioned: "being an empathic designer is to be able to stand in the user's shoes, but also to get out of their perspectives with the valuable insights." During the research phase of this project, I loved to use my time to read through the literature and observe parents and their behavior about rituals in their daily life. This exploration without filter resulted in being overwhelmed with so much qualitative data. I learned it is essential to take a distance from your users and switch off from the project from time to time, especially on the weekends. It takes time to digest, found, and observed findings, and filter out the information you need to continue the project. I have to admit that I fell into this trap and had a difficult time in filtering information, which made this project very intense.

Here, I will discuss the limitations of the Tada design concept.

Dutch market
As the idea behind Tada is to suggest rituals for people and for in this project, parents to be mindful and do energize activities, the question is how people, in general, will download or use this Tada application. For in this project, research on the market side has not been done yet.

Will the parents get hooked and unlocked by Tada?
Another question is if people will get hooked on the suggestion system of Tada. Everyone is different, and everyone reacts differently on behavior. So the question is if they will the Tada application but also accept the visual style and the new interactions of it.

It leaves a lot of freedom to fill in the space
Only the main feature of the Tada design is detailed with the moments of friction, but during the user evaluation, there were already comment on how Tada can be developed even further. So it leaves a lot of freedom to fill in the space for Tada.

Future research

What future research can be identified?

At the moment, Tada is far from a finished product. In this section, I would like to address the future research of the Tada concept and other interesting yet complex issues we as designers are dealing with.

For the Tada design, I suggest the following aspects:

First, I would recommend evaluating the interaction with the design again, but this time with more parent as participants. And to have a longitudinal study to see if parents improved their energy level in a more extended period by using the design of Tada. Ideally, a study of two to six months is recommended.

Secondly, the content of the rituals used in the current user evaluation was taken from the ritual collection from the research phase in the main study part 2. To enable supervised machine learning and suggest more personalized rituals over time, more research has to be done in this area.

Thirdly, if the Tada concept can be developed to a state that can be launched, what research and steps have to be taken to do that?

Apart from the Tada design itself, there are some interesting subjects I scratched the surface during the graduation project that can be researched on in the future.

First, the mindful behavior of the collective society and the individual self is a subject where research and design can delve deeper into, which means that personal energy care and wellbeing perhaps are related. Now I have not found literature about that.

Second, the potential of secular rituals design is unexplored. Combining everyday rituals with meanings and translated into design tools that help people to achieve a certain intention is not a lot of designers do to solve a design problem/opportunity. This can be researched in the future.

Thirdly, with the rapid growth of innovation in the digital landscape, extended screentime is inevitable. The correct behavior to use screentime is not apparent yet the common people. I believe as a designer that we have the power to solve this problem. This way, mindless and fixed behavior can be adjusted. It all starts of being mindful of the surroundings and the intention, that translates into behavior.

Lastly, I would like to mention the urge to current parenting behavior. Children see their parents as a role model and as the standard. I am wondering if there is a correct way of parenting that stimulates healthy and ethical behavior for the children. If I had the chance to go deeper into this research topic, I am curious what to discover about this topic.

Overall conclusion

What are the results of this project?

In the project introduction, the vision is **going from a mindless behavior to mindful behavior in the home environment for parents.**

To find a way to fulfill this vision, iterations through different researches and design exploration has been done. Through this opportunity-driven domain, I found out that being mindful about rituals in the evening was a key aspect for tired parents to energize themselves. Additional that rituals can bring pleasure in the daily, busy life. With these insights, secular rituals were collected and explored to see which kind of activities energized them.

With the insights of the research exploration, a design goal was created:

I want to create a modern secular ritual for working parents with small children (3 to 5 years old) to manage their personal energy care in the evening at home.

The current behavior of working parents in the evening I observed is the fixed routine that got their attention with screentime. The desired interactions I envisioned was to be conscious of their evening behavior without feeling bad. From the current situation and the interaction vision: **The desired interaction should look like … looking in a telescope with a view.** It resulted in desired interactions: **mindful, focus, surprise and personal.**

The design goal, interaction vision, desired interactions, and design criteria were used as a starting point for the design phase and resulted in the design: Tada. Tada is a mobile application that suggests evening energizing rituals for parents and invites them to slow down and be mindful. The idea behind the design comes from intertwining two behavior models: the Hooked model and the Friction model. Two moments of friction can make parents more mindful about their behavior in the evening. Tada meets the four desired interactions: surprise, playful, mindful, and focus.

During the user evaluation, an interactive prototype was presented to parents. Parents were positive and perceived the potential of the Tada design. In their opinion, it provides them a different way to take care of their energy levels in the evening while doing ritual activities that they liked to do.

Personal reflection

In this section, I will reflect on this graduation project in a chronological way and touch upon my personal learning points.

Even before starting this self-initiated graduation project, I have always been fascinated by what makes humans tick. I looked for a subject that was meaningful and challenging. In essence, a graduation project which was meaningful not only for me but for my intended users as well. A project where I could be challenged and display what I have learned during my DFI Master. I have to admit that during this project, I have a high learning curve about my self-development and as a designer. What my strengths and weaknesses are.

Log off
At the start of the research phase, I intended to explore as much about subject around rituals, sleep, and energy care as possible. I never took the time to switch off. And I was consumed by the amount of information and work I had to do.

Information overload
I love to explore and gather all the information about the subject, but I was overwhelmed by the information because I never filtered out the unwanted data. The nice thing after I have become a ritual expert is that I have taught myself a relaxing ritual to digest the absorbed information. Which works for me.

Design is a team sport
I thought I understood what it meant to graduate on your own. But after doing the graduation project alone myself, I had to admit that it was hard to make all the decisions by myself, even more, because this was a personal research project. It created intense pressure and negativity for myself, even without realizing. And it is so much more fun to work in design teams.

Design for your target group, not for 'you'
Even before starting the design phase, I had solutions and design directions already to work it out. But somehow I wanted to go further with concept 'A' as a designer myself, but then it would not be as useful for the intended target group. At that moment, I realized again that I was not designing for myself.

"just do normal"
Imperfectly, perfect. Overdelivering and bad time management ask for trouble. I sometimes did not realize that I was nitpicking on a consent form for like 20 minutes until someone talked to me. Design is not perfect. Although I know from myself, that I aim for perfectionism, but in real life, it does not work like that.

Dare to make choices

When you are not that self-confident, you question yourself a lot. For some time during my graduation project, I did not dare to make choices. I felt lost in a maze. Then during the conceptualization phase, I was not sure about designing a digital tool for devices. In a way, it was contradicting my project. Since I as a designer want people to be more mindful about digital screen time.

Underestimating the digital screens

"Oh, it is just a screen!". It requires a lot of detail and hard work to be able to design screens that work intuitively. And I am glad that I choose for the Tada design concept, to let myself experience as a designer, that developing a proper application can be time-consuming.

Take care of the three types of energy

When you are immersed in a project, never forget to take care of yourself as well. Our bodies need the energy to work. When they don't get it, we don't function well.

Creativity obstacle

At one point of the time, early in the year 2019, I could not find myself be creative, that I was never content. Therefore, I gave up trying and went to do other pressing stuff for the project.

Future-oriented design

Now that I look back and reflect a bit about the Tada concept is that I have not been future-oriented enough during my own project. Designers don't design for the now, but we design for the future. This is something I will take with me for sure.

Project is just a project, not my life

And with this last personal learning point in reflecting is that any project is just a project. Not my life. Just thinking about this makes me relieved already. There is no such thing as 'best' project, and secretly, I had too many expectations for myself. Nevertheless, I believe this is a good graduation project!

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Appendices

Appendix A

Introduction
Introductie

Dear parent,

Thank you for participating in my research of my graduation project which I am currently working in TU Delft, in collaboration with the Delft Institute of Positive Design.

The aim of this research study is to find out and collect your digital habits and before bedtime activities within the family, to improve a good night's sleep.

This study consists of two parts. **Part 1** is filling in the 'My daily digital habits and before bedtime activities in the family' diary study for five consecutive days. **Part 2** is filling in anecdote cards involving everything regarding rituals. After you complete the study, you send it back to me with the enclosed returning envelope. You will receive a small reward for helping me with my research.

By participating in this study, you will get insights and an overview in your own, your partner and/or your childrens digital and bedtime habits. You can use these insights to zoom in and adjust habits in your family to improve a good night's sleep within the family.

Personal information will be processed confidentially and at the end of the graduation project all personal data will be erased. All information collected from the written diary study and anecdote cards will be used for data collection and the end result will be in form of a design tool. You have the right to request access to the end result. If you decide not to continue with this study anymore due to any reason, please contact me.

Before you start with the study, sign the consent form (on the other side) and send me a photo of the filled-in consent form through WhatsApp or e-mail.

Finally, if you have any questions the study, feel free to contact me. My contact information is written at the end of this page.

With warm regards,
Lina Li

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linaleehee@gmail.com

Beste ouder,

Bedankt voor je deelname aan mijn onderzoek naar mijn afstudeerproject dat ik momenteel doe aan TU Delft, in samenwerking met het Delft Institute of Positive Design.

Het doel van dit onderzoek is om jouw digitale gewoonten en voor-het-naar-bed-gaan activiteiten in het gezin te achterhalen en te verzamelen om een goede nachtrust te verbeteren.

Deze studie bestaat uit twee delen. In **deel 1** vul je 'My daily digital habits and before bedtime activities in the family' de vijf daagse dagboekstudie in. **Deel 2** is het invullen van anekdote kaarten met betrekking tot alles wat met rituelen te maken heeft. Nadat je het onderzoek hebt voltooid, stuur je het terug naar mij met de bijgevoegde retourenvelop. Je krijgt een kleine beloning voor het helpen van mijn onderzoek.

Door deel te nemen aan deze studie, krijg je inzichten en een overzicht in uw eigen, uw partner's en / of de digitale en bedtijdgewoonten van uw kinderen. U kunt deze inzichten gebruiken om in te zoomen en de gewoonten in uw gezin aan te passen om een goede nachtrust in het gezin te verbeteren.

Persoonlijke informatie wordt vertrouwelijk behandeld en aan het einde van het afstudeerproject worden alle persoonlijke gegevens gewist. Alle informatie verzameld uit het geschreven dagboekstudie en anekdote kaarten zullen worden gebruikt voor het verzamelen van gegevens en het eindresultaat zal in de vorm van een ontwerptool zijn. Je hebt het recht om toegang tot het eindresultaat te vragen. Als jij besluit om niet langer door te gaan met deze studie, neem dan contact met mij op.

Voordat u met de studie begint, ondertekent u het toestemmingsformulier (zie andere zijde) en stuur je mij een foto van het ingevulde toestemmingsformulier via WhatsApp of e-mail.

Tenslotte, als je vragen hebt over de studie, neem dan gerust contact met me op. Mijn contactgegevens staan aan het einde van deze pagina.

Met vriendelijke groeten,
Lina Li

Consent Form
Toestemmingsformulier

Please tick the appropriate boxes / Vink de juiste vakjes aan	Yes	No
Taking part in the study		
• I have read and understood the study information dated [03/10/2018], or it has been read to me. I have been able to ask questions about the study and my questions have been answered to my satisfaction. *Ik heb de onderzoeksgegevens van [03/10/2018] gelezen of begrepen, of deze is voorgelezen. Ik heb vragen over de studie kunnen stellen en mijn vragen zijn tot mijn tevredenheid beantwoord.*	☐	☐
• I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time, without having to give a reason. *Ik stem er vrijwillig mee in om deel te nemen aan deze studie en begrijp dat ik kan weigeren vragen te beantwoorden en dat ik me op elk moment kan terugtrekken uit de studie, zonder een reden te hoeven geven.*	☐	☐
• I understand that taking part in the study involves providing information in the diary study and anecdote cards. *Ik begrijp dat deelname aan het onderzoek inhoudt dat er informatie wordt verstrekt in de dagboekstudie en anekdote kaarten.*	☐	☐
• I understand that taking part in the study that making photographs are optional. *Ik begrijp dat deelname aan het onderzoek optionele foto's gemaakt kunnen worden.*	☐	☐
Use of the information in the study		
• I understand that information I provide will be used for: *Ik begrijp dat de informatie die ik verstrek zal worden gebruikt voor:*		
• Report. *Verslaglegging*	☐	☐
• Publications. *Publicaties*	☐	☐
• Presentations (knowledge sharing). *Presentaties (delen van informatie)*	☐	☐
• I understand that personal information collected about me that can identify me, such as [e.g. my name or where I live], will not be shared beyond the study team. *Ik begrijp dat er persoonlijke gegevens over mij zijn verzameld die me kunnen identificeren, zoals [bijv. mijn naam of waar ik woon], zal niet worden gedeeld buiten het onderzoeksteam.*	☐	☐
• I agree that my information can be quoted in research outputs. *Ik ben hiermee eens dat mijn informatie kan worden geciteerd in onderzoeksresultaten.*	☐	☐
• I agree to joint copyright of the written information [diary study and anecdote cards] to Lina Li *Ik ga akkoord met het gezamenlijke copyright van de afgegeven schriftelijke informatie [dagboekstudie en anekdote-kaarten] aan Lina Li*	☐	☐
Future use and reuse of the information by others		
• I give permission for the data of the diary study and anecdote cards that I provide to be archived, so it can be used for future research and learning. *Ik geef toestemming voor de data van de dagboekstudie en anekdote kaarten die ik geef om te worden gearchiveerd, zodat deze kan worden gebruikt voor toekomstig onderzoek en academische doeleinden.*	☐	☐

Signatures

_____   _____   _____
Name of participant / Naam deelnemer   Signature / Handtekening   Date / Datum

I have accurately provided the information sheet to the potential participant and, to the best of my ability, ensured that the participant understands to what they are freely consenting.

_____   _____   _____
Researcher name / Naam onderzoeker   Signature / Handtekening   Date / Datum

Contact details for further information:
Lina Li, +31 6 3497 3037, n.l.s.li@student.tudelft.nl or linaleehee@gmail.com

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INSTRUCTIONS

1. Select a ritual or emotion sticker

2. Place the sticker at one of the anecdote cards (English or Dutch)

3. Describe the context of the emotion or ritual as specific as possible.

4. (optional) Make a photo to enrich the described experience.

PART 2

Dear parent,

For the upcoming five days, you are asked to share at least one anecdote about a ritual you do yourself, with your partner or with your children in leisure time at home. This can be about something you experienced on that particular day, but also be an established ritual or activity some time ago. Rituals are recurring activities you do in the ordinary day that gives attention to process as well to affect.

You receive one sticker sheet with rituals and emotions. These are just to inspire you and you can use them if you like, but you can also pick the empty stickers to describe another emotion or experience. Place the sticker on one of the description cards and describe the particular moment or feeling as specific as possible.

If the described experience can be enriched with a photograph, and if you are comfortable with sharing then please do so. Also write the number of the photograph in the circle in the lower corner on the description cards and send it through WhatsApp or email to me.

I want to emphasize that there are no wrong answers or anecdotes, you are the expert! Besides that you are only asked to share experiences you feel comfortable with sharing.

(flip this page over for instructions)

Place the emotion/ ritual sticker here!
Desribe the ritual as detailed as possible. What happened? What was the context? Who was involved? What object was involved? How did it make you feel? etc.

Did any (digital) object play a role in the ritual? If yes, what object?

(optional) Make a photo to enrich the described experience

Place the emotion/ ritual sticker here!
Desribe the ritual as detailed as possible. What happened? What was the context? Who was involved? What object was involved? How did it make you feel? etc.

Did any (digital) object play a role in the ritual? If yes, what object?

(optional) Make a photo to enrich the described experience

RITUAL

- *A ritual I love ...*
- *A ritual that makes us smile ...*
- *My favorite ritual of the day ...*
- *A weekly ritual that we look forward to ...*
- *A family ritual I value is ...*
- *My selfcare ritual is ...*
- *My special morning ritual is ...*
- *A ritual that my child enjoys ...*
- *A ritual before sleeping that I enjoy ...*
- *An upcoming ritual that we want to try ...*

EMOTION

- This ritual made me feel: **KIND**
- This ritual made me feel: Relaxed
- This ritual made me feel: Loved
- This ritual made me feel: Calm
- This ritual made me feel: *Joyful*
- This ritual made me feel: Present
- This ritual made me feel: Proud
- This ritual made me feel: *Grateful*

EMPTY STICKERS

AMBITIOUS	CONFIDENT	CARING	EASY-GOING	CREATIVE	STRICT
EMPATHIC	COMFORTABLE	HARD WORKING	CHEERFUL	GRUMPY	STRUCTURED
RELIABLE	PUNCTUAL	KIND	PATIENT	POSITIVE	FORGIVING
PRACTICAL	DIPLOMATIC	HONEST	OBSERVANT	FRIENDLY	SOCIABLE
AMBITIOUS	CONFIDENT	CARING	EASY-GOING	CREATIVE	STRICT
EMPATHIC	COMFORTABLE	HARD WORKING	CHEERFUL	GRUMPY	STRUCTURED
RELIABLE	PUNCTUAL	KIND	PATIENT	POSITIVE	FORGIVING
PRACTICAL	DIPLOMATIC	HONEST	OBSERVANT	FRIENDLY	SOCIABLE

DAY 5 - MY EVENING LEISURE TIME
DAG 5 - MIJN VRIJE TIJD IN DE AVOND

Exercise 1
Describe the specific activities you do to <u>put your child(ren) in bed on an ordinary evening after a working day</u>. Use the stickers to arrange the activities. Write it down yourself when the activity is not mentioned. Mark that moment with a X. And what is your energy level when you do these activities?

Opdracht 1
Beschrijf de spe...
op een gewone ...
de stickers om d...
de activiteit niet ...
het doen van de ...
En wat is jouw e...

Energy level — High / Low

Exercise 2.1
Describe the specific activities you do after you put your child(ren) in bed. Do you follow any routine or ritual? Use the stickers to arrange the activities. Write it down yourself when the activity is not mentioned. What sparks joy for you while doing these activities? Mark that moment with a X.

Opdracht 2.1
Beschrijf de specifieke activiteiten die je doet nadat je jouw kind(eren) in bed hebt gelegd. Volg je een routine of een ritueel? Gebruik de stickers om de activiteiten te rangschikken. Schrijf het op wanneer de activiteit niet wordt genoemd. Welke activiteiten zorgen voor vreugde? Markeer dat moment met X.

Child in bed/
Child sleeps

Zzz

Energy level — High / Low
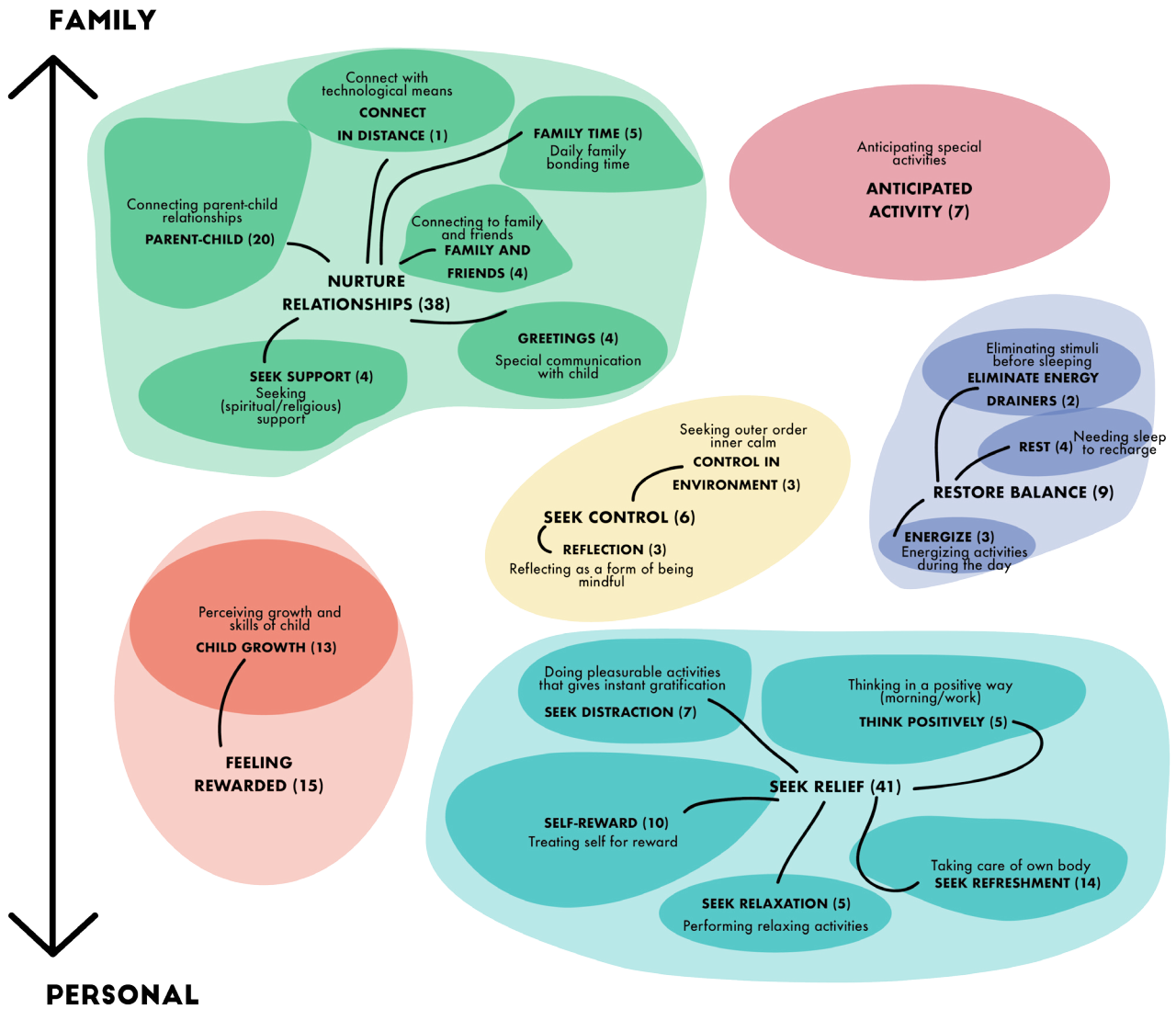
Explanation for exercise 2. Uitleg bij vraag 2.

Exercise 2.2
What do you usually do in your leisure time **after an ordinary working day in the evening before sleeping**? Mark the activities in a circle. You can link the activities by drawing a line to the timeline above.

Opdracht 2.2

- social media
- podcast
- read
- shower
- food
- watch tv
- meditation
- cleaning
- play games
- physical touch
- text
- coffee
- netflix/stream video
- sport
- meeting friends
- alcohol
- other,
- other,

(optional) ma...
(optioneel) m...

(optional) make a photo to enrich your explanation...
(optioneel) maak een foto om jouw uitleg te verrijken.

12

13

Appendix B

FAMILY

CONNECT IN DISTANCE (1)
Connect with technological means

FAMILY TIME (5)
Daily family bonding time

PARENT-CHILD (20)
Connecting parent-child relationships

FAMILY AND FRIENDS (4)
Connecting to family and friends

NURTURE RELATIONSHIPS (38)

GREETINGS (4)
Special communication with child

SEEK SUPPORT (4)
Seeking (spiritual/religious) support

ANTICIPATED ACTIVITY (7)
Anticipating special activities

ELIMINATE ENERGY DRAINERS (2)
Eliminating stimuli before sleeping

REST (4)
Needing sleep to recharge

RESTORE BALANCE (9)

ENERGIZE (3)
Energizing activities during the day

CONTROL IN ENVIRONMENT (3)
Seeking outer order inner calm

SEEK CONTROL (6)

REFLECTION (3)
Reflecting as a form of being mindful

CHILD GROWTH (13)
Perceiving growth and skills of child

FEELING REWARDED (15)

SEEK DISTRACTION (7)
Doing pleasurable activities that gives instant gratification

THINK POSITIVELY (5)
Thinking in a positive way (morning/work)

SEEK RELIEF (41)

SELF-REWARD (10)
Treating self for reward

SEEK REFRESHMENT (14)
Taking care of own body

SEEK RELAXATION (5)
Performing relaxing activities

PERSONAL

"After I put my daughter in bed, I take a warm and nice shower. Then I thouroughly do my skincare routine that I see as a ritual. When I eventually am in my clean payama in my soft bed. At that moment I feel reborn."

"Looking at pictures of my child. During working hours I sometimes look at the pictures of my daughter on my phone. Just a few minutes of her pictures reminds me how much I love her and gives me motivation to work hard.

"Before sleeping, I have my own time. It can be started after my son go to the bed. During this time, I do various things. It makes energy for me. If I can't get my own time before sleeping, I can't do well (child caring)."

A ritual that makes me feel relaxed: "Quiet time before sleeping is my ritual. Removing all sound makes me feel relaxed. So I can sleep well."

My special morning ritual is: "My morning ritual is clearing the house. Exactly, it is to do laundry and vaccuum. While I do these two things, I feel productive. I feel good after cleaning."

This ritual makes me feel relaxed: "Before I sleep, I listen to a podcast. The voice makes me very relaxed. This happens before bed, but also in bed."

SEEK RELIEF

Doing pleasureable activities that gives instant gratification

Thinking in a positive way

Taking care of own body performing relaxing activities

Treating self for reward

RESTORE BALANCE

Eliminating stimuli before sleeping

Needing sleep to recharge

Energizing activities during the day

SEEK CONTROL

Seeking outer order inner calm

Reflecting as a form of being mindful

A ritual before sleeping that I enjoy: "Every evening before I go to bed, I like to stretch my body. So when I sleep my body doesn't feel so stiff."

This ritual made me feel relaxed: "After I brought my daughter to school, I enjoy a delicious breakfast before work. When I eat, I watch content like Youtube, FaceBook and Instagram on my smartphone. It connects me with my friends."

Jogging: "To give myself more energy and to prevent a low energy moment, I started to jog again. First, once in a week and two weeks ago, twice in a week. I hope to get more fit and get more energy."

"I have my own time without family, 1-2 hours every week. This time is really what I need & want strongly. So it makes me feel joyful. During my own time, I consider my life, career, plan for week & month etc. I focus on myself. After I have 'me-time', I'm active and energetic again."

"Putting the baby in the stroller, walking in the town, waiting when the baby fall asleep in the stroller. Then coming home later and let her sleep in her room. Then it's housing time."

"When I feel slow or just not in sync with myself, I meditate. Sometimes without any sound. But sometimes I use Headspace to guide me. Often I feel energized again so I can take on the remaining day."

A ritual that makes us smile and proud: "Play music and watch my daughter dancing. She looks very funny when dancing to the music and makes us laugh."

A ritual that made me feel proud: "Everyday my daughter makes something, sometimes a drawing, sometimes an object made out of clay. For instance, today she coloredin a coloring page. Then she showed it to me with a smiling face. I am so proud of her, the drawing looks nice too."

This ritual made me feel kind: "Every Friday the garbage are being disposed. As usual I not only put my own garbage at the door, but also my neighbor's garbage."

"My husband made a blog when we moved to The Netherlands to show our family overseas that we are good in Delft. So I post at least once per week. Before writing, I think carefully about the subject. I am happy to see the comments after posting. All things related with posting makes me grateful for my current life."

This ritual made me feel joyful: "Every weekend on Saturday we try to do an outdoor activity. If the weather is bad, then we go to the mall or a museum. This is precious family time, because the whole family is involved. And it makes me joyful to have time with my family"

"Before the children really go to sleep and I put out the light in their rooms, we always have a short moment to pray to God. We do this a frequent as possible. This lets me realize to appreciate that we are blessed!"

FEELING REWARDED

Perceiving growth and skills of child

ANTICIPATED ACTIVITY

Looking forward to a future event

NURTURE RELATIONSHIPS

Connecting parent-child relationship
Connecting in a distance

Daily family bonding time
Connecting to family and friends
Special communication with child
Seeking (spiritual/religious) support

"My daugther went to a swimminglesson. I am super proud of her. because she swam so well. Her niece was distracting her and wanted to play. But she just swam. Me and my son were watching as she was swimming. Just proud of her."

This ritual made me feel joyful: "Watching my child riding a toy horse in the morning."

A weekly ritual that we look forward to... "Is planning a trip for in the weekend. Doing this makes us anticipate and look forward. Then we go to the towns or the countryside."

"Every morning when I get up to start the day I give a 'good morning' greeting and kiss to my little girl, then I will receive a 'good morning' smile back. If I am off to work already and she is still sleeping, then I will receive the smile in a photo from my partner through Whatsapp."

"A ritual that my child enjoys: Every night I read a bedtime story for my daughter before she sleeps in bed. She chooses her own book for me to read. Her favorite book is 'The bossy tin soldier'. I intensely enjoy reading the story for her and she also enjoys it."

"I played with my two children before they slept. Then I read a bedtime story to them. They where slowly trying to fall asleep. Then my husband came home, he gave the children kisses and hugs before they really dozed off. I felt so loved and proud of my family."

Appendix C

Sparking inspiration

This section elaborates and explores existing products, services and activities that inspired me in the ideation process. The goal of looking at existing designs is to see what is already on the market that energizes people.

The question for exploring inspiration is as follows:
What existing designs are used in the evenings to energize people?

The criteria used for the six products is that they are used mostly in the evening and makes them more conscious and mindful. It should also inspire the design goal and the desired interaction mentioned in Chapter 4.

The list on the next page describes strenghts and weaknesses of the product in relation with the design goal and what I want to bring along as inspiration. Strengths is displayed as a '+' and weakness is displayed as a '-'. Interesting points were taken into account.

Takeaways
After a brief analysis of the six products, these products and services improves a form of behavior for its user. As the products take care of one activity at one moment, I realized that the digital services are more versatile and accessible for daily life interactions. Figure 5.5 illustrates the matrix with the six different products.
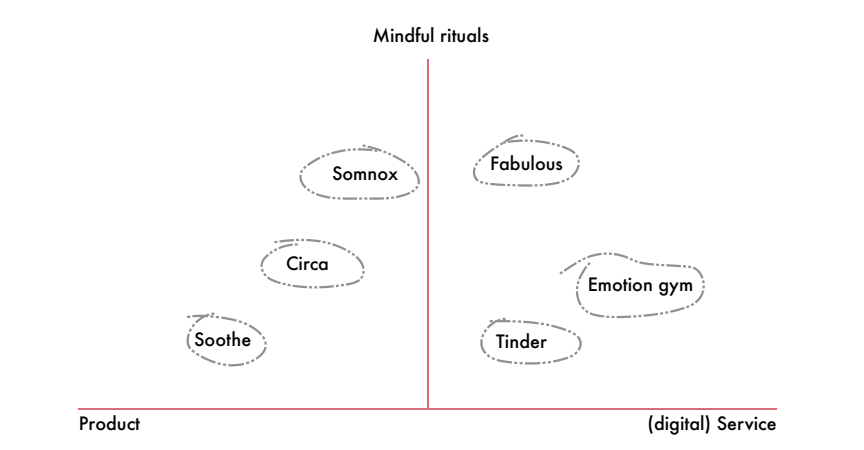
Soothe (concept) - A solar panel nightlight in the shape of an hourglass for children

\+   the hourglass form represents time, without an actual hourglass

\-   the product is mainly aimed for children

Interesting: a trigger/nudge for action can be to visualize time

Somnox - The huggable sleep robot

\+   stimulates breathing regulation, soft textile invites comfort. Somnox can be used in the evening (personal time before sleeping)

\-   heavy, passive, intended for the sleep time

interesting: created and acts like a baby to create intimacy, a new way of interacting with robots
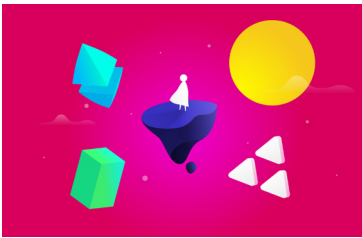
Fabulous - Digital application for daily mindfulness and healthy habits

\+   the app gives the user an overview, records goals, challenges and more to create a more healthy behavior in a sustainable way

\-   needs a trigger in physical form, notifications can be annoying

interesting: accessible and ease of use for the intended users

**The emotion gym - A gym that trains emotions**

\+   good example of taking care of mental and emotional energy

\-   high threshold to join for perople that feel awkward, uncomfortable to show emotions

interesting: people do it in a group (community), you get the feeling that you are not the only one with this issue

Circa - An alarm clock with white noise sound, so deep sleep is enhanced

\+   taking care of personal energy care, rest and sleep

\-   can only use in the bedroom and when you are going to sleep

interesting: pulsating lights, white noise and other sensors incorporated in the alarm to trigger and grab attention
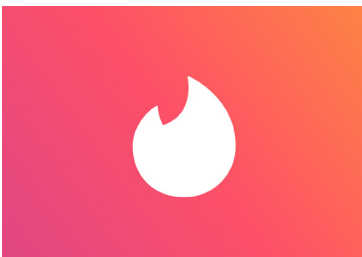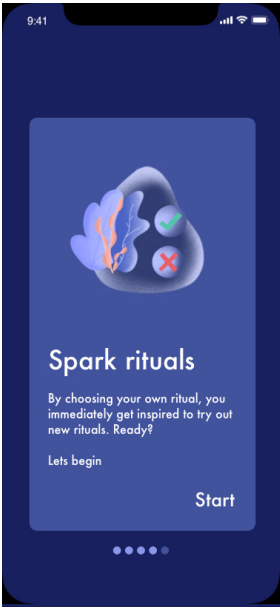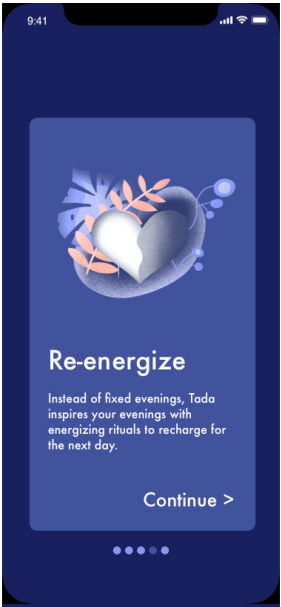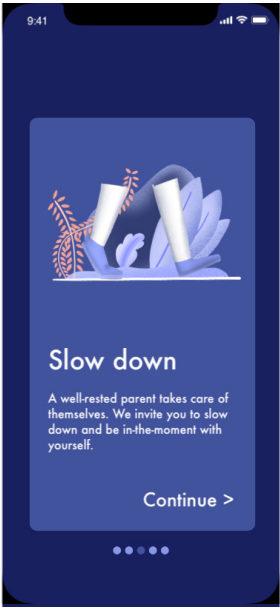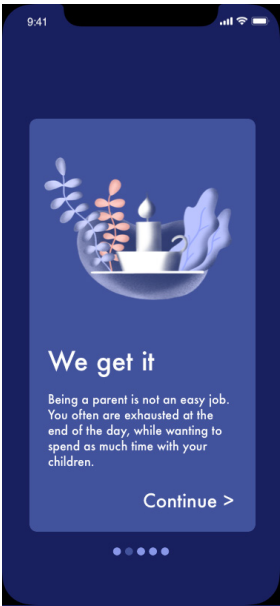
Tinder - A popular dating application

\+   easy accessible on any devices, this application uses the hooked model described in Chapter 2.

\-   unconsciously makes you use the application more often, the intended user gets hooked on it
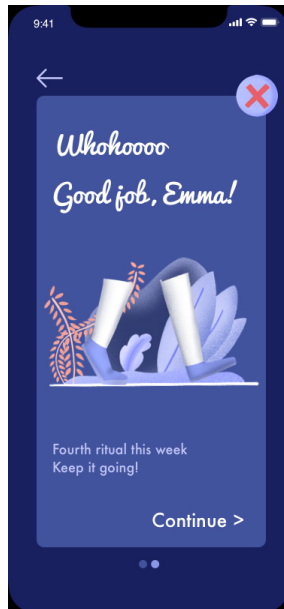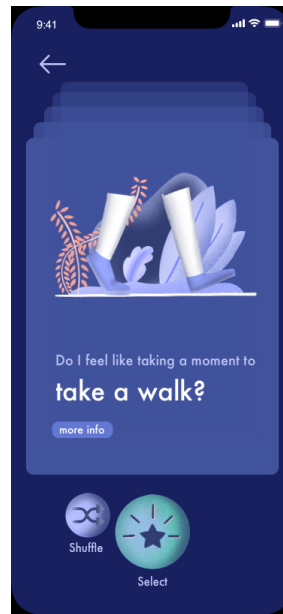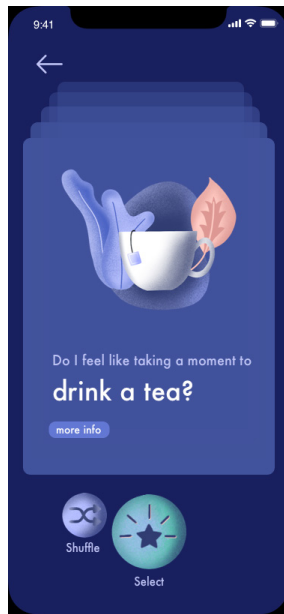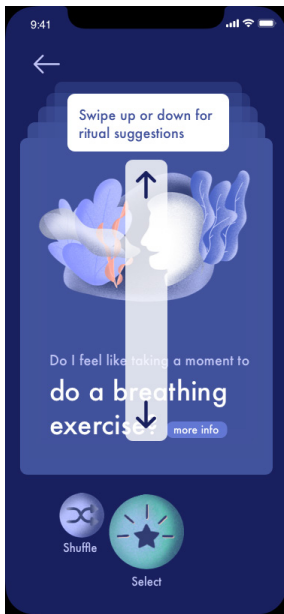
Interesting: This model can be used to unlock/unhook the existing behaviors

Appendix D
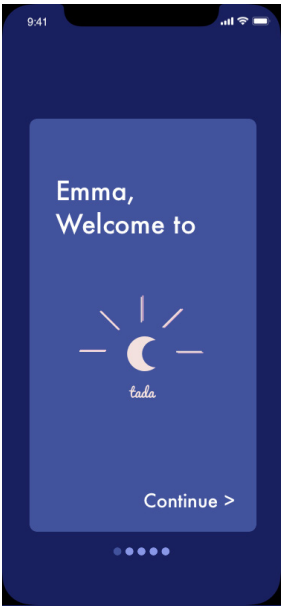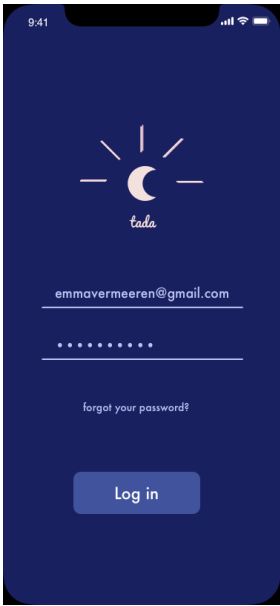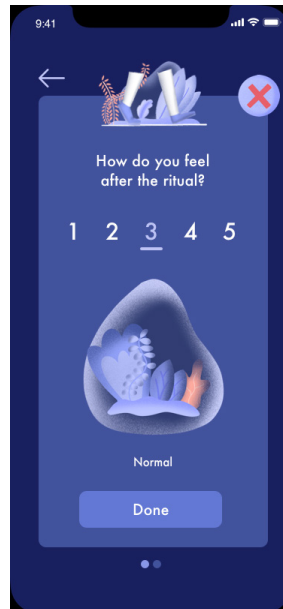
Appendix E

Script procedure

Hello, my name is Lina. Thank you for helping me by participating in the project today. I am working on the design of a new mobile app called Tada that will recommend people to try out new everyday rituals to energize their evenings.
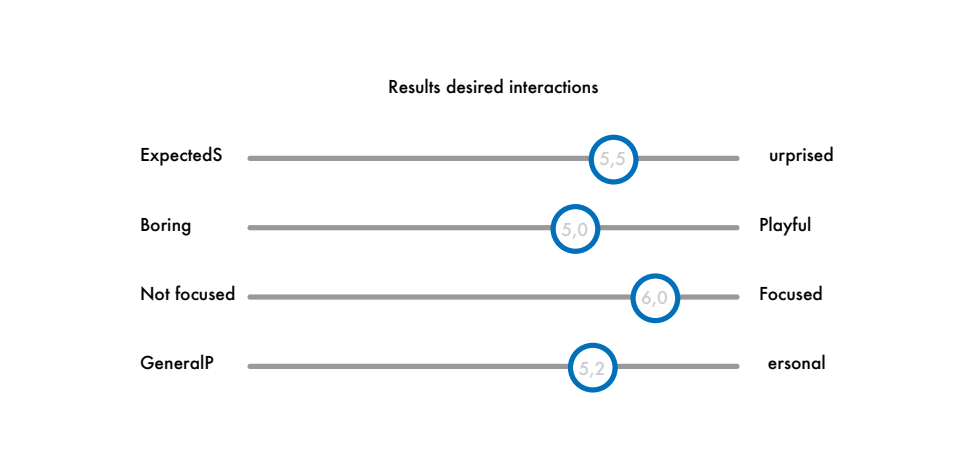
Today I am running some usability tests that will help me assess the ease of use for the feature – finding out if people can easily understand how it works.

I have an initial design of the app that I'd like to share with you. Now, this is just a prototype – it is a limited version of the feature that'll give you an idea of what the full version might eventually be like. It has limited functionality, but you will be able to navigate around and accomplish certain tasks.

To begin, I will ask you complete a few tasks based on specific scenarios. I'll observe you as you go through the app. Again, remember this is just a prototype, so only some parts of the app mockup will be fully functional. And there are no right or wrong ways to do things regarding the task completion. Just do your best to complete each one. While working on your tasks, I encourage you to voice any opinions or concerns you have – talk me through it as you go and explain the actions you take. I'll be taking notes and recording the conversation just for my own reference.

Also, as we go along, I'll provide you with some details about which selections to make when answering certain questions, since not all of the links work, And one last thing to mention, you'll notice that for this test you'll be logging in as someone named Emma Vermeeren.

Do you have any questions? Please feel free to ask as we move through the test as well. Shall we begin?

Results desired interactions

ExpectedS	——————●(5,5)——————	urprised
Boring	——————●(5,0)——————	Playful
Not focused	——————●(6,0)——————	Focused
GeneralP	——————●(5,2)——————	ersonal

	P1	P2	P3	P4	P5	P6	SUM
Login **TASK 1.1**	33		3	3	3	3	18
Onboarding **TASK 1.2**	3	3	3	3	3	3	18
Feel **TASK 1.3**	3	3	3	3	3	2	17
Suggestion **TASK 2.1**	3	3	2	2	2	3	15
Completion **TASK 2.2**	2	3	3	3	3	3	17
Suggestion **TASK 3.1**	3	3	3	2	3	3	17
Not complete **TASK 3.2**	1	2	2	3	3	3	14
Overview **TASK 3.3**	2	2	2	3	3	3	15

3: User can perform task quickly and with no trouble
2: User can perform task, but has some struggles
1: User can't perform task

COMPLEET

LOGIN ONBOARDING FEEL SUGGESTION 'YES' 1 DONE SUGGESTION 'YES' 2

didn't know that numbers were touchable

tapping numbers is not intuitive

didn't understand how to swipe up or down

more instructions 'first time use'

thinking that swiping up or down is choosing already

swipe up or down - same order, but shuffle button

'prefers same order, but likes a reshuffle

confirmation button is not clear

add text with the ♡ button

the priority of main text is not clear

NOT DONE

OVERVIEW

'not now' does not reflect intended meaning

'not now' does not reflect intended meaning

didn't click 'not now'

'reassuring message' should be more clear'

saved & last week rituals are contradicting

icons were touchable + last week too

the overview page is not intuitive

the word 'tab' on ritual is unclear

last week 'path' is not intuitive

not clear where the path/timeline begins

last week screen - know how I feel after the ritual

no monthly overview

more options of rituals + more info

more information about the ritual

P1
P2
P3
P4
P5
P6

USABILITY ISSUES BY FREQUENCY