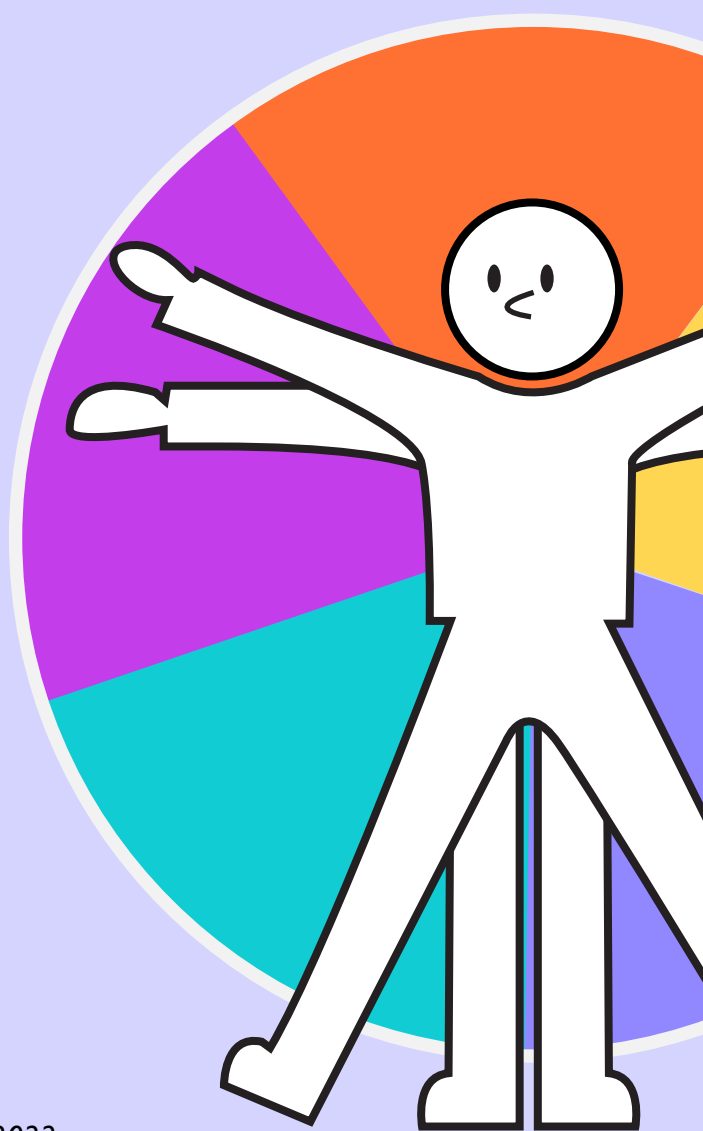


My Coping Toolkit

*“Reframing the way we
deal with stress”*



*Master Thesis, July, 2022
Miriam Ayala Cruz*

My Coping Toolkit

"Reframing the way we deal with stress"

My Coping Toolkit
Reframing the way we deal with stress

MSc Design for Interaction
Miriam Ayala Cruz

July 2022

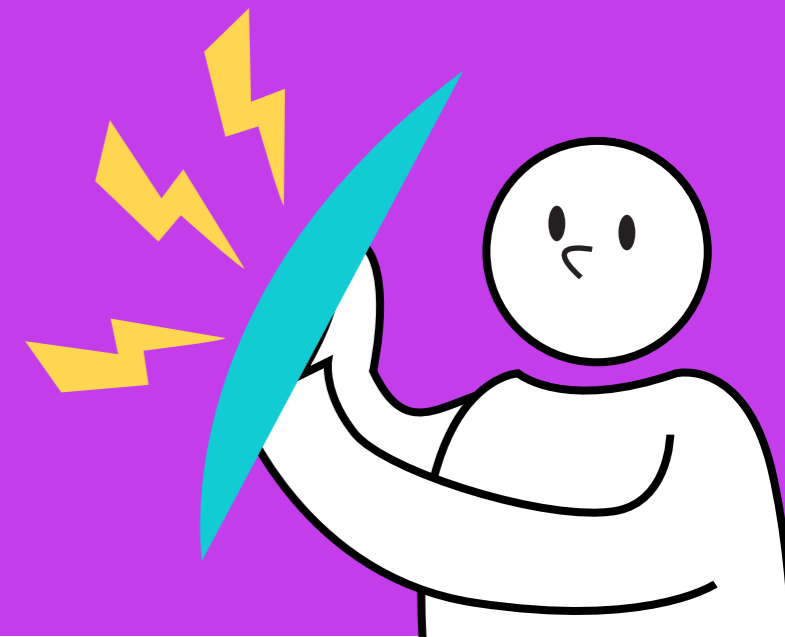
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Master Thesis, July, 2022
Miriam Ayala Cruz



Preface

Coming to Europe was one of the biggest decisions I ever made in my life, and being part of TU Delft inspired me as a designer to continue exploring the possibilities within the scope of Human-Centered Design and Behavioral change.

My personal motivation for this graduation project is based on the belief that mental health is essential in every environment. My experience of overcoming anxiety by going to therapy and receiving support from the people who love me inspired me to develop this design.

I believe that with the right amount of guidance and support human beings have the opportunity to overcome anything, no matter how menacing it might be. Two of my life teachers (my parents) taught me that "You can't be ready for everything but you can prepare for anything"

Thank you to my mentors Jos and Natalia for your constant guidance and support when I was struggling with the whole process

Thank you to all the testers involved in this project for their valuable contribution. A special mention to my friend Inés who assisted me with recruiting and breaks to recharge at the library.

Thank you, mom and dad, for teaching me the true meaning of unconditional love and support.

To all my family for the good memories that always accompany me wherever I go and light my way when I feel hopeless and homesick.

To my friends and sisters Sonia, Melissa, Ruth, Jimena, Frida, Edna, Andrea, and Sandy who are living the dream all over the world and building dreams.

To my baby cousins Adriana, Mariana, Mauricio, Carlos, Braulio, Valeria, and Ricardo, who are starting to find a way in this interesting world.

To my housemates and friends who became the family I chose and gave me so many amazing moments while living under the same roof.

To my coffee and hardworking people who accompany me and saw me dying at the TU Library.

Executive Summary

Stress is a normal phenomenon human beings experience throughout their lives, however, if people let its effects prolong more than necessary, it can manifest in other ways: pains, sleep deprivation, disease, etc. People learn to endure these stimuli by facing and learning from them through their Coping Behaviour, yet this process is not always effective and can even provoke people to increase the impact of the stressor that may even affect their wellbeing further.

The long-term effects of stress, both physical and psychological, are of increasing concern with some even arguing that they constitute a health crisis. People often rely on their set of abilities and experience to solve this crisis, even so, there are many existing stress management techniques designed and tested to efficiently solve the most common sources of stress.

But if effective stress management solutions exist, why do we find more people with anxiety, depression, and other health conditions which are known to be associated with prolonged periods of stress?.

An intervention is proposed within this project, utilizing design methodologies and Self-Experimentation, that helps people enhance their stress abilities and Coping Behavior for their particular needs and life situations.

Factors like context, personality, and abilities of an individual will make the outcome of the stressor effect diminish or increase, strategies which cannot reflect the unique circumstances of an individual are therefore unlikely to be as effective. There is a research gap to make existing stress management techniques more sympathetic to people's personal traits and needs, in this sense design methods (like sensitizing materials and mapping) can help explore possibilities to make this experience personalized and adaptable to the person.

To address this research gap, this project: "My Coping Toolkit; Reframing the way we deal with stress", provides a set of materials focused on encouraging people to try strategies to enhance their existing CB.

During this project, important information about the origin of stress and how it is communicated to people was explored, at the same time the exploration and creation of materials and content with users revealed the importance of providing versatile material that evolves with the person.

The project guides people through information about the importance of stress management, it fosters reflection on current Coping Behavior, and encourages

people to go out of their comfort zone to try alternative strategies and tools that they can incorporate to their benefit.

When testing design interventions, the need to incorporate Sensitizing Materials for stress management became evident, although it is not an intervention that solves the effect it produces, it helps the person to detect things in their environment that are affecting their well-being.

On the other hand, when using Self-Experimentation principles people made iterations consciously and with guidance. The findings of such iterations produced results that were valuable in the elaboration of an effective toolkit with strategies that can be evaluated by participants. Through a process of personalization, the owner can decide which strategies to employ and when to use them.

In conclusion, this thesis has shown how design methods can provide people with materials that can be tested and adapted to suit their individual needs. Such interventions allow people to know their strengths and weaknesses and work further on them before the next stressful event takes place.

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Chapter 01. Introduction

In this chapter, a general introduction of the project is provided with an overview of all the stages involved.

1.1 Relevance of the project

We all want to keep balance in our lives, however, we don't live statically, changes in our daily environments are inevitable and the need to know how to restore balance when faced with external stimuli is a lifetime effort.

Organizations like the American Psychological Association (APA) and the World Health Organization (WHO) recognize that we are going through a stress crisis (this problem was already visible before the COVID-19 crisis), according to their studies **6 out of 10 adults experienced stress on a regular basis** and 8 in 10 adults (78%) say the coronavirus pandemic became a significant source of stress in their life. (American Psychological Association, 2020; World Health Organization, 2020a).

Stress is a natural response every person experiences throughout different moments in their lives. This phenomenon can be explained as when the demands of ones environment surpass their ability to alter the situation; **the events that provoke stress are known as "stressors"**. In other words, a stressor is a demand made by the environment that upsets the balance, thus affecting well-being and requiring action to restore balance (Glanz et al., 2015). A stressor can also be the anticipation of such demand (Sapolsky, 2004).

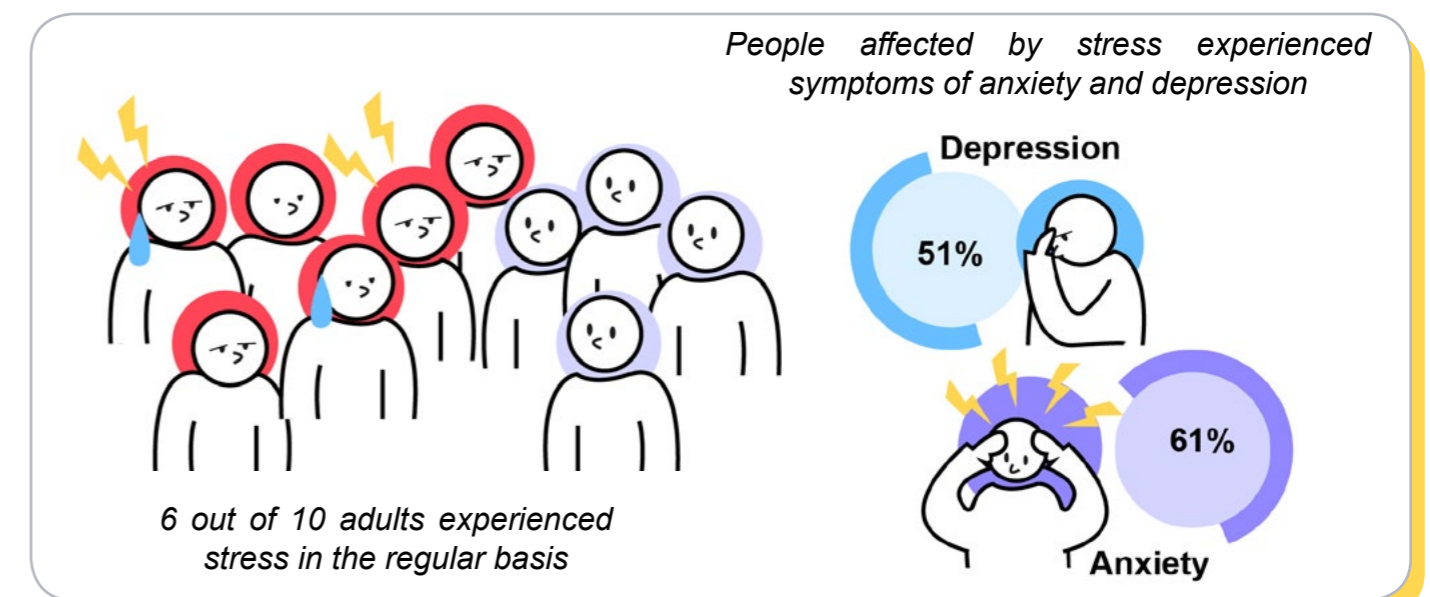
Factors like context, personality, and the abilities of an individual will make the outcome of the stressor effect diminish or increase. Most of the time untreated stress turns into health phenomena that need later intervention from psychologists, psychiatrists, and other health professionals.

Stress levels increased after the pandemic, in contrast, the decrease in social activities seems to have had a partially positive effect on stress levels, as more than 13 percent of the respondents said they experienced a lower amount of stress during the pandemic (Figure 1). (Statista, 2021-2022)

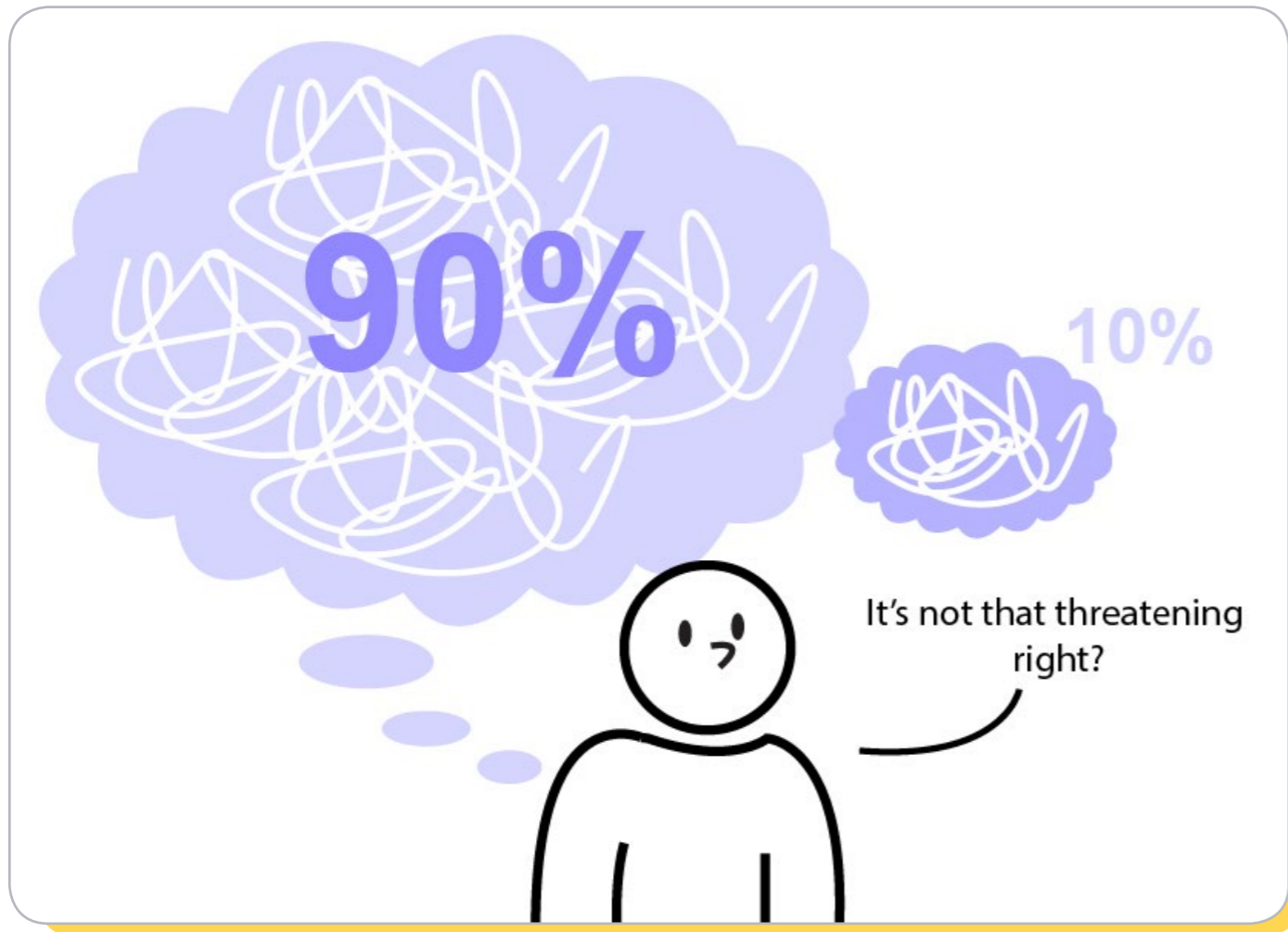
Mental Health Foundation UK demonstrated that in 2017 (before the pandemic) **people affected by stress experienced symptoms of anxiety and depression**, the sample chosen was 4,619 participants from which 51% of adults reported feeling depressed, and 61% reported feeling anxious.

Of the people who said they had felt stress at some point in their lives, 16% had self-harmed and 32% said they had had suicidal thoughts and feelings. Regarding behavior, 46% of the people participating in the sample reported they started consuming too much or eating unhealthily due to stress. 29% reported that they started or increased their drinking, and 16% reported that they started smoking or increased their smoking. (Mental Health Foundation, 2020).

This project will explore possibilities to help people find their way to balance the effects of stress in their lives.



[Figure 1. Stress and statistics]



[Figure 2. Overthinking]

The stress response can become more damaging than the stressor itself, especially when its sources are psychological. According to Gary Marcus, Professor of Psychology at New York University, a recent laboratory study at Yale and Pennsylvania State University found that over 90% (Figure 2) of the things we worry about never happen; worrying for at least for 5 minutes is enough to bring down a person's mood (Marcus, 2009).

This has an impact on our health, especially after constant exposure. If this exposure remains untreated by a health professional it can manifest in other ways (anxiety, depression, etc.) People are not always aware of the impact the stress response has on their lives until the appearance of physical pain, mood changes, sleep deprivation, and more (Alday, 2022; Sapolsky 2004).

Chronic effects from stressors can potentially make us sick or can increase the risk of being sick, due to the amount of energy and resources the human body needs to use to boost the response and restore its balance. This process makes people more likely to fall victim to several infectious diseases, and be less capable of combating them once they have them (Etapé 2018; Sapolsky 2004).

People face the stressor and its effects through their Coping Behavior (CB). CB can be explained as the set of abilities and knowledge people acquire after adapting to the stimuli of the environment.

To understand how CB is manifested, Lazarus and Folkman explain in their "Transactional Theory of Stress and Coping" four types of strategies to overcome stress: 1) Problem Management, 2) Emotional Regulation, 3) Meaning Based Coping and 4) Dispositional Coping Styles (Glanz et al., 2015; Lazarus & Cohen, 1977).

For this project, Problem Management (PM) and Emotional Regulation (ER) strategies will be used to make interventions.

1.2 Project Aim and Scope

My goal for this project is to design a set of materials to make my users feel confident to try new ways to confront their daily work-related stressors by implementing emotional regulation and problem management strategies

There is a gap to make existing stress management techniques appealing to people's personal traits and needs, in this sense design methods (like sensitizing materials and mapping) can help explore possibilities to make this experience personalized and adaptable to the person. This could help prevent the deterioration produced by stressors and show people how to develop their Coping Behavior strategies to improve their self-efficacy (SEF) (Bandura, 2010).

Without proper guidance, people have fewer opportunities to overcome the stressor and its effects, which eventually decreases their SEF. This will generate frustration leading to more stress (Wethington et al., 2015; Weiner et al., 2010).

One of the research goals focuses on providing a guided experience using Self-Experimentation (SE) combined with Coping Behavior (CB) strategies to enhance SEF. SE can improve outcomes within the Appraisal Stages by guiding and motivating people to try CB strategies

to boost their capacities instead of forcing adaptation through activities that are advertised to larger and generalized audiences.

SE makes testing CB strategies a more adaptative and personalizable experience adding value to the person employing these design tools. For the next step, the aim will be to focus on answering how-to guide people in self-experimenting CB strategies to enhance SEF?

Two groups were chosen to conduct stress-related research and test a final design. The first group is composed of TU Delft students and the second one is of IDE working staff. The first was selected because they are an accessible and flexible group to approach, which allows more iterations while exploring sensitizing tools.

On the other hand, the final designed intervention will be focused on IDE working staff; the decision for this target group was that they experience different sources of stress within their workplaces and their schedules are quite irregular, which adds more complexity to the materials.

1.3 Project Challenges

Stress is a widely researched topic and from that research existing and tested strategies to manage stress have been developed/ discovered. However, a way of encouraging people to try such techniques and adapt them to their daily routines is missing.

One of the challenges within the scope of the project is How-to boost this interest in implementing new ways to improve the stress response.

Another challenge is focusing on the individual's SEF instead of each source of stress. Stressors are everywhere in the environment and are perceived differently by people which makes the experience almost unique (what stresses a subject might not be stressful for another)(Wethington et al., 2015; Weiner et al., 2010). How to provide a way for people to express themselves through sensitizing methods to find and narrow a way to make an effective intervention is key.

These differences make it difficult to make interventions on each source, nevertheless, the focus of the research can be pointed to the conditions around people that lead

them to choose certain Coping Behaviour. The emphasis on Self-experimentation will allow personalizing the interaction between the user and the final proposal.

The testing should be incorporated into a situation in which the person is already experiencing stress rather than provoking it, the consequences of conducting testing with variables that are ethically questionable for the tester's health can bias the results.

1.4 Research Questions

The main research question for this project is “How can Design for Interaction methodology and Self-Experimentation can assist in the creation of a flexible and adaptative tool for people to increase their SEF (using their abilities and preferences) to manage their daily work stress? In addition to the Research Question more subquestions will be answered throughout the course of the project:

- How to provide guidance for people utilizing SE and CB strategies to enhance SEF?
- What are these stressors (acute and chronic)?
- What are the contexts that define the stressors?

- How to make the stressor obvious so people can choose a clear strategy,
- How much influence does the experience of facing previous stressors have on an individual when facing new stressors?

1.5 Process Overview

This project is divided into four stages, this organization was inspired using the Double Diamond design process created by the British Design Council (2019). Overall the idea of using this method was to have the opportunity to iterate in some stages to improve the outcome of the final design proposal.

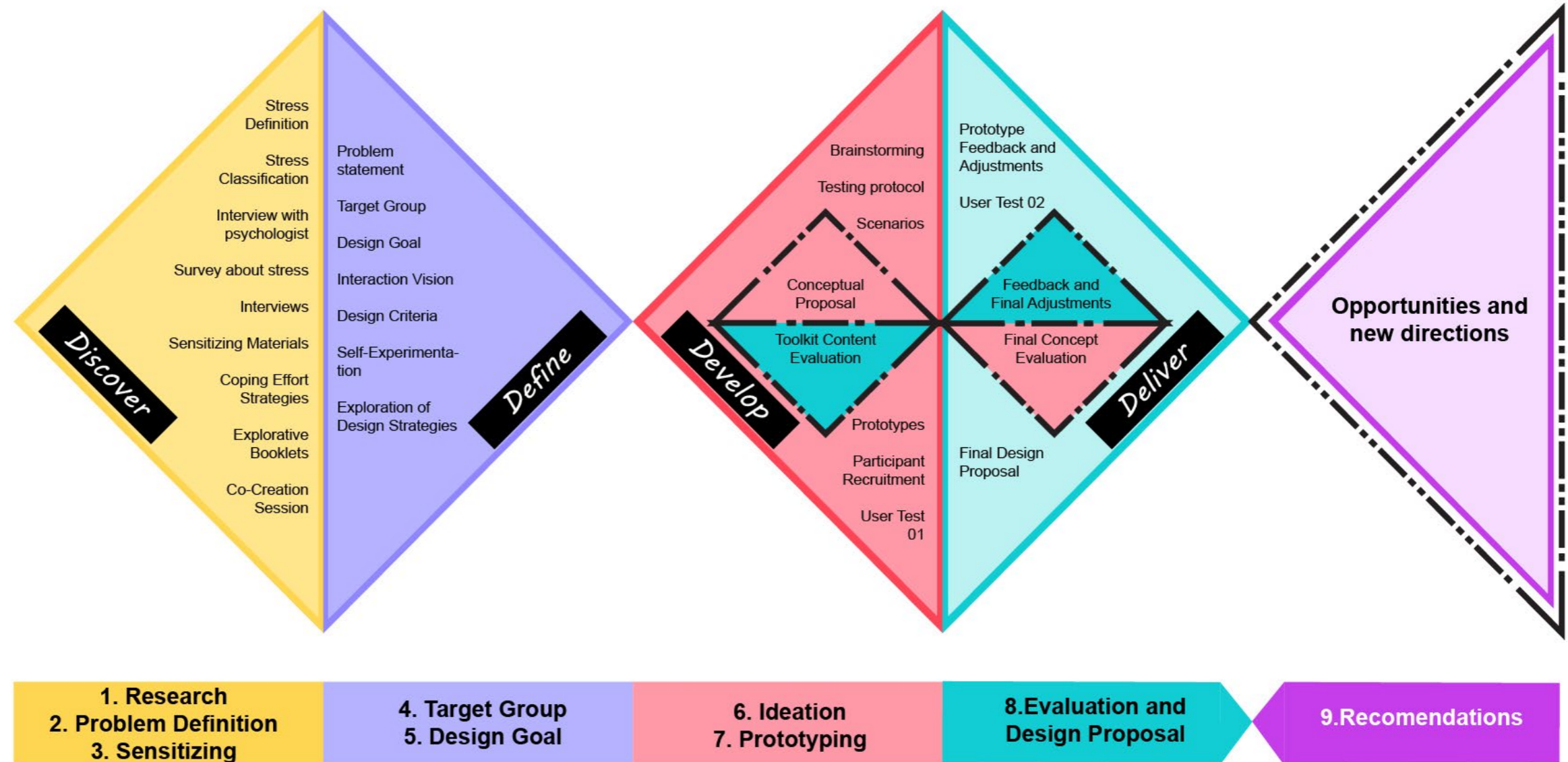
The first stage “Discover” will be focused on exploring how people perceive and experience stress by utilizing sensitizing tools, in addition, these tools will focus on discovering people’s coping behavior and needs while facing stressful situations.

The second stage “Define” will focus on structuring a design goal and interaction vision focused on the needs

and context of the selected target group, in addition, the interaction vision on managing stress through SE will be merged to start the conceptualization process.

The “Develop” stage will focus on shaping the concept to create prototypes that fit the intentions and values of the design goal and interaction vision, in addition, space for iteration will be considered after the user tests

The fourth and final stage “Deliver” will show an optimized and focused design proposal based on the results from previous stages. An overview of the process can be found in [Figure 3](#).



[Figure 3. Design process and stages]

For this first part of the project, general information was gathered about the definitions and theories around stress, followed by additional information from psychologists, and analysis from students and workers. This stage aimed to narrow down the topic in a concrete direction in which design methodology and tools can be implemented to improve the response to stressors.

2.1 What is stress? And where does it come from?

Stress is a natural response that emerges when people are confronted with changes or elements in the environment called stressors which can be **anything in the outside world creating physical, homeostatic, psychological, or emotional disbalance**. Stress can also be the perceived anticipation of a confrontation happening (Sapolsky, 2004).

stressful event that occurs (see **Figure 4**) (Alday, 2022; Glanz et al., 2015; Sapolsky, 2004).

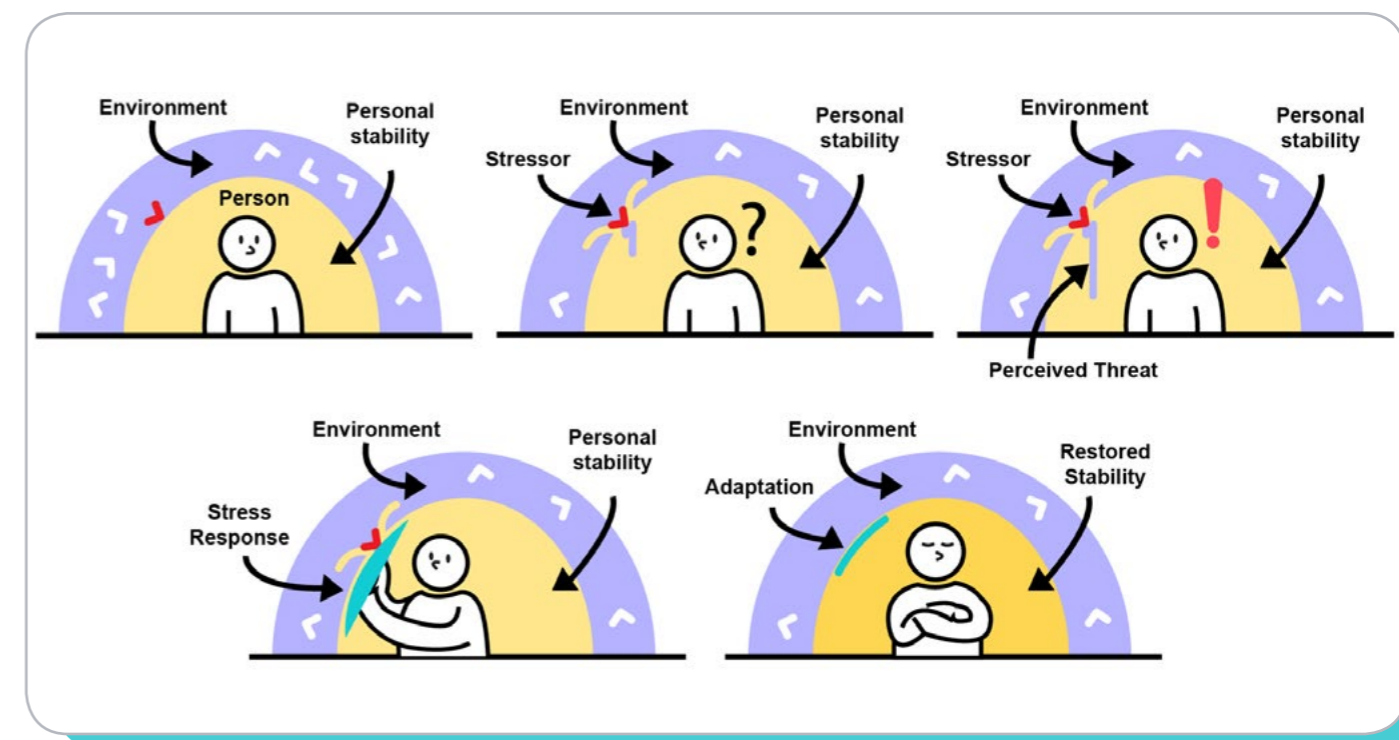
CB is the automatic actions or set of actions taken in dealing with stressful or threatening situations and this type of behavior can have a positive or negative effect on the individual state.

To restore balance the individual affected will make use of a stress response known as Coping Behaviour (CB), these actions eventually help the individual to adapt to his environment and prepare a base when the next

Chapter 02. About Stress and Coping.

Findings from literature research.

In this chapter findings from the literature research about stress, and how it is classified, treated, and studied are presented.

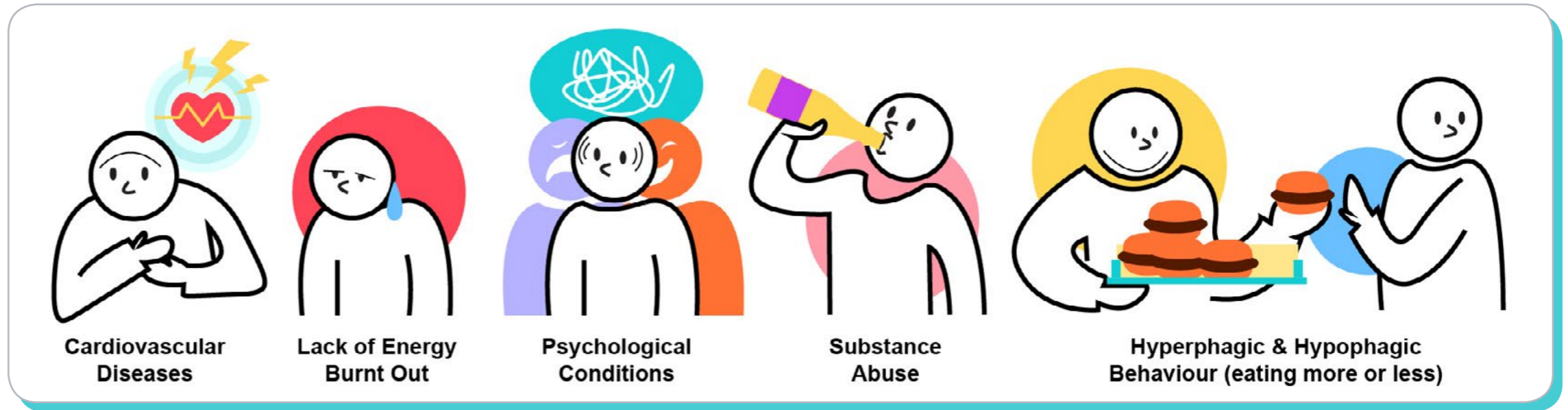


[Figure 4. Stress and stressors]

Walter Cannon introduced in 1920's the term "stress" for the first time, then Hans Selye proved with experimentation on rats two ideas about stress: "The body has a surprisingly similar set of responses (which he called the general adaptation syndrome, later referred to as stress response and finally Coping Effort) to a broad array of stressors", and demonstrated that "If stressors go on for too long, they can make you sick" (Glanz et al., 2015).

It's important to say that stress by itself is neither negative nor positive if we see it as the response of the body against threats, nevertheless, it requires certain resources and energy from the body, and the prolonged effects this response has on people (homeostatically at least) have direct and indirect repercussions on their health, as

previously discussed this can be a physical condition but also mental and emotional leading to unhealthy habits and conducts. (see **Figure 5**) (Alday, 2022; American Psychiatric Association, 2022; Glanz et al., 2015; Sapolsky, 2004).



[Figure 5. Conducts and conditions related to prolonged exposure to stress]

2.2 Stress classification

According to the American Psychological Association (2022) and the “Diagnostic and statistical manual of mental disorders” (DSM-IV-TR), we can divide stress in two ways: By severity or by the length of exposure to its effects (American Psychiatric Association, 2022) (see **Table 1**).

Classification	Type	Characteristics	Examples
By Length of Exposure	Acute	Symptoms of distress appear almost immediately in the body but usually do not last long. The effects last for a maximum period of 6 months.	Arguments with co-workers, Traffic jams, being sick for a week or two, etc.
	Chronic	When symptoms of distress are constant and overwhelm the person over a long period of time physically, emotionally, and psychologically. This type of stress usually lasts more than 6 months.	Some health conditions like anxiety, fatigue, high blood pressure, heart disease, and depression can be developed.
By Severity	Mild	Is produced by a stressor that is not perceived as strong or severe.	A jumpscare while watching a horror movie
	Moderate	Commonly daily, manageable stress that can be either positive or negative.	Losing your wallet with all your cards and money
	Severe	Is produced by a stressor that is perceived intensity and usually causes major damage physically and psychologically.	The sudden death of a relative

NOTE: The severity is experienced differently by every person, which makes it difficult to determine definite examples for each individual.

Table 1. Stress classification

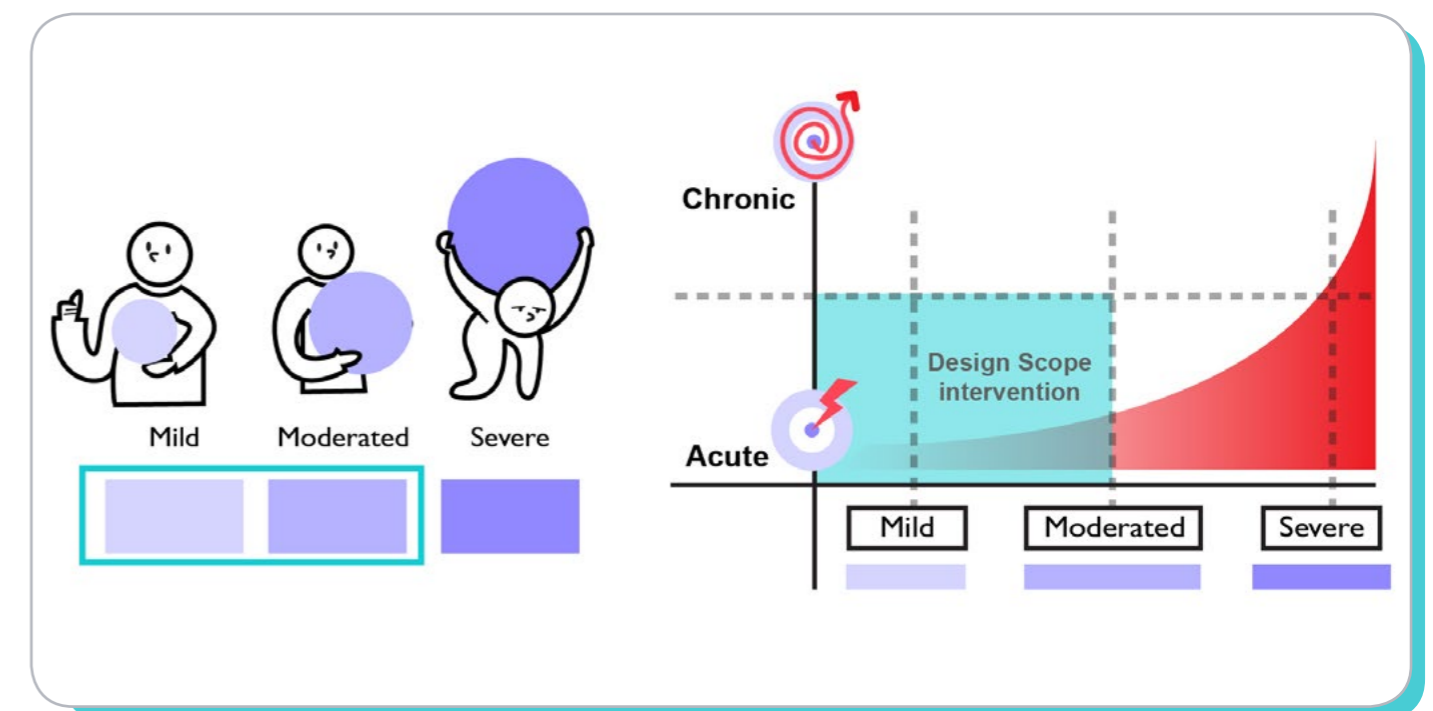
The DSM-IV-TR separates acute from chronic and explains mild and moderate stress are common types of stressors. Severe stress is usually a traumatic event (like the sudden death of a loved one or living through natural disasters).

Mild, moderate, and severe stressors when becoming chronic need the intervention of a professional. **Figure 6** (Alday, 2022; American Psychiatric Association, 2022).

Within the project, the scope will be focused on Acute and Mild-Moderate stress. The reasons are that mild and moderate levels of stress can be targeted as a preventive

strategy and handled without the assistance of a mental health professional (the intervention usually occurs when stress becomes chronic).

In addition, the project excludes severe levels of stress due to the complexity of traumatism and its effect on the mental state of a person which is out of scope for this project.



[Figure 6. Types of stress and scope of the intervention]

2.3 Positive and negative sides of stress. What does stress do to your health?

The Stress response is a biological trait intended to assist us in reacting to potentially dangerous situations, as well as coping with and learning from them (Bandura, 2010; Sapolsky, 2004). The effect stress has on people can be complex, it triggers several metabolic processes and focuses energy and resources from the body to face the stressor.

If the stress episode is relatively short (acute) and not severe, **the body can absorb the damage and restore its functions after a period of time** (Alday, 2022). When exposed constantly to this metabolic disbalance it will start affecting basic functions that are crucial for a person well being, for example, their sleeping patterns, digestive processes, hormonal regulation, etc.

One of the areas that seem to be affected the most is the immune system response. Several studies demonstrate that the **stress response can become more damaging than the stressor itself, especially when it's originated from a psychological source** (Estapé, 2018). Sapolsky (2004) describes in his book that a single period of stress can disrupt already a variety of immune functions.

In addition to these immune functions, we need other processes to keep the body functioning in optimal conditions, an example of these is the production of **cortisol; a hormone that assists in the regulation of sugar levels in the blood torrent.**

This hormone works through glucocorticoid receptors and is released when we are exposed to stress (Sapolsky, 2004). Almost all tissues in the human body have glucocorticoid receptors, which means that cortisol can

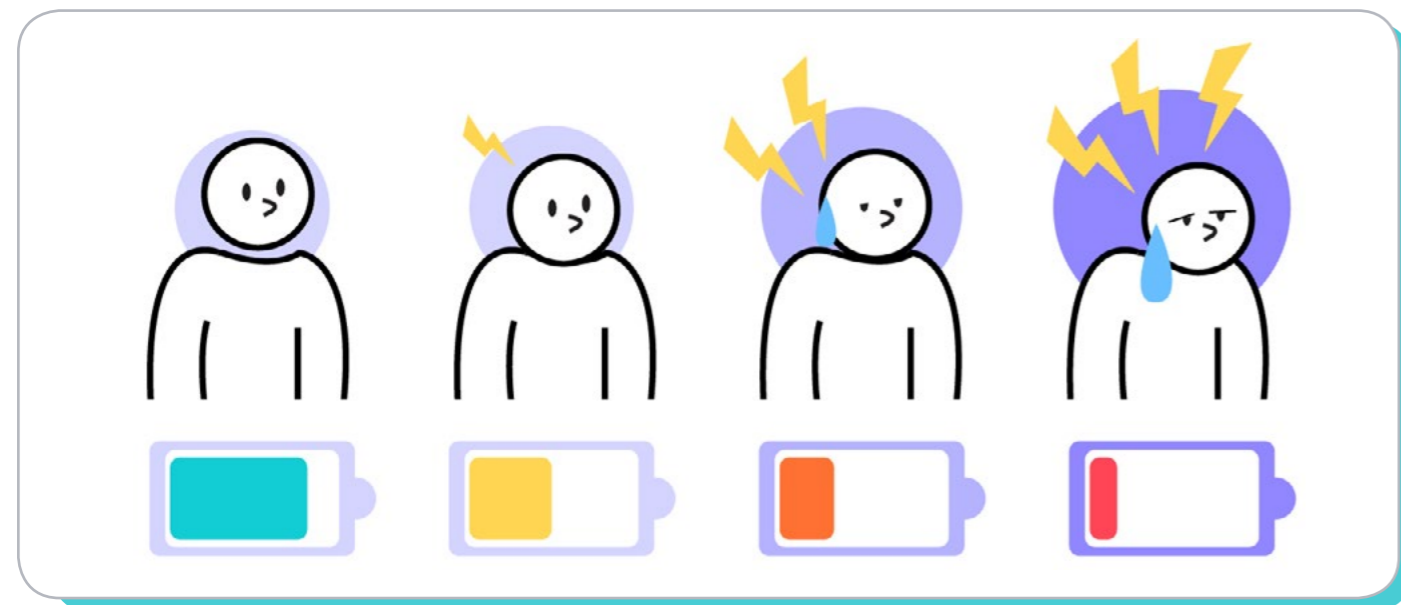
affect nearly every organ system, for example: nervous, immune, cardiovascular, respiratory, reproductive, musculoskeletal, integumentary, etc. this explains why long exposure to stress increases the risk of cardiovascular diseases, diabetes, and more metabolic affections.

Once stated that stress has a direct or indirect impact on metabolism processes, **chronic or repeated stressors can potentially make people sick or can increase the risk of being sick.**

The reason behind this is that the body suppresses immune function often and for longer periods of time, which means there are more chances to fall victim to a number of infectious diseases. The more this process repeats the body will be less capable of fighting disease (this is how it's believed the Irritable Bowel Syndrome can be triggered)(Lazarus & Cohen, 1977; Sapolsky, 2004; Sundman et al., 2019).

Fighting a stressor consumes energy which means that long-term exposure to stress drains more resources, which eventually turns into fatigue. In the same way, short periods of stress that are constantly dropping one after the other can cause you to burn out, see [Figure 7](#). (Alday, 2022, Weiner et al.,2010).

For the full notes taken from the interview with the health professional see [Appendix B](#).



[Figure 7. Long-term exposure to stress]

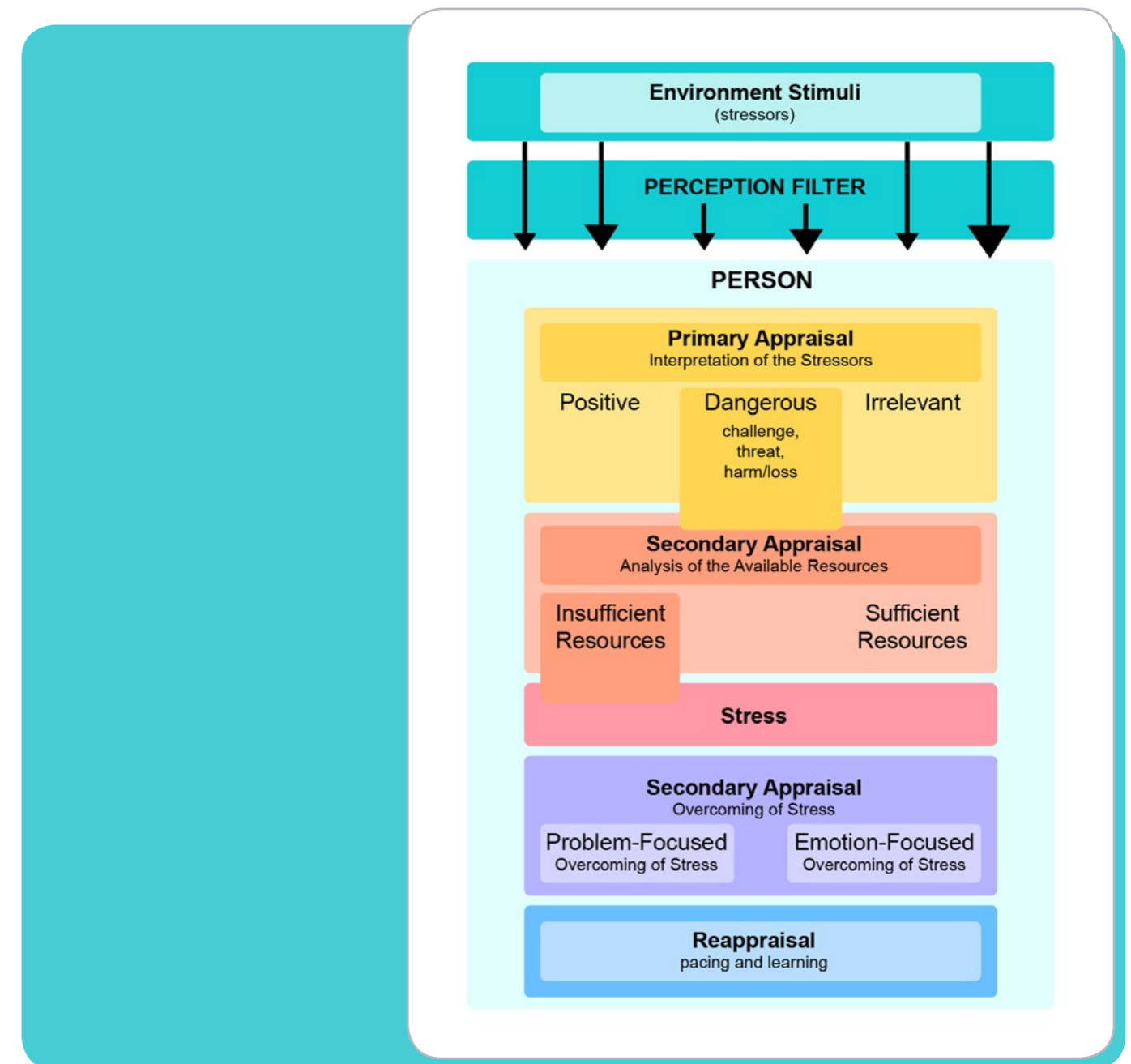
2.4 The Transactional Theory of Stress and Coping

Regarding theories and studies about stress and how it affects human emotions and behavior, we have different focuses and examples like the Theory of Emotion proposed by James and Lange or The Emergency Theory by Cannon-Bard.

For this project, Lazarus and Folkman's studies and model ([Figure 8](#)) were used as a base to understand stress principles, repercussions, and stages and to explore future interventions (Glanz et al., 2015).

According to The Transactional Theory of Stress and Coping, an individual goes through two different types of cognitive processes; we know them as "primary

appraisal" and "secondary appraisal." An "appraisal" is the perception of an individual about a particular stressor since this interpretation is personal and unique stressors have different effects on people (Glanz et al., 2015; Lazarus, 1977).



[Figure 8. Transactional Model of Stress and Coping (TMSC)]

During the “First Appraisal” the person affected will identify if the stressor is harmless or a threat, when it’s identified as a threat (within the individual’s personal goals), it can go two ways: The person will pass to the “Second Appraisal” stage or will remain in a “loop” where more stress will be produced.

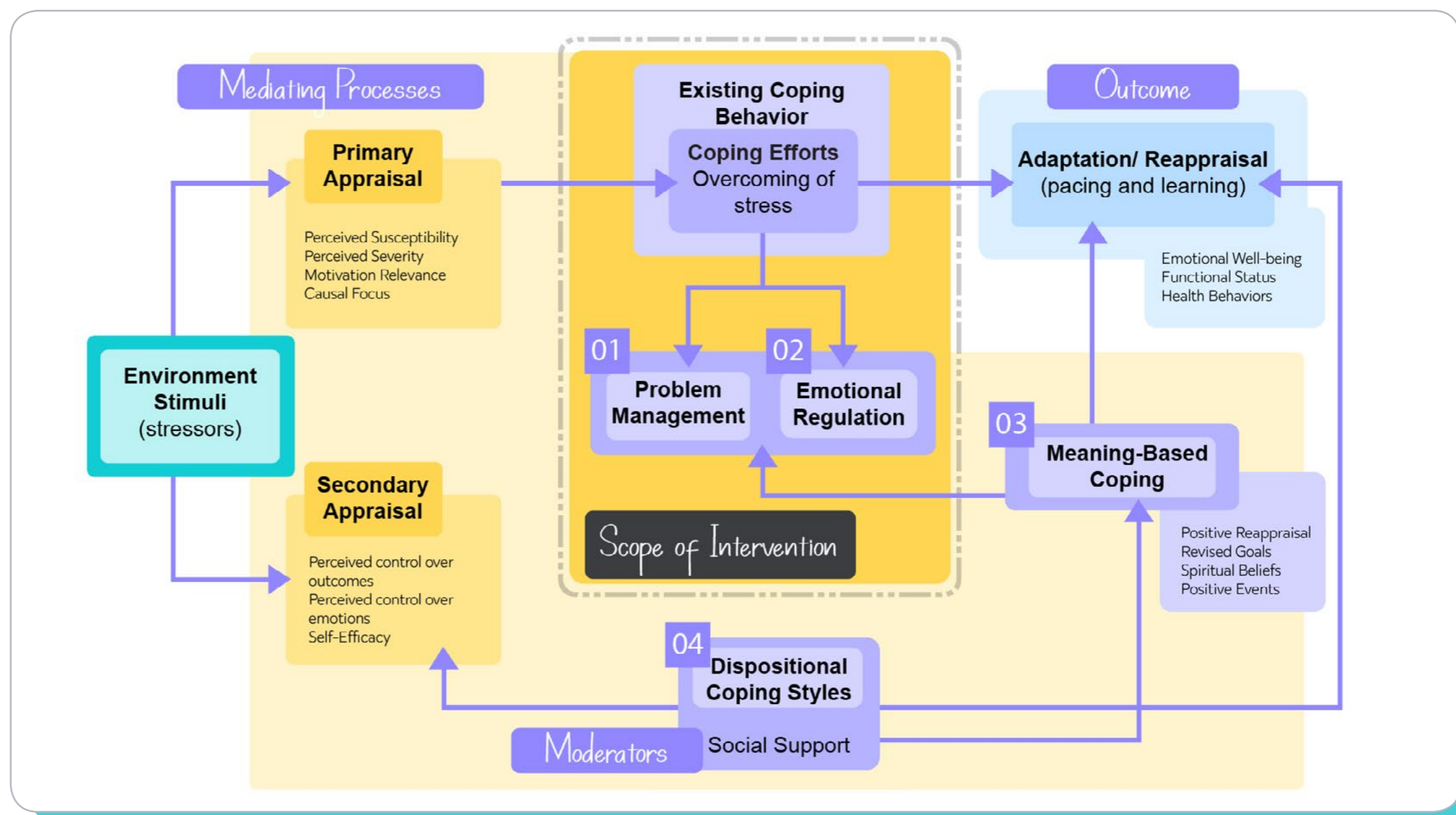
The “Second Appraisal” stage is where the person affected will try to make use of strategies and skills to bring solutions to face the stressor. These can arise as a result of previous stress experiences. All strategies, tools, elements, and the belief in our Self-Efficacy (SEF) learned from overcoming past stressful experiences are known as Coping Efforts.

Within the original Transactional Model of Stress and Coping (TMSC) it is shown that people depend on the outcome of the analysis of their SEF to come up with strategies to face the source of the stress, SEF is an individual’s belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Glanz et al., 2015; Lazarus & Cohen, 1977).

The use of ER or PM tools will determine if the individual can overcome the stressor effect accurately or prolong it (Glanz et al., 2015; Lazarus & Cohen, 1977). During the “reappraisal stage” the stressor effect fades and the individual learns from the event to possibly prevent future stressors.

A reinterpretation of the original TMSC was created to show the scope of the project which focused on people’s existing Coping Behavior. This diagram aims to emphasize the area of intervention that will focus on ER and PM strategies within a complex system that is the TMSC. (Figure 9).

People learn Coping Behaviour through the course of a lifetime and adapt accordingly, however it’s important to keep improving this existing CB to face a different variety of sources of stress.



[Figure 9. Reinterpretation of TMSC]

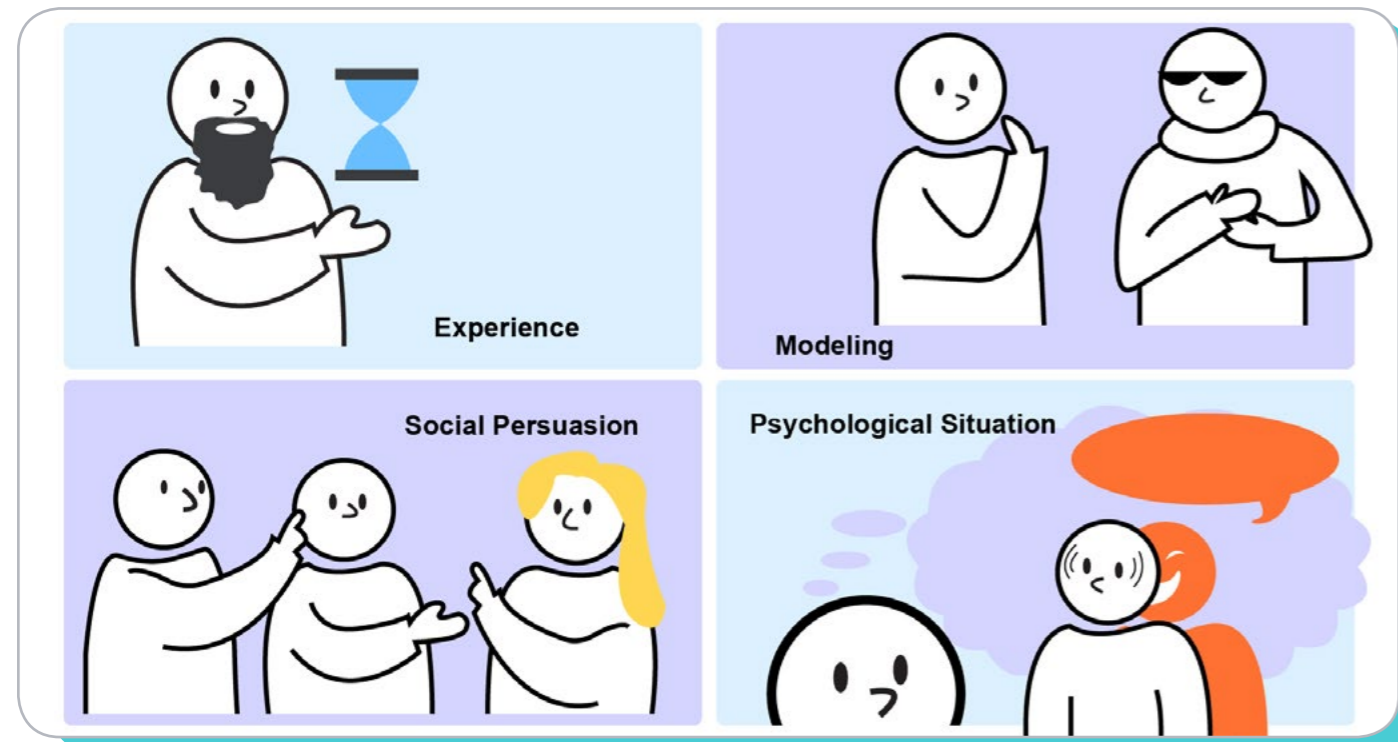
2.5 The importance of Self-Efficacy (SEF) to overcome stress

According to Dr. Alday (2022), “a strong sense of self-efficacy (SEF) promotes human accomplishment and improves well-being”. People with a high perception of SEF view challenges as things to be mastered rather than threats to avoid. In other words, if individuals trust their capacities to face a stressful situation, they are more likely to avoid the long-term effects that create unhealthy situations (Bandura, 2010).

Bandura explains that **SEF is “the foundation of human motivation, performance accomplishments, and emotional well-being”** (Bandura, 1997, 2006) giving importance to the idea that people need to believe they can produce desired effects by their actions to make changes and overcome challenges; when this is not the case they incentive to undertake activities or to persevere in the face of difficulties will decrease.

Overall there are some factors identified by Bandura (see **Figure 10**) influencing SEF:

- 1. Experience:** Also called “enactive attainment”. The experience of mastery is the most important factor determining a person’s SEF. Success raises SEF, while failure lowers it.
- 2. Social Persuasion:** It manifests as direct encouragement or discouragement from another person. Discouragement is generally more effective at decreasing a person’s SEF than encouragement is at increasing it.



[Figure 10. The construction of Self-Efficacy]

3. Modeling: Also called “vicarious experience”. It manifests when the failure or success of the individual is experienced through the feelings or actions of another person. Modeling is particularly useful for people who are particularly unsure of themselves.

4. Psychological Situation: In stressful situations, people commonly exhibit signs of distress (shakes, aches, pains, fatigue, fear, nausea, etc.) such perceptions in oneself can markedly alter SEF.

A conclusion reached by Bandura (2010) regarding SEF is that “whatever other factors may serve as guides and motivators, they are rooted in the core belief that one can make a difference by one’s actions”. Can be concluded that in order to enhance current CB it’s necessary to focus on the individual’s abilities, sense of confidence and inspire them to try and adapt new strategies.

In addition, it is possible to work on different parts of the process within the TMSC, taking into account the perspective of the individual to alter their environment and improve their ability to respond to the disbalance caused by stress.

2.6 Avoidance, Procrastination, and Maladaptative Behaviour

As mentioned before, SEF plays an important role when facing a stressor, if people have a low perception of their abilities they will more likely avoid the threat. When this situation occurs “Avoidance Coping” and procrastination habits appear.

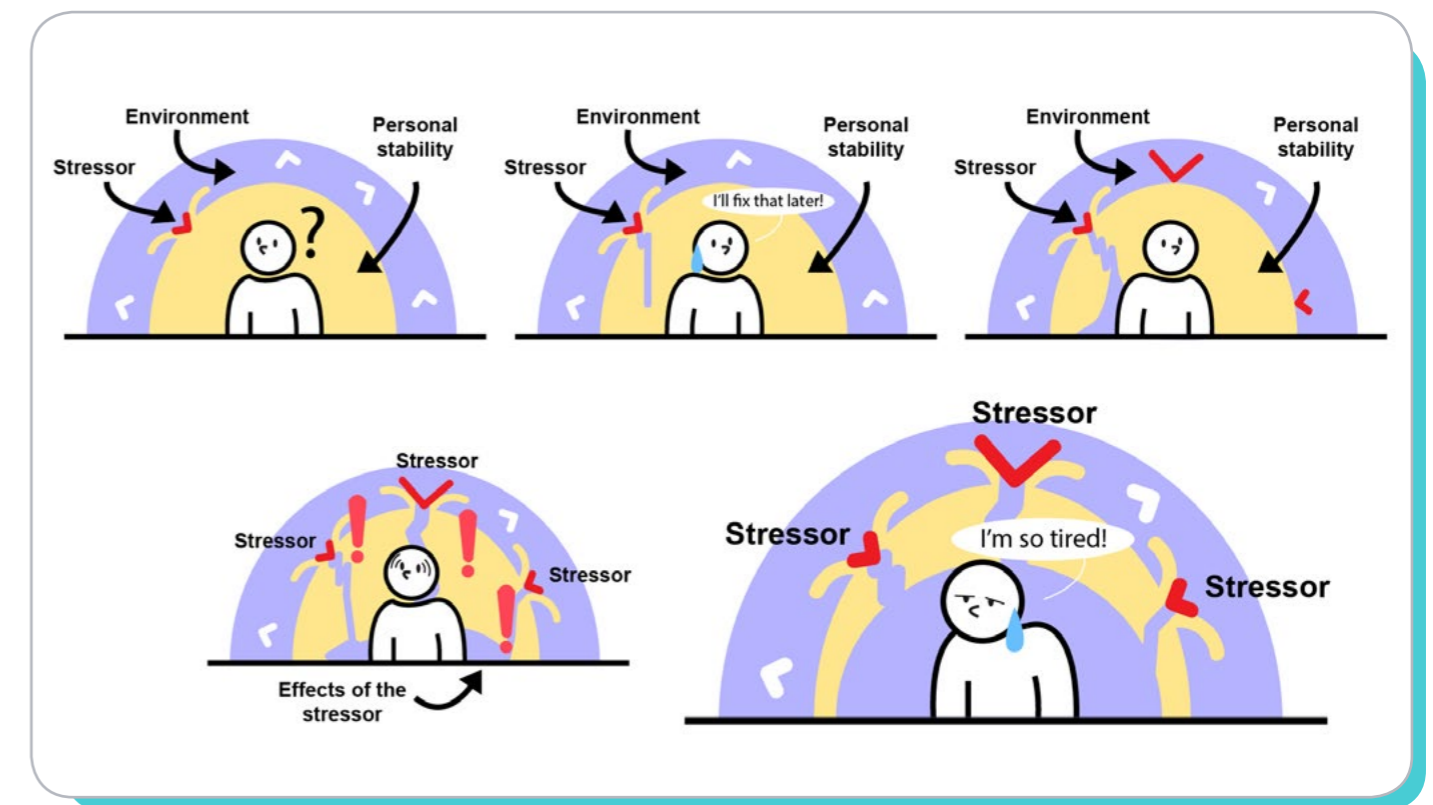
“Avoidance Coping” (AC) is the practice or an instance of keeping away from particular situations, environments, individuals, or things because of either the anticipated negative consequence of such an encounter or anxious or painful feelings associated with them.

Procrastination in addition is the act of postponing or delaying (intentionally and habitually) something that must be done, often because it is unpleasant or boring (Glanz et al., 2015).

Needless to say, **ignoring the stressor will drain resources from the person and will make it vulnerable to the next threat**, by that point, it might be too overloaded to face the problem (see **Figure 11**).

Psychology brings several theoretical perspectives to

study AC. People use it as a way to respond to feelings of fear or shame to solve certain situations (American Psychological Association, 2020). Unfortunately, **overuse of AC can result in Maladaptative Behavior**.



[Figure 11. What happens when we avoid “too much”]

Maladaptive Behavior (MB) prevents people from adopting or coping accurately with the demands and effects of stressors creating the illusion that doing (not necessarily healthy) it will reduce the level of stress, however, this ends up in a “loop” from which it is difficult to escape. MB increases stress and anxiety, with examples including self-harm, binge eating, and substance abuse (American Psychological Association, 2020).

2.7 Differences between Coping Behavior, Coping Effort, and Defense Mechanisms

Many fields and disciplines use a wide variety of terms to describe how people face stress, to show the focus of the project it was important to make these differences clear. Defense Mechanism and Coping Behaviour refer to the same response and Coping Effort is a specific strategy or set of strategies that compose a person's Coping Behaviour.

The term "defense mechanisms" was defined in 1926 by Freud to explain how individuals manage stress. Traditionally, defense mechanisms were referred to as patterns of relatively involuntary responses to external or internal elements that could involve feelings, thoughts, and behaviors, very similar to the definition of Coping Behaviour we have now.

Coping Behaviour (CB) refers to all actions or sets of actions taken where stressful events take place. CB is a behavior that changes and adapts constantly and can be both positive and negative. According to APA's records, both terms were frequently mistaken or their definitions overlapped, that's why Lazarus suggested that coping and defense mechanisms must be studied together and therefore coping should not be

limited to deliberate and conscious processes (American Psychological Association, 2020; Glanz et al., 2015; Lazarus & Cohen, 1977).

Within CB we have Coping Efforts which Lazarus (1997) defines as the actual strategies used to mediate primary and secondary appraisals. Studies from Lazarus & Folkman, mention two main groups of strategies to face stressors: "Emotional Regulation" (ER) or Emotion-Focused Coping & "Problem Management" (PM) or Problem-Focused Coping.

The main difference between these terms is that "ER & PM" are found within the TTSC, and "Emotion-Focused Coping & Problem-Focused Coping" are terms used by APA and other Psychology societies worldwide, in the end, both refer to the same thing (American Psychological Association, 2020; Glanz et al., 2015; Lazarus & Cohen, 1977).

2.8 About Coping Effort Strategies: Emotional Regulation and Problem Management

Both CE tactics function differently for different people in different settings, contexts, etc. It has been proposed that Emotional Regulation (ER) is used primarily when a person appraises a stressor as beyond his or her capacity to change, on the other hand, Problem Management (PM) strategies are employed when the individual appraises the stressor within his or her capacity to change.

ER is commonly defined as a stress-management strategy in which the individual focuses on regulating their negative emotional reactions to a stressor. This strategy does not focus on pragmatic actions to change the stressor itself but focuses on the individual trying to control feelings using a variety of cognitive and behavioral tools.

Some of these tools and techniques are usually related to meditation and other relaxation techniques like praying, positive reframing, wishful thinking, some avoidance techniques, seeking social support (or conversely engaging in social withdrawal), and talking with others (including mental health care professionals) (American Psychological Association, 2020; Stoop, 2017; Sumathi et al., 2021). A full list of existing and used techniques for this project can be found in [Appendix C](#).

On the other hand, **PM strategies are used when a person directly confronts a stressor in an attempt to decrease or eliminate it.** This implies that the individual will actively generate possible solutions to a problem, confronting elements associated with the stressor, and other forms of instrumental and pragmatic action.

Examples of these can be using a task list to arrange and prioritize tasks for the next month (American Psychological Association, 2020; Stoop, 2017; Sumathi et al., 2021). A full list of existing and used techniques for this project can be found in [Appendix C](#).

Chapter 03. Sensitizing for Stress Research

The focus of this chapter is people's Coping Behaviour and the sources of their stressors; explorations with students from TU Delft from different master's and bachelor's programs are presented, and so does the exploration of patterns in the election of CB.

STAGE I: DISCOVER

This is a continuation of the previous chapter in which information about what is stress and what repercussions it has on people's health and wellbeing was touched on. In the next part of the research the focus switches towards what CB individuals show to overcome stress, the level of awareness of this behavior and the reasons behind those choices. In addition, this chapter covers how sensitizing methodologies assist in gathering data from people.

3.1 Research with users and the importance of sensitizing materials

At this point of the project, more information about CB obtained from people was required, the data found in theory and literature suggested that individuals have tendencies to make choices (conscious and subconscious) that can lead to Maladaptive Behaviour (MB).

Utilizing sensitizing materials can help find out what people think do and feel to capture the reasons and motivations of their choice when applying specific CB.

As mentioned in the previous chapter some questions arose after the literature research: What are the most common/preferred Coping Behaviours? and why? How is this CB related to the stressor? Are people aware of them? and to what extent? To answer these questions the following activities were performed:

01 Online Stress Survey



As a first approach an online survey was created, 80 students and workers from different countries participated in this activity

Methods: Insights were organized using the categorization of clusters from the ViP method. Within the ViP method designers can construct a "worldview" to show the scope of opportunities and variety of options to shape any design direction (Hekkert, 2016).

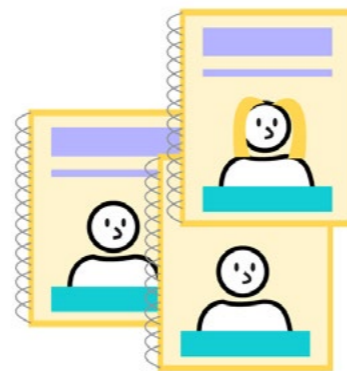
Goal: To gather insights about people's stress sources and current CB and build patterns with the literature found.

02 Questionnaire



Existing measuring methods like the PSS developed by Cohen and colleagues were used before the sensitizing materials to test levels of stress before and after interventions. Full results and explorations can be found in **Appendix D**.

03 Booklet



A group of 9 Master students join the booklet activity, through the course of a week they received information and activities to create awareness about stress.

Methods: The activities in the booklet were elaborated by taking inspiration from different sources used in psychology, design, and stress management manuals/ workshops worldwide including those from the interview with Dr. Normal Alday, the World Health Organization archives, and the Convivial Toolbox techniques about Contextmapping (Alday, 2021; Sanders & Stappers 2014; World Health Organization, 2020a).

Goal: Exploring sensitizing materials and find out the most suitable ones for further explorations and experimentation.

04 Co-Creation Session

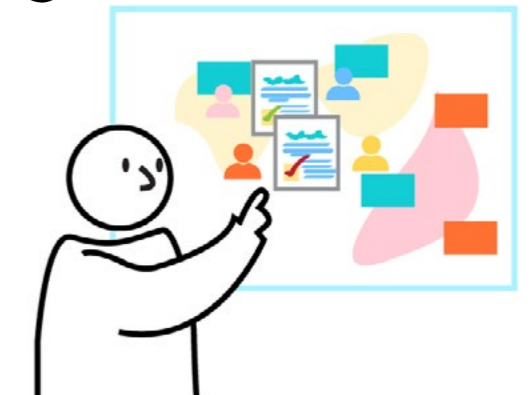


A group of 7 Master's students from TU Delft participated in a Co-Creation session focused on exploring existing CB strategies (specifically Emotional Regulation and problem Management strategies) and finding out if they have tried them before.

Methods: The materials for the co-creation session were inspired by theory and examples found in the Convivial Toolbox (2014) and the Context and Conceptualization course given at the IDE faculty of TU Delft (Stappers, 2022a; 2022b; 2022c; 2022d).

Goals: the activity aimed to understand if people know and have tried ER and PM strategies before, or if any of the decisions people make while facing their stressors leads to Maladaptive Behaviour.

05 Stress Journey Map



Using an example discussed in the co-creation session where students have to face stress (deadlines and exams) a journey map was created to illustrate all the different elements involved in the process of coping and how this particular group deals with it

Methods: Roadmapping and Contextmapping principles (Simonse et al., 2018).

Goal: Show visually the results of the session to later use these insights for the next stages

3.2 Stress Online Survey

An online survey was elaborated and shared with people working and studying in different institutions in the Netherlands, the sample was composed of local and international students from the ages of 20 to 58, either residing temporarily or permanently in the country.

The goal was to find information from people's experiences with stress and their coping mechanisms. This could help corroborate the information found in the literature research and get new insights and patterns to work on further.

The survey consisted of four questions: "What causes you stress?", "How do you manage to get rid (or not) of those things, people, situations, etc. that stress you?", "Do you manage your stress alone? Or does someone help you to go through it?" and "Mention something that makes you feel relaxed (Is it a place, person, thing, context, etc?)"

The survey was constructed under the principles of "Do, say, and think" taken from Context and Conceptualization Methodologies (Sanders & Stappers, 2014). Most of the practical knowledge obtained through this focus encourages designers to involve the user in the process under the argument that they might be able to give accurate information about their needs, in words of Dr. Sleswijk-Visser "Every person is different and has personal experiences" (Stappers, 2022a).

One of the barriers was the fact that stress is experienced differently, therefore studying the user will provide directions for the design focus in further stages.

Results from the survey showed that the main sources of stress among people were linked to workload, deadlines, time constraints, responsibilities, and personal aspirations/expectations.

Another element that evokes stress comes from the expectations people have of themselves, the source can come from people we admire, respect, follow, work for, etc. (e.g. when a student needs to graduate on time because his parents asked for money borrowed to the bank and he doesn't want them to carry with financial consequences).

Either due to lack of experience or the low perception of our abilities, people compare the quality of their performance with other coworkers or people around them. Comparisons sometimes help when we need to improve the quality of our work, however, the answers from the survey demonstrate this habit might have the opposite effect of helping to handle everyday work stress.

A more complex situation takes place when we take into consideration the particular traits of the person: their character, how they perceive things overall, their economical and social situation, etc. Within this complexity, a large number of participants expressed in one way or the other that uncertainty about what the future brings is a major source of stress, (this future can be short or long-term).

Making choices, especially those affecting the result of major events in their lives are big sources of stress, this can be linked to the person's perception of their abilities (self-efficacy) and their self-esteem, based on research and interviews with psychologists people overthink when they doubt of their capacity to face a problem. As previously mentioned in Chapter 1, studies suggest that 90% of the thing we worry about never happen (Estape, 2019).

All the answers from the survey can be found in [Appendix E](#).

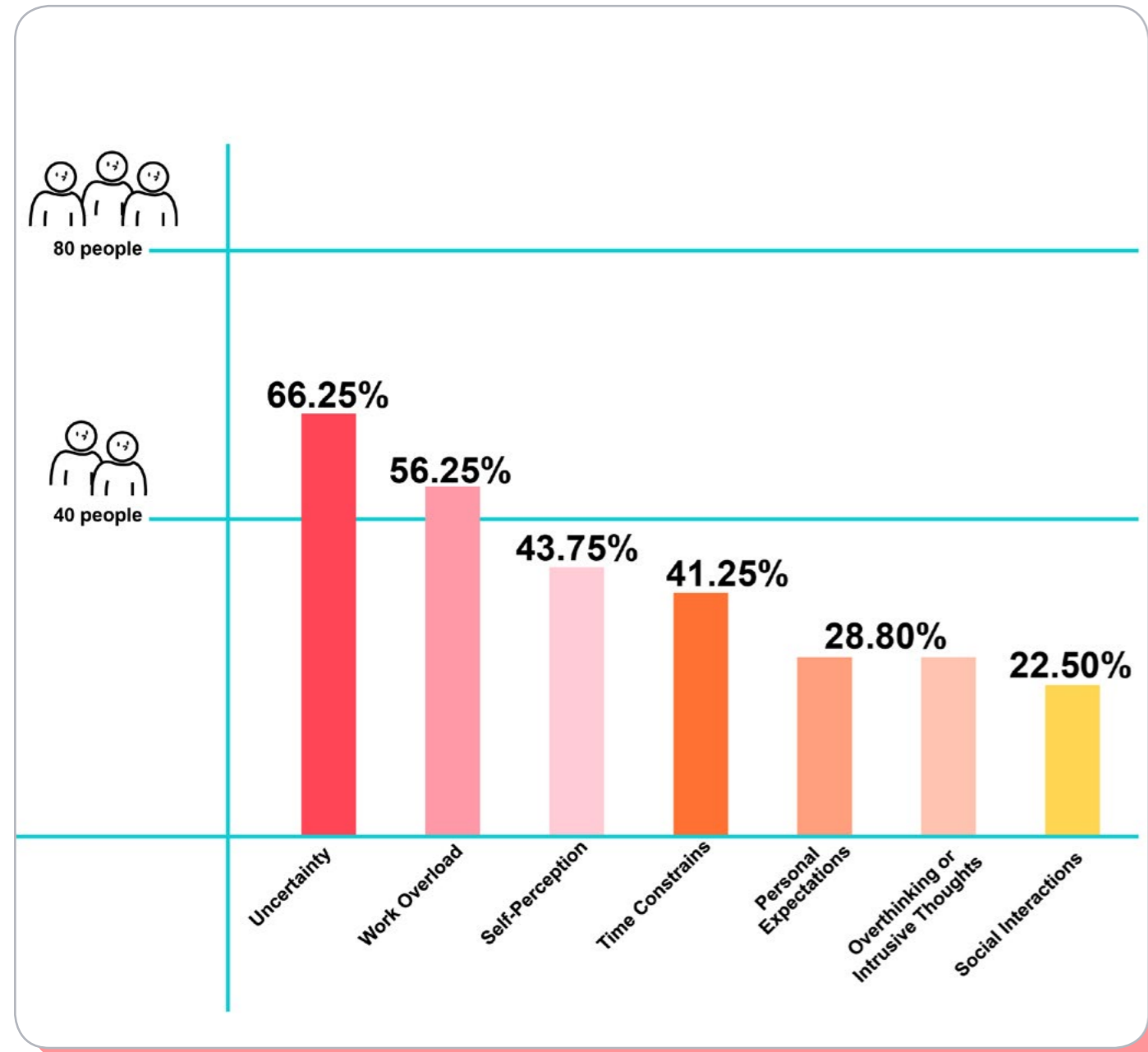


[Figures 13. Quotes & survey results]

Based on the survey answers it became evident that stressors can be combinations from different aspects of people's daily lives. The next design challenge is "untangling" this complexity and providing a clear direction for an accurate intervention to manage stress.

What are the most common sources of stress according to people who answered the survey?

- Uncertainty 53 people out of 80 (66.25%)
- Work overload 45 people out of 80 (56.25%)
- Self-Perception 35 people out of 80 (43.75%)
- Time constrains 33 people out of 80 (41.25%)
- Personal expectations 23 people out of 80 (28.8%)
- Overthinking or intrusive thoughts 23 people out of 80 (28.80%)
- Social interactions 18 people out of 80 (22.50%)

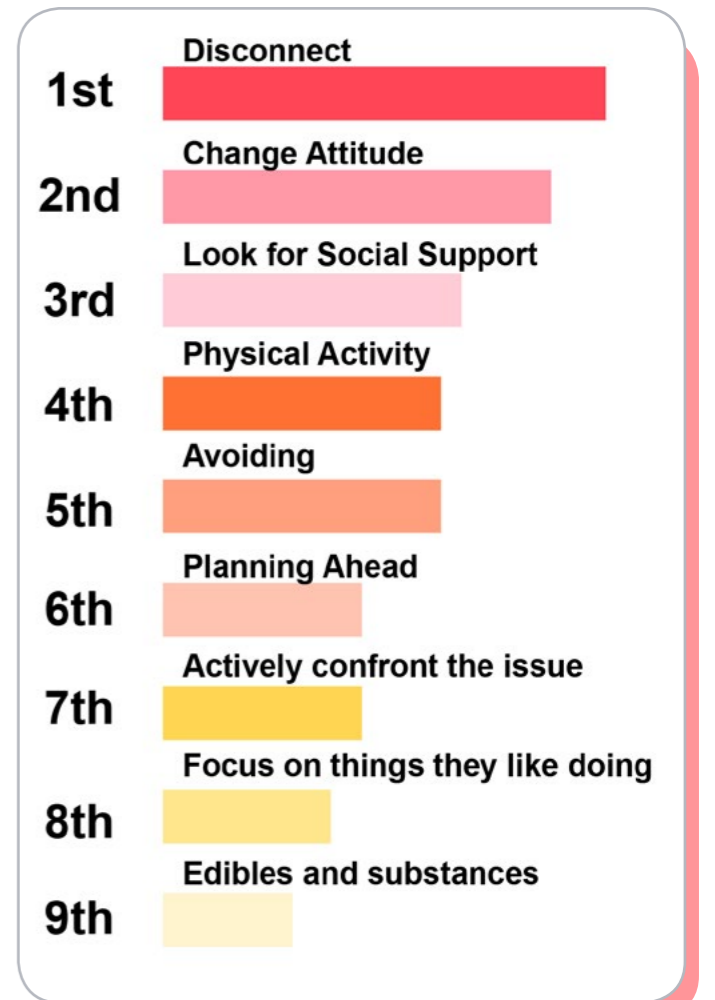


[Figures 14. Interrelation of stressors]

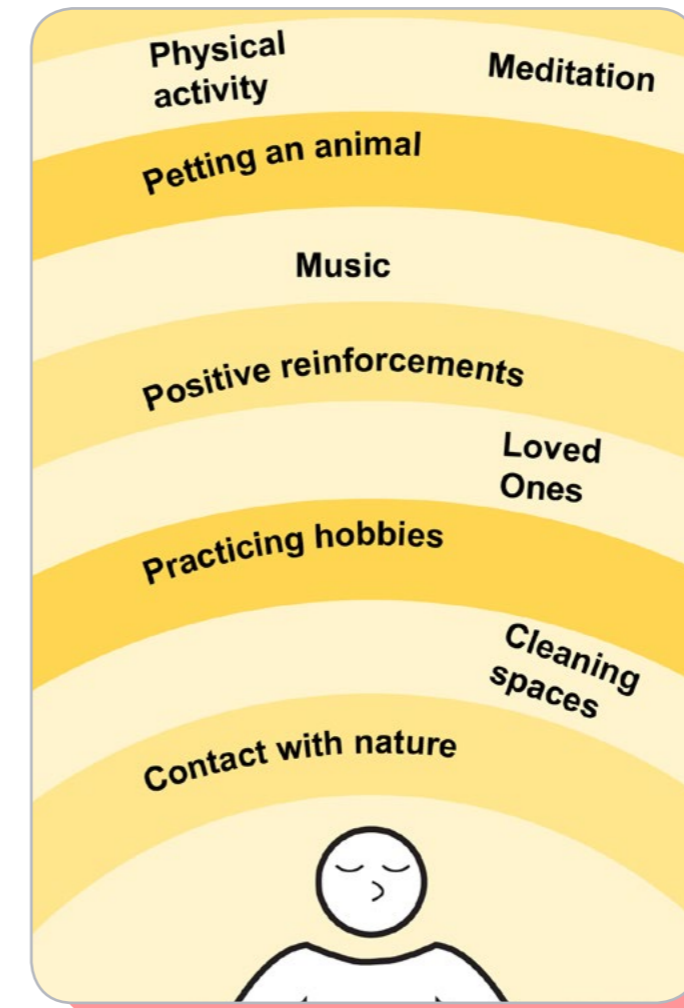
In contrast, a compilation of the most common coping techniques provided by the participants was elaborated, showing a tendency for people to detach or switch spaces and ideas to avoid the source of stress. This idea of focusing on relaxation to lower stress has been part of programs designed to help people lower anxiety, panic attacks, etc. and some design areas started proposing interventions as well (Stoop, 2017).

The **most common ways to release stress** according to people were:

1. Disconnect (postponing the situation for a while)
2. Change attitude
3. Look for social support
4. Physical activity
5. Avoiding
6. Planning ahead
7. Actively confront the issue
8. Focus on things they like doing
9. Edibles and substances



[Figure 15. Coping behaviour techniques]



[Figure 16. Stress relievers]

Finally, for the last question, a diverse list of relaxation techniques provided by people was elaborated on. The full list can be found in [Appendix E](#).

the survey showed that 18 out of 80 people prefer solving the problems that stress them themselves, 18 out of 80 depend on others to do it, and 44 like practicing both options if they perceive they need additional advice, a different perspective, etc.

Some of the most frequent things people like doing to relax are:

- 1) Practicing Hobbies
- 2) Taking care of their personal spaces (redecorating) or cleaning their room/home)
- 3) Meditation
- 4) Stay in contact with nature
- 5) Physical Activity
- 6) Positive reinforcements
- 7) Music
- 8) Petting an animal
- 9) Spending time with loved ones

3.3 Perceived Stressed Scale

Before starting explorations with students and staff from TU I decided to test existing methods used to register stress levels to get insights and inspiration for my future materials. Part of the psychological bases found within the literature research suggested that the perception of stress through time influences an individual's CB, however, by using the Perceived Stressed Scale (PSS) it's possible to inquire to some extent the effects of stress short or long-term does to people wellbeing.

A total number of 20 people were given the PSS questionnaire. To have ideas of how constant the effects of the stress were on each particular case, two PSS were given to people. The original PSS questionnaire focused on stress from last month, and the second PSS aimed for stress perception from the previous week.

These changes in the second test in contrast with the original PSS focused on showing how constant the perception of stress was in the month and a shorter period (week) If the stress has been constant for more than 1 month the perception in the variations would be minimal, on the other hand, if the subject was exposed to certain stressful but not so common events this perception will show a larger variation between each

scale. The full results can be found in [Appendix D](#).

By visually showing people the state of their stress levels, 10 out of 13 participants could remember what caused the stress, in addition, some of them showed interest in improving their coping mechanisms further.

To conclude, if we map stress in different time frames and then we compare the results we can find out patterns of prolonged exposure to stressors (regardless it's intensity). This resource can become useful when showing people directly the impact on their everyday working routines.

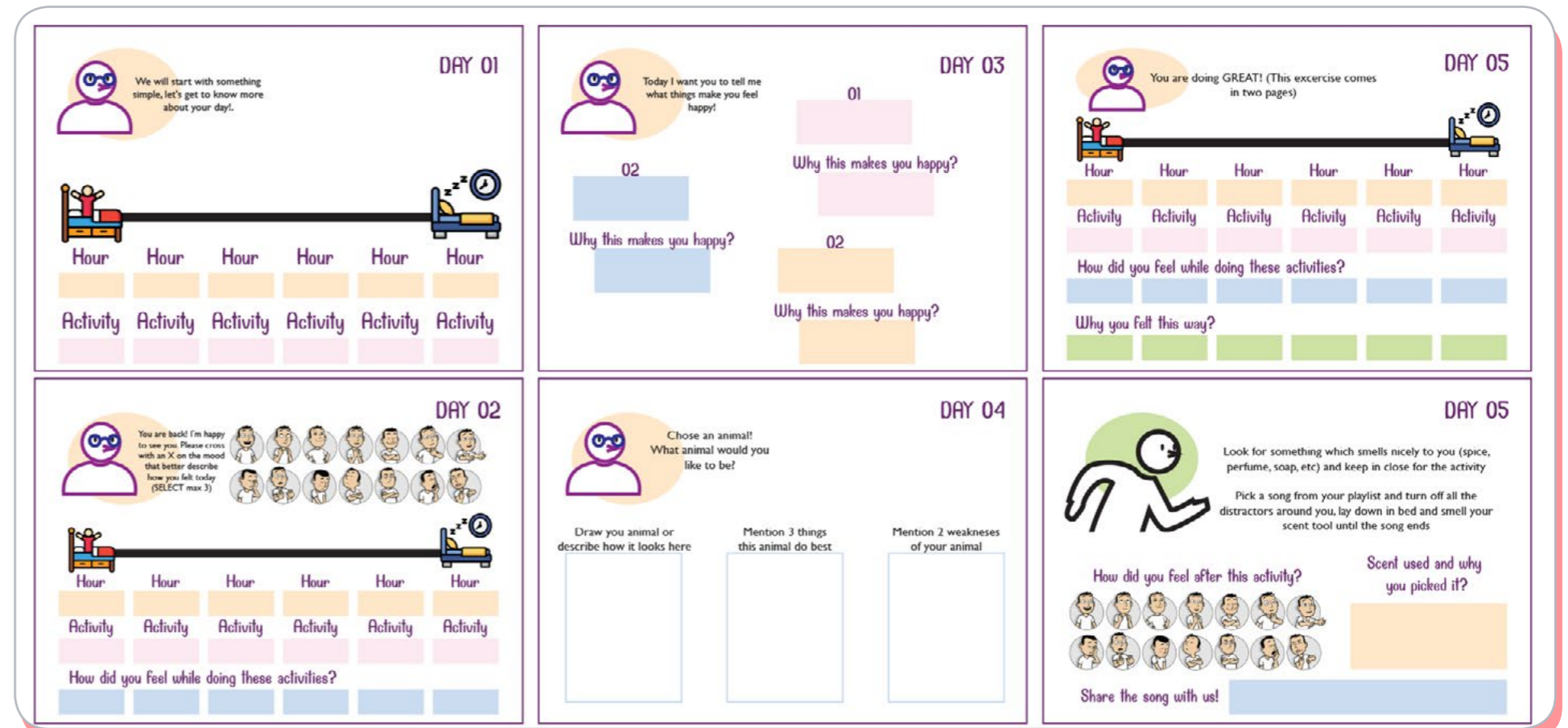
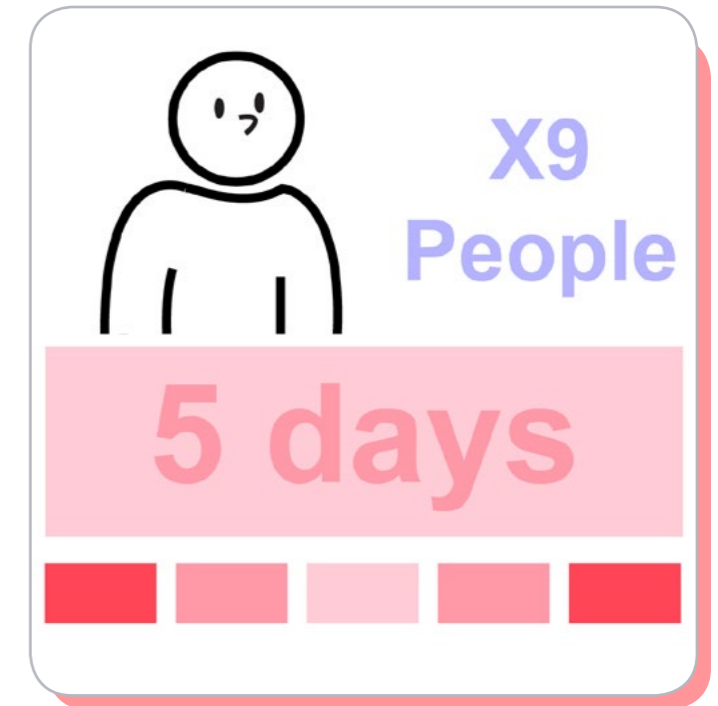
3.4 Sensitizing Booklet "My Stress Journal"

For this part, new material was elaborated as an exploration to learn how to sensitize people to make them aware of their sources of stress through a booklet with activities called "Stress Journal". (See [Figure 18](#))

A group of 9 master's students from TU Delft from 21 to 29 years old from different programs and nationalities was invited to participate in to report and test 5 activities inspired by existing techniques of stress management and methods employed in psychology.

At the same time, the structure of the booklet was inspired by implementing the contextmapping procedure to create awareness gradually and to avoid overwhelming the tester. The main goal of this material was to explore ways to sensitize people about their routines and stressors, and how aware they are of these influences. This was an essential step to making further interventions once framing the needs of the target group.

The activities consisted of five days in which participants tested materials developed using Contextmapping methods proposed in the Convivial Toolbox and the Context and Conceptualisation Course.



[Figures 18. Booklet]

In the end, 4 out of 9 people completed the exercises in the booklet, 3 didn't pass from the second day, and from those 4 who finished all the booklet 3 delivered it on time; the rest delivered the booklet after the time-space given.

According to the testers the most enjoyable activities were those focused on asking the person what they like and why, on the other hand, the least preferred ones were the scent and ambiance exploration.

From the booklets two reflections came across, the first is that the method is useful to create awareness, however, the exercises proposed were not fully focused on the person's Coping Behaviour, which prevented testers from connecting or personalizing the material given, especially at the end of the week. At the same time, giving something dynamic can enhance the interaction to spark curiosity about the materials.

The second reflection was that some of the activities proposed were perceived as additional work rather than reflective activity, which means the time estimate of 20 minutes could be reduced to encourage the tester to fill in all the exercises.

Another finding was that people seemed to stop after the third day due to the lack of time within their busy schedules, this was a hint to be taken into account to integrate their activities in the prototyping stage into their current routines so the amount of energy invested can be perceived as doable and enjoyable.

To conclude, the booklet showed that:

- The length of sensitizing exercises should be relatively short (less than 15 min)
- The materials should allow the owner to personalize the activities or provide flexibility for the user to adapt them.
- Suggesting a schedule instead of imposing one encourages people to keep working on the materials.

To see the full results from the booklets and the privacy agreements go to [Appendix F](#).

3.5 Co-Creation Session

After exploring possibilities to sensitize people about stress with a reflective booklet it became important to incorporate dynamic activities as well into the proposals.

The co-creation session was planned to find out existing and new ways to make the coping strategies adaptable to everyday life situations. The topics touched on within the group of 7 students ([Figure 19](#)) focused on personal experiences, preferences, and habits linked to existing CB and strategies found in the research, plus group reflections to share and evaluate the choices made.

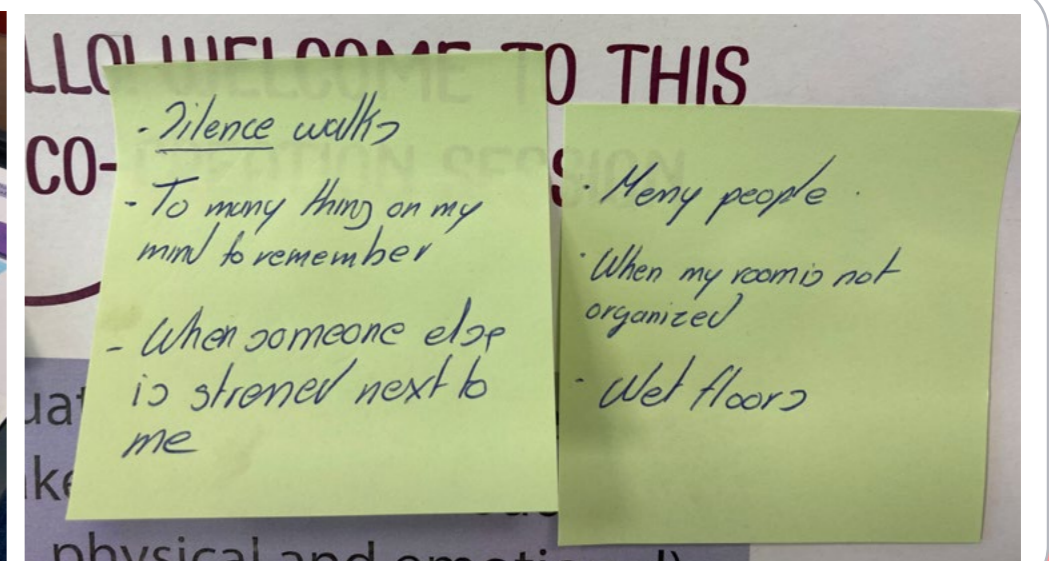
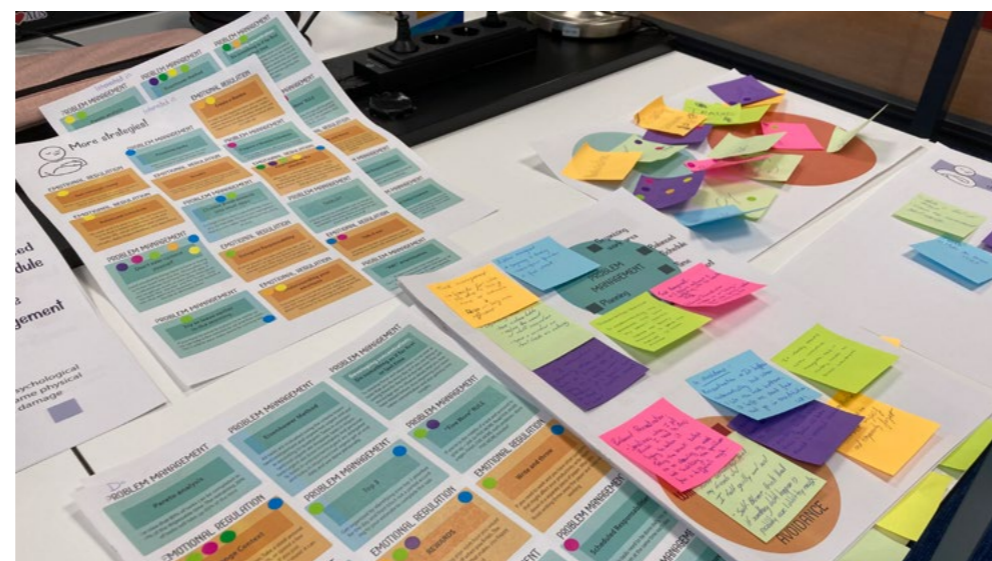
During the session, templates and a set of materials with different colors were provided to each participant to distinguish their choices from the group reflections. **The co-creation consisted of 5 activities:**

- **Activity 1:** What is stress and how do we manage it in our daily lives?
Here the participants had to recall stressful situations and how they overcame them.
- **Activity 2:** What CB strategies do you use the most and in which context? (ER, PM or AC)
The concepts of Emotional Regulation, Problem Management strategies, and Avoidance Coping were explained to participants to, later on, let them classify their CB strategies within these categories and create a discussion around them.
- **Activity 3:** From the CB Cards what you have tried before and what would you be interested in trying next?

In this activity cards with ER and PM ([Figure 20 & 21](#)) strategies were given to participants to find out if they have practiced any of them and which ones seemed interesting to incorporate for further stressful situations.

- **Activity 4:** From the selected CB cards how frequently would you be willing to implement the strategies?
Once the selection in the previous activity was made the testers were asked how frequently would they try out some of the techniques from the cards (considering that these strategies are meant for you to prepare in case a stressful event happens).
- **Activity 5:** Within a year, a month, and a week, which strategies would be used within this period?
The goal of this section was to ask people how doable was to practice some of the activities during short and long periods and the level of complexity.
- **Activity 6:** What other strategies do you think should be included in the card list?
Here the participants had the freedom to make their cards and propose other activities according to their needs and preferences, taking into account the previous discussions within the session.

The path of expression method from the Convivial Toolbox was used to create the activities for the session.



[Figures 19-21. Co-Creation materials]

Once stated that most materials from the session were inspired by employing the “Path of Expression” and The Abstraction Hierarchy from C&C Contextmapping techniques helped process the findings.

First, the Path of Expression helped synthesize answers from people about their present actions and past reflections to look for suitable ways to make interventions to produce an impact on the decisions made in the future. Second, the Abstraction Hierarchy method was mainly used to process all the findings regarding CB strategies in the session and look beyond the scope formulated until now to tackle the intervention accurately and adapted to real people.

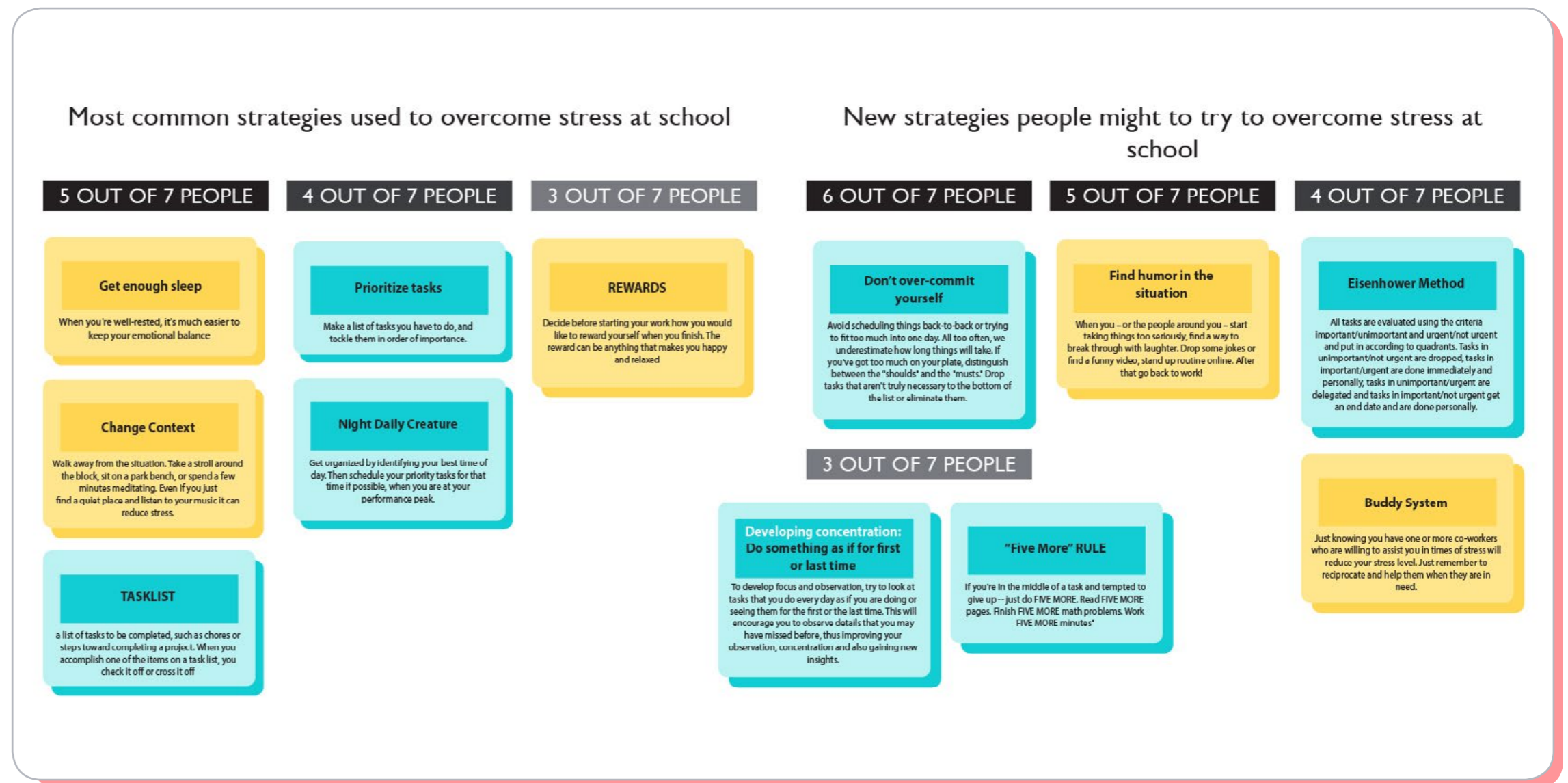
The benefits of this method are that, through the perception of others (other people see different things), the designer can complement or explore unexplored possibilities starting with two questions: How and Why? in words of PJ Stappers “When your interpretations are different but related” (source).

The full templates, results, and consent forms from the co-creation session can be found in [Appendix G](#).

The **main results** gotten from the methodology applied to the results from the co-creation session were:

1. Stress is a consequence of people being overloaded/overwhelmed, this situation makes individuals prefer avoiding tasks, responsibilities, feelings, and personal expectations because they can't process them.

2. Physical activities play an important role in lowering stress (see [Figure 23](#)).
3. The main reason why Avoiding Behaviour is a common strategy it's because it's comfortable and people put less effort into avoiding than confronting. Reinforced by the statements of Hekler (2013), the rationalizing process consumes energy and people going into stressful situations constantly have limited reserves of energy which eventually affects their wellbeing and therefore their health.
4. Participants described that the strategies from ER and PM that looked more interesting to them were straightforward, practical, easy to understand, fun, and flexible to apply in both emotional and practical circumstances
5. Some people described in the session that negative feelings emerge (more recurrently guilt) when they stop doing chores, tasks, etc. because they perceive themselves as unproductive, mediocre, etc.
6. There is a general preference for more pragmatic tools

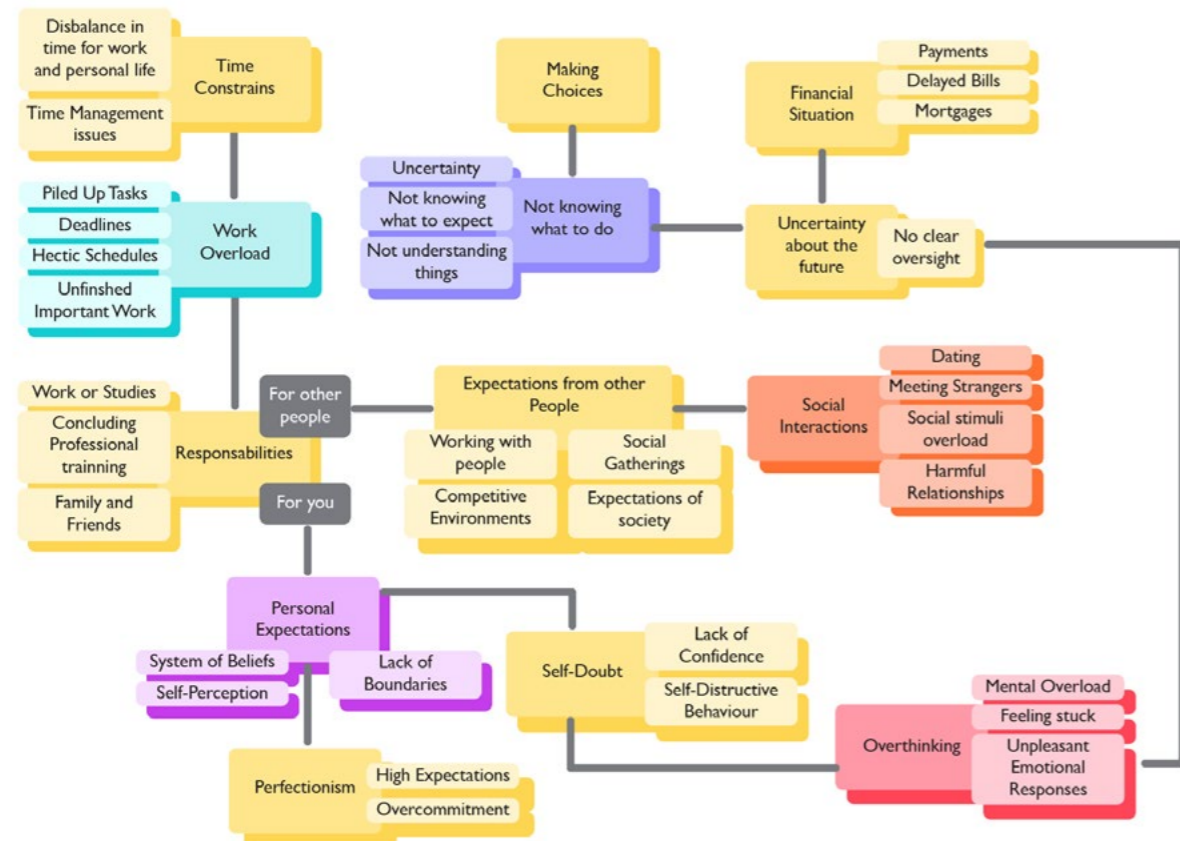


[Figure 22. CB strategies]

New strategies proposed during the session



[Figure 23. New CB strategies]



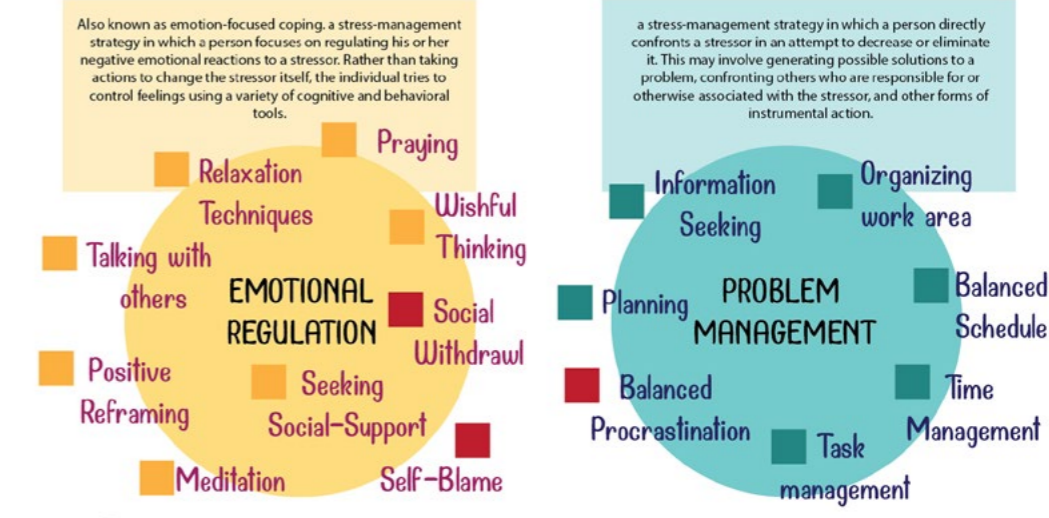
[Figure 24. Stressor and CB map]

More strategies!



HELLO! WELCOME TO THIS CO-CREATION SESSION

What situations, contexts, people, etc. make you feel overloaded? (mental, physical and emotional)



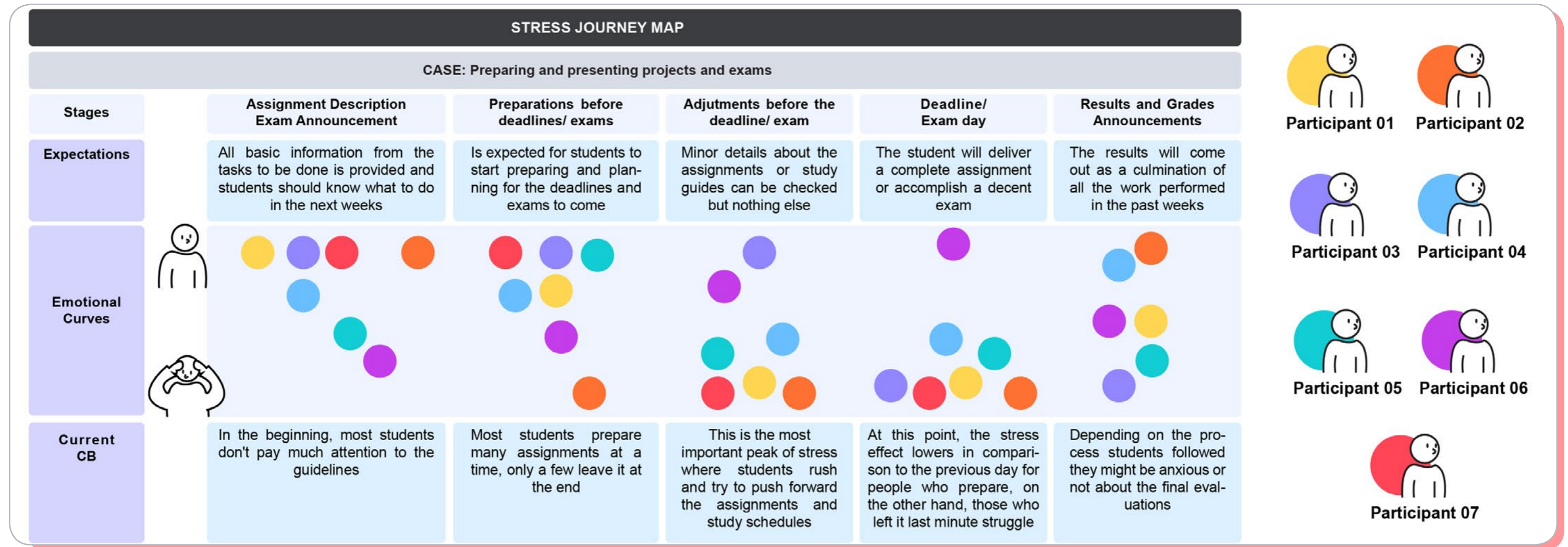
Do you know that...
Procrastination is not always bad, it's a different way to disconnect and recharge!

Dogs can develop chronic stress from their owners
Stress can be purely psychological and still causes the same physical and emotional damage

[Figures 25. Co-Creation templates]

3.6 Stress Journey Map

Finally, a Journey map was elaborated taking the experiences of the students participating in the Co-Creation session to show the variety of experiences and paths an individual can come up with in moments of stress (See Figure 26) using one situation in common as a base example to show this variety of options.



[Figures 26. Stress journey map]

The mapping from the session was a useful tool worth exploring for further interventions, however, the next steps will focus on the selection of a target group, the formulation of an accurate design goal, and the evaluation of design strategies to elaborate intervention materials accordingly.

An important difference to mention is the fact that people can be both overloaded physically (tasks, deadlines, work, etc) and emotionally (fear, guilt, uncertainty) the plan would be focusing on the practical and pragmatic side of Stress management (Bein Overload) to generate resources to enhance confidence through Self- Efficacy that will eventually have an impact while dealing with the emotional load.

This perception of being overloaded and feeling overwhelmed can be targeted through Emotional Regulation and Problem Management strategies. Regardless of the inclination participants had toward PM strategies, some combination with ER might drop more concrete results in the prototype and testing phase.

The next steps in the project will focus on: How to design a strategy to enhance CB for overloaded people? What type or amount of guidance do I need to avoid overloading them more? Do I want to focus the strategy on both emotional and physical overload? how?

3.7 Sensitizing stage conclusions

At the beginning of the chapter, some questions were presented regarding people's CB strategies and the awareness they have of the stressor. It's important to state that these questions were answered and the sensitizing activities provided useful insights to start the conceptualizing stage:

- People can learn abilities around their CB before a stressful event occurs, this can increase the effectiveness of response when the stressor appears.
- From the different factors that provoke stress (context, social interaction, personal perception, etc), people's confidence and self-efficacy are important to generate change. Without these aspects, people won't feel the urge to improve or go further from their current state.
- It's crucial to provide materials that people can personalize and allow them to reflect, this will make the person aware of their current situation.
- People feel more confident when they can see their progress, which is an aspect that can be included in the elaboration of proposals.

To conclude, the group in which the sensitizing activities were focused was students, however, to make the design effective it's important to focus the findings on the target group (Ph.Ds. and postdocs from TU). Tho the information compiled is useful for different groups the need for a defined goal is required to obtain an accurate concept, such results depend on the needs and characteristics of the target group.

Chapter 04: Design Exploration: Target Group, Methodologies, and Self-Experimentation

In this chapter a definition of the context and needs of the target group are summarized, so does the definition and direction for the design in the future.

STAGE 2: DEFINE

For this second stage (within the first part of the project), specific information about context and needs from the selected target group was compiled. This stage aimed to apply the information found in the previous research and focus the findings on formulating a clear problem statement, challenges, and goals for the elaboration of a design proposal.

4.1 Target Group and further design decisions

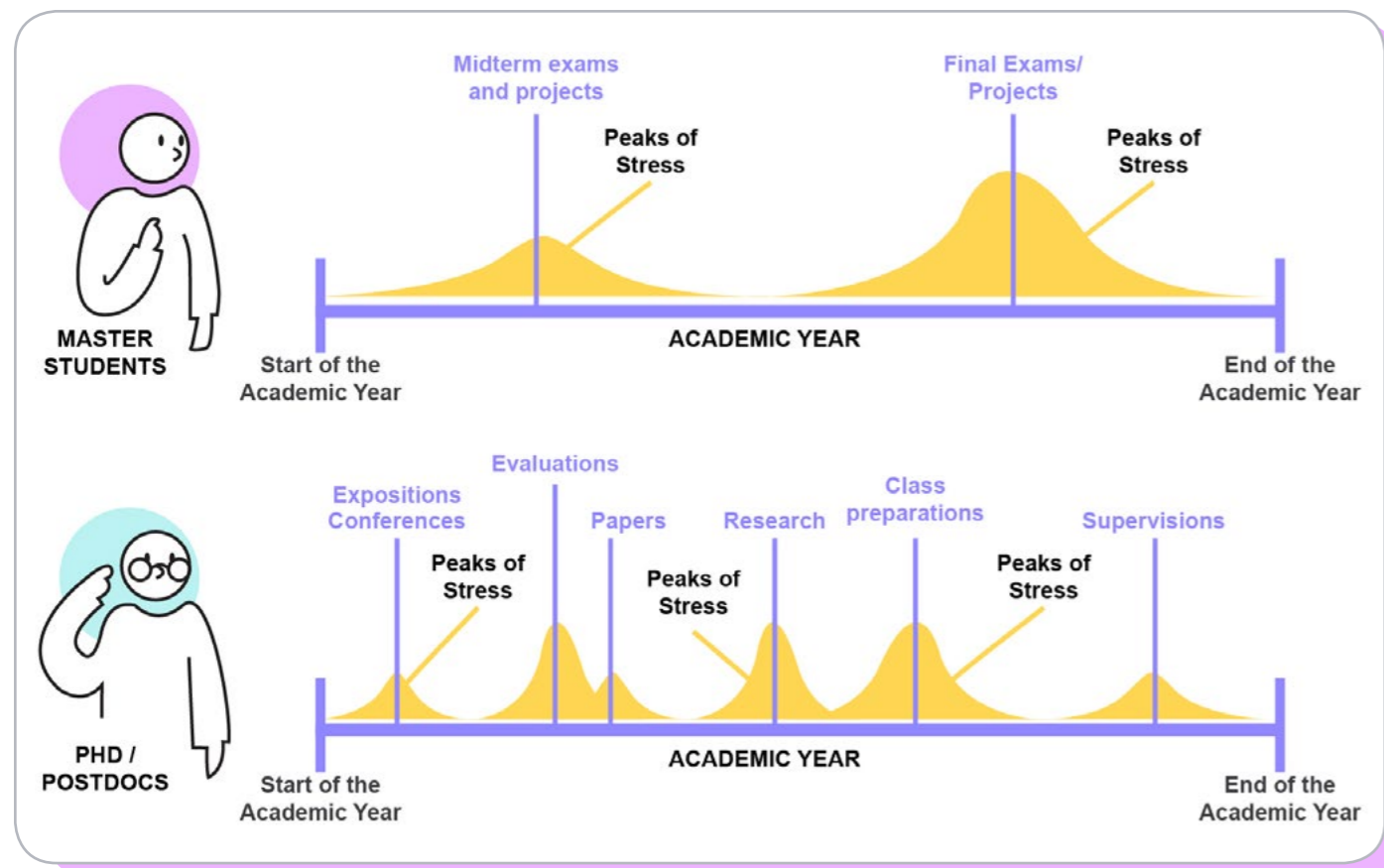
Thanks to the sensitizing materials, it was shown that some strategies used in the co-creation are more popular than others when implemented in real-life situations, students were an accessible group to study these materials and make iterations during the sensitizing stage.

A student's profile is characterized by learning and handing in assignments/exams in a defined time frame, stress manifests in specific periods of the school year, therefore the results obtained show a preference for solving or improving efficiency and time management.

The information obtained will be used to focus on the target group. To achieve this interviews with workers from Tu Delft (PhDs and postdoctoral researchers) were conducted to verify if the results from the co-creation could be applied to them and more people.

Regarding stress and work, The World Health Organization (WHO) explains stress occurs in a wide range of work circumstances but is often made worse when employees feel they have little support from supervisors and colleagues, as well as little control over work processes. (World Health Organization, 2020b)

These findings during the literature research show that the design intervention could benefit not only PhDs and postdoctoral researchers, but workers in other types of institutions if the final proposal can be open to adaptation (see Figure 27).



[Figure 27. Target groups, characteristics, and comparisons]

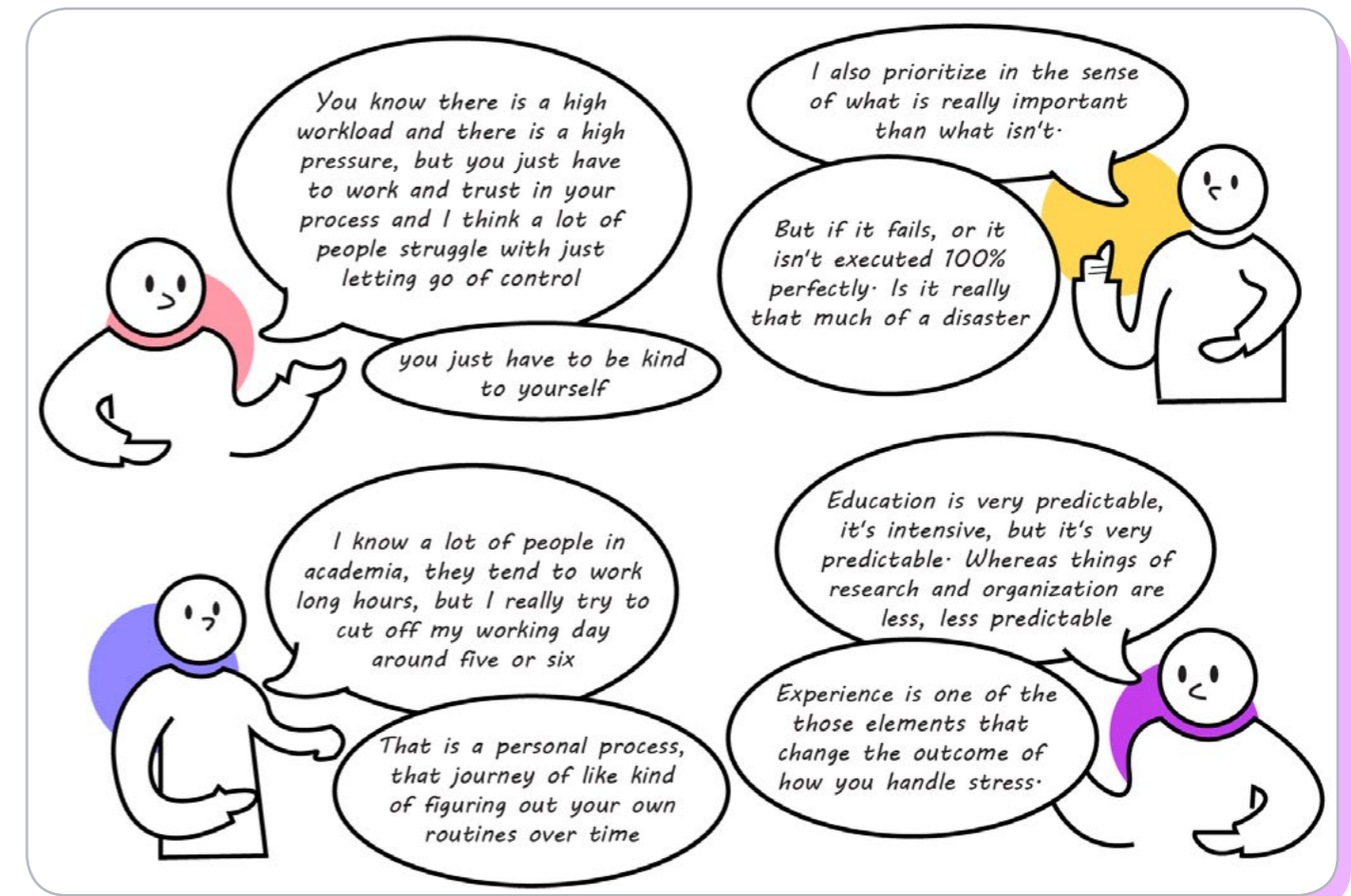
Two activities were carried out to define the profile of the target group on which the intervention would be designed: an online questionnaire and face-to-face interviews to know in-depth the needs of each individual.

A total of 8 Tu Delft employees from the Faculty of Design participated in the first activity and 4 of them provided further insights through the individual interview.

The notes and transcripts from the survey and interviews

can be found in Appendix H.

All the participants have different backgrounds and experiences regarding stress management, however, some general insights emerged from these activities (see Figure 28)



[Figure 28. Quotes from interviewees]

- This target group doesn't postpone, but if they don't have enough time for the deadline they can eliminate tasks considered non-essential.
- Stress comes when they have to invest more time than they had expected in their planning
- They already have experience managing multiple tasks and practice their relaxation, and stress management strategies (even if some of them might not be fully aware of how and when they react to their stressors)
- All people use Avoidance Coping sometimes, regardless of their experience. This group uses AC as a strategy to have a space to think of other options to solve more complex problems
- Everyone has a different definition of stress
- If the direction for work is clear their performance in that task improves
- People I interviewed have clear strategies that might help people regardless of their experience because it has related to their confidence
- Some people are conscious and others aren't about their coping behavior
- "Teaching is predictable, researching is not" - Interviewee 4

4.2 Problem statement

The target group already learned or practiced strategies to manage stressors at work, however, their experience not necessarily has to be linked with healthy behavior which means that facilitation towards more accurate and suitable options to enhance wellbeing and tackle stressor effects is needed. The challenge relies on encouraging individuals to move away from their comfort zone and try alternative options to what they already know.

Second, people have information about the stress that is not entirely true or reliable; this misinformation affects the choices people take and prevents them to know about the consequences on their wellbeing, there is a general understanding that stress can be harmful to our health but, very few people know to what extent their reactions can make a difference between experiencing a short period of discomfort or developing physical, mental and emotional health issues.

Once the main points of the problem were established, a draft was drawn up to start building the design goal: **“My goal is to design a physical material to make my users**

feel confident to try new ways to confront their daily work-related stressors by implementing emotional regulation and problem management strategies”.

The next step consisted of research and evaluation of existing design tools and methodologies to define what tools and materials would be suitable to achieve the core of the design goal.

4.3 Exploration of Design Strategies

To provide an accurate strategy for the final product, research on existing tools was done as well as analysis to compare possibilities between materials (see [Table 2](#)).

Strategy	Applications	Advantages	Disadvantages
Mapping Strategies	To systematically demonstrate the complexity of a situation, problem, or issue	Can be useful to visually show a person's progress if the understanding of a topic is complex	It requires effort to place the information in a coherent and understandable way
Storyboards	Is a tool to pre-visualize interventions or examples. They show sequences using visual resources like drawings which typically have some directions and dialogue	They can show the intention of an intervention (in design in this case) beforehand so the person knows what to expect	The level of the complexity of the visual materials is proportional to the depth of the message that is intended to be transmitted
Storytelling Resources	Similar to storyboards with the variation of fewer visual elements and more text/ spoken word.	Can generate dialogue among more people and create meaningful connections	The activity takes time and reflective parts need more reading and explanation if we compare them to other visual resources.

Manuals/ Handbooks	A concise reference book used to cover a particular subject.	It provides guidance and can include visual elements and text to reinforce it	Most manuals don't contemplate dynamic activities because their primary function and practicality prevent it.
Toolkits	A set of tools, especially kept in a bag or box used to fulfill a particular purpose	The toolkit itself can be a personal set of resources, abilities, or skills which makes it suitable to be adapted to its user	It requires certain guidelines to explain the purpose of some of the tools
Apps	They provide services of different types and are a digital resource practical for being used	They are practical to keep in the smartphone	Some explorative functions are limited to the screen and tactile functions of the device
Games	There principal function is providing entertainment and they can come in physical or digital formats	They can encourage behavioral change if there's a balance between the content and the activities proposed	They require multiple testings and cognitive background to accurately fulfill an educative purpose
Cards	A source of consultation or used as a complement with larger sets of materials, games, toolboxes, etc.	Practical in some cases when the information is concise	The content by itself can become unappealing after a while if there is no intention behind the activities proposed
Websites	They provide multiple services and some with larger complexity can provide a personalized experience	You can get access to the information through any of your devices and consultation is easier	Without a proper network some of the heavy contents might not be available
Social Media Pages	Tools used for consultation, information spread, etc. They belong to one person, a group, an organization, or larger associations.	They can become spaces for sharing and learning	The mode is limited to physical explorations

Table 2. Stress classification

Based on the explorations I decided that a toolkit could provide more versatility and adaptability for this project

The advantages of using toolkits are that designers can propose different activities to explore a variety of interactions, this resource was selected based on the idea that people will have more variety of options from where to choose, test, and adapt according to their goals and abilities.

The toolkits usually have more elements from other strategies (like cards, spinners, textures, etc.) that can complement the material if well adapted to a clear purpose, therefore the next step after this selection was constructing a clear design goal.

4.4 Design Goal, Interaction Vision, and Design Criteria

After defining the profile and needs of the target group, making a summary of insights, and choosing a strategy the next step was elaborating a concrete design goal:

“To design a physical toolkit to make users feel confident to try new ways to confront their daily work-related stressors by implementing emotional regulation and problem management strategies”.

The decision of making the explorations with physical materials is to allow exploration and personalization, testers can draw, cut, add or fold and personalize their activities if they feel like it. These interactions generate attachment to items and can be beneficial to encourage further activities.

It's important to mention that the strategies proposed will help people develop their CB by iterating and trying them constantly and are not meant to lower the effect

of the stressor at the moment it has an impact on the individual. Their function is preventive and prepares the person for future events.

One of the methodologies that complemented the design goal is the interaction vision (IV), this resource helps the interaction designer to focus on inspiring situations taken from diverse scenarios, life situations, etc. In this case, the selected desired interaction was “like discovering a new way to cook your favorite dish” (see [Figure 29](#)).

This particular example allows people to incorporate conventional tools (it can be their tools) and use them differently.

4.5 Criteria and Design Values

How are the Interaction Vision Values connected to the design goal?



[Figure 30. Design Goal]

For the design to achieve the principles of the design goal shown above using the values from the chosen Interaction Vision, some points have been considered:

Four key values needed for the elaboration of the toolkit came through by using this IV:

- **Enlightening:** People can discover something new regardless of what they have tried before
- **Unconventional:** Goes against the established way, it's in a certain way counterintuitive.
- **Fun:** The experience provides amusement or enjoyment so it allows people to keep trying either to master it or see where the interaction goes.
- **Challenging:** Gives room for reflection to achieve the challenge taking into account also how to accept failure

- Reflective activities have to be included so the users can get a deeper understanding of their choices during and after the experiment
- The activities should take less than 20 minutes to perform, otherwise, it becomes overwhelming and people might feel discouraged.
- It has to be visually attractive and dynamic to spark curiosity, if people perceive enjoyment they will more likely try it more than once and the learning process will run smoothly.
- The elements should provide guidance but not give many hints so people can have autonomy and confidence to use whatever they consider will work for them in the future.
- The design should encourage people to create and give opinions to improve the toolkit, this eventually can lead to variations that other people might find attractive and interesting to implement in their materials.

All notes and written processes for DG and IV can be found in **Appendix I**.



[Figure 29. Interaction Vision]

4.6 About Self-Experimentation (SE), Confidence, and Self-Efficacy (SEF)

An important part of the project relates to the question “how to convince people to try a new approach to stress management strategies?”, this statement was included in the DG under the label “make users feel confident”.

To cover this challenge short research about what made people feel confident was conducted, in addition, principles of Self-Experimentation were studied to make the next steps of the prototyping and testing focused to cover the content of the design goal in full.

What exactly is Self-Experimentation?

SE is a branch of the Quantified Self (QS) movement that centers around the interest of self-tracking as a tool for self-discovery (in other words self-knowledge through numbers), on the other hand, SE focuses on creating self-knowledge rather than generalizable knowledge going from generic contingencies to more personal ones (Fedlmeier, 2021).

The reason why **SE is employed** here is that a proposal that enhances particular traits within individuals is needed, more in concrete, **to enhance their Self-Efficacy and confidence to try the materials.**

Based on this method and the fact that stress is an experience everyone perceives in their way SE can be a useful approach to make base materials evolve with their owner and provide accurate results to enhance their current CB.

According to Albert Bandura, confidence is a nonspecific term that refers to the strength of a belief not necessarily specify towards if it's positive or negative, for example: “I can be supremely confident that I will fail the exam”.

To make confidence effective, we have to use the resources of SEF and SE. On the other hand, SEF refers to the belief in one's capabilities, that people can produce given levels of accomplishments.

A SEF belief, therefore, includes both an affirmation of a capability level and the strength of that belief which should be considered within the materials.

For people to perceive their achievements, there must be room for repetition and reflection, repetition without reflection can cause more frustration since by not locating the sources of failure there can't be improvements.

Reflection on materials you can choose could provide

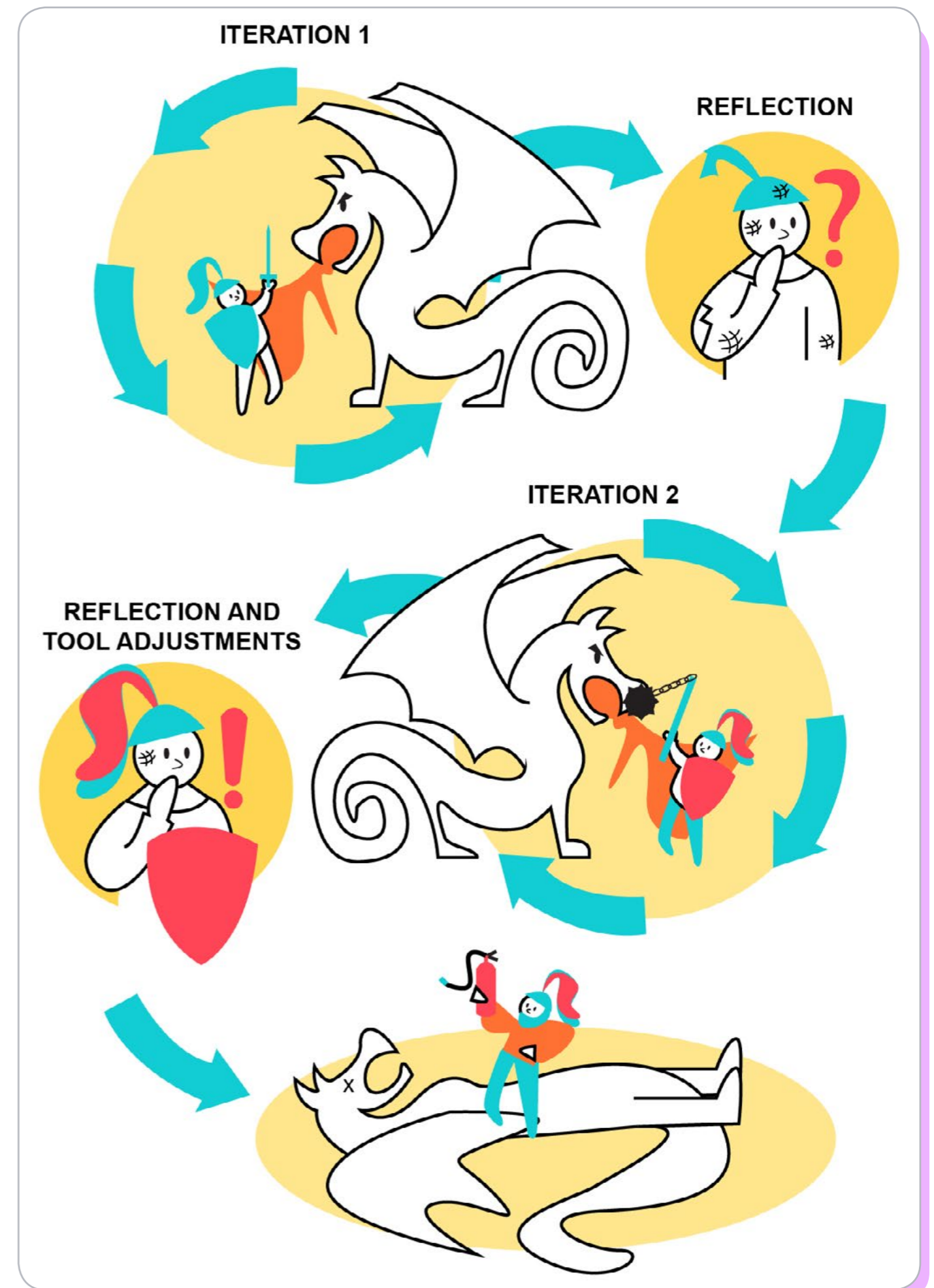
a more enjoyable incentive than imposed generic tasks, for example: Asking someone to meditate when the person's preferences and abilities are more related to physical activities, they might understand the value behind it but they will be less encouraged to try.

Iteration is important to increase perceived SEF and confidence, within this iterative process people should have the opportunity to create as well and generate a sense of self-knowledge which is part of the SE method.

SEF can be defined as the individual's belief in their capacities to execute behaviors necessary to produce specific performance attainments (Bandura, 1997), and plays an important role in the development of CB because reflects the individual's confidence in their abilities to exert control over his/her motivations, behaviors, and social environments.

In conclusion, more ideas were added to the design criteria list: The toolkit should take into account **the possibility of creating self-knowledge through the activities proposed** and provide the possibility to the person personalizing and keeping material to be used in different locations.

To illustrate the importance of the process previously described an analogy was used in [figure 31](#).



[Figure 31. An analogy of how to overcome Stress through Self-Experimentation]

This stage focus on the development of a concept that fulfills the values and targets the points from the design goal, within the activities presented brainstorming and evaluation processes were applied.

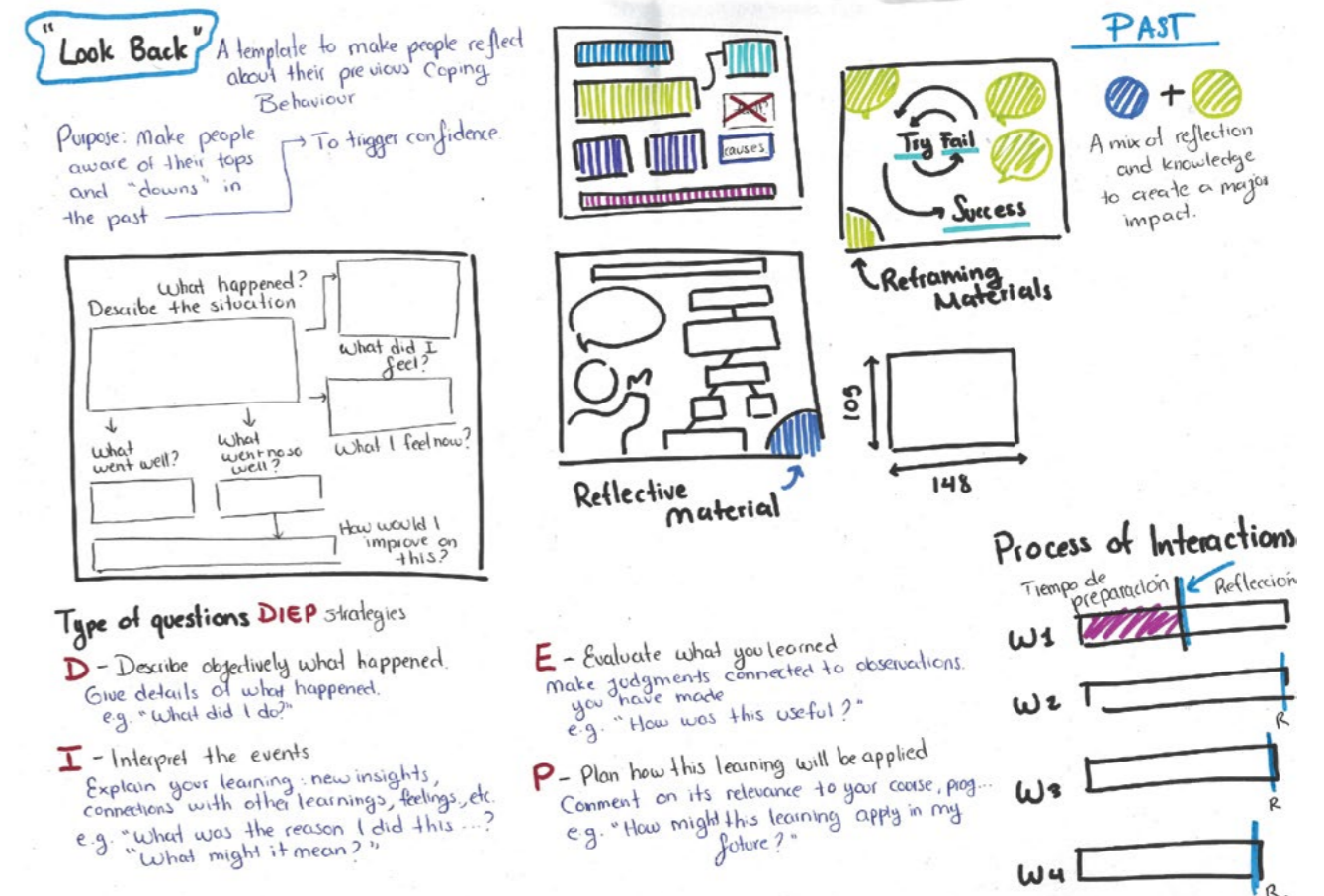
5.1 Ideation and Concept Construction

A brainstorming with ideas based on literature research, user-focused studies, design, and psychological tools and techniques was elaborated to start building up ideas for materials that the toolkit could incorporate.

Chapter 05. Ideation and Conceptualization

The content of the chapter focuses on the iteration, the conceptualization process and the elaboration process of the Design goal and Interaction vision is explained.

Concept 01: "Look Back"



- **Description:** A reflective activity to show people their previous achievements regarding their CB, by asking about past experiences people can have an idea of their abilities and reflect on them
- **Origin:** Based on the "Path of Expression" the idea merges design methodologies and therapeutic methods psychologists use to change the perception of the "self"
- **Value:** Making people reflect on the past to, later on, act on their future is key for them if we seek to enhance current CB

Concept 02: "Highest Moment of Your day"

"Highest Moment of your day!"

An exercise for people to realize their daily periods when they are more efficient.

Hours here

① = ② = ③ =

① Mark your Top moment ^{where you are more energized} of the day, and your lowest

② Place your tasks. (According to your previous energy levels) in the squares.

A = lowest energy invested B = Highest energy invested

C = dimbo of tasks midpoint.

Purpose: Awareness of your energy levels and how you use them.
 x Stress takes away a lot of energy
 Reward: More focused and efficient

Put here all activities you do in the regular bases (try to avoid those tasks you rarely do)

Time

How demanding is it?

Place your tasks here to start figuring out what is taking more effort...

→ Provide pens and maybe stickers with Stress Levels

Process of Interactions

Lo que haces regularmente Cuánta energía le inviertes a las cosas En el día cuando tienes más energía + lo que tienes que hacer ya categorizar!

Template 1 Empezar a categorizar. Template 2 Template 3.

Martes Miércoles Jueves Viernes

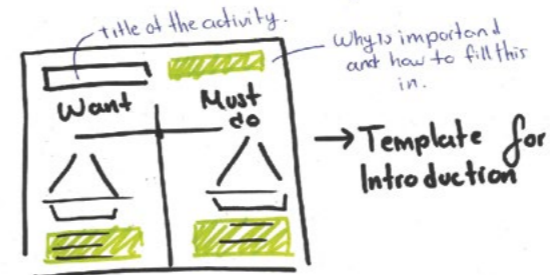
Paquete de Templates para las Tareas de esa semana.

- **Description:** An activity that allows the person to realize the moments of the day in which they are most productive and thus be able to make the most of these periods.
- **Origin:** Some people stop sleeping because they did not feel productive during the day and want to compensate for it using their sleep hours, however people can work at different times as long as the corresponding sleep hours are respected. Therefore, this exercise aims to help select these moments and take advantage of them.
- **Value:** This exercise can help regulate schedules in the routine, this helps people place the most demanding tasks in those periods where there is more energy and productivity.

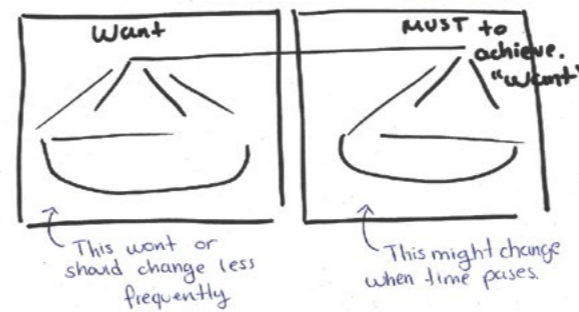
"Putting things in perspective"

Purpose → Have a clear idea (awareness / mindfulness) of what you do)

This activity will help people realize how "balanced" their work, responsibilities and likings are.



Long Term Templates (At the end of week 3)



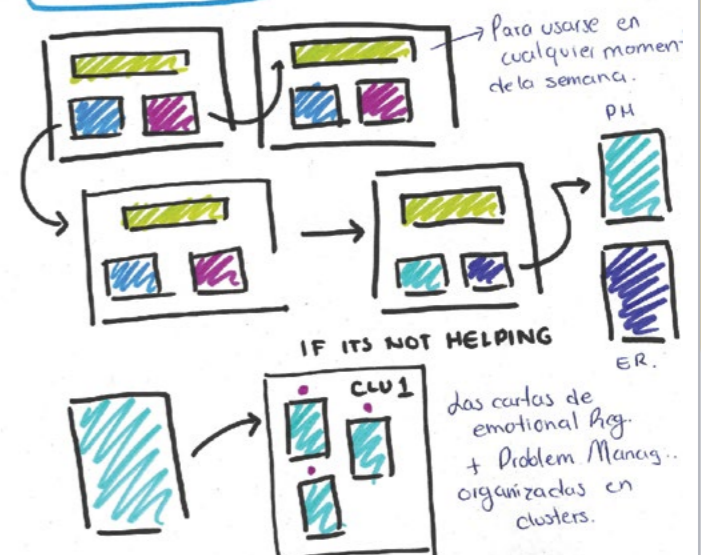
- **Description:** For heavy dilemmas, these cards are meant for you to evaluate the consequences if you decide to confront or avoid them.
- **Origin:** Inspired by the "would you rather" game and psychological introspection activities to evaluate the actions we make but with a quick and simple base
- **Value:** Some decisions are stuck in people's thoughts for a while that might affect their performance overall, by using this technique intrusive thinking can stay at bay.

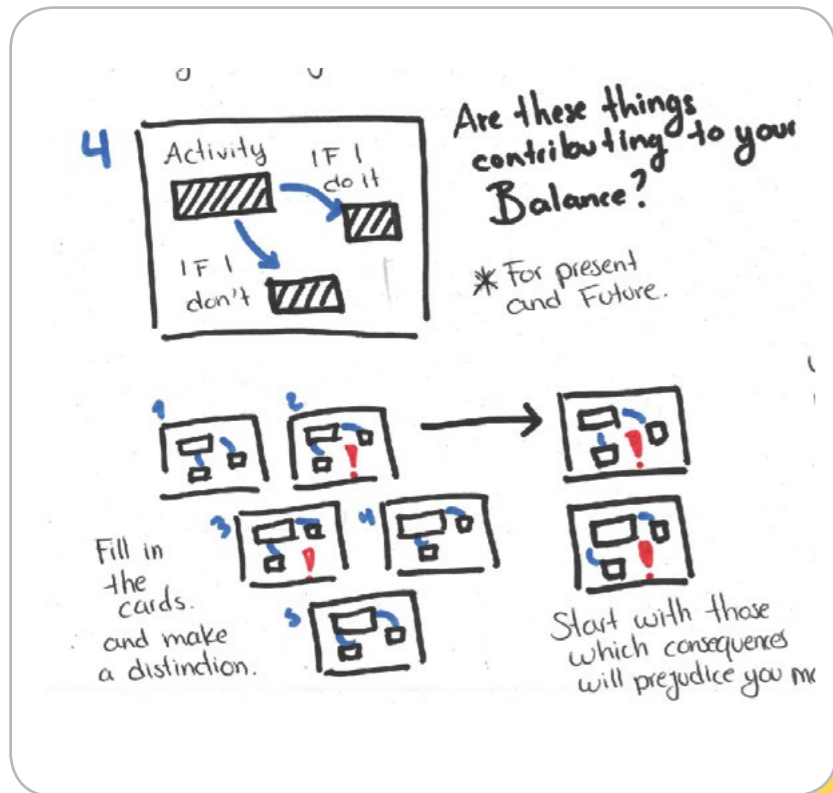
Concept 04: "What If"

Concept 03: "Putting things in perspective"

- **Description:** An activity that aims to help people put their work and personal obligations into perspective, the things they want to do, and the things they need to get done.
- **Origin:** Based on management techniques, this helps people realize how they are handling their responsibilities. By visualizing them it is easier to make interventions.
- **Value:** People can improve the balance of their daily activities and create a habit that allows them to enjoy and fulfill their obligations and dispel intrusive thoughts

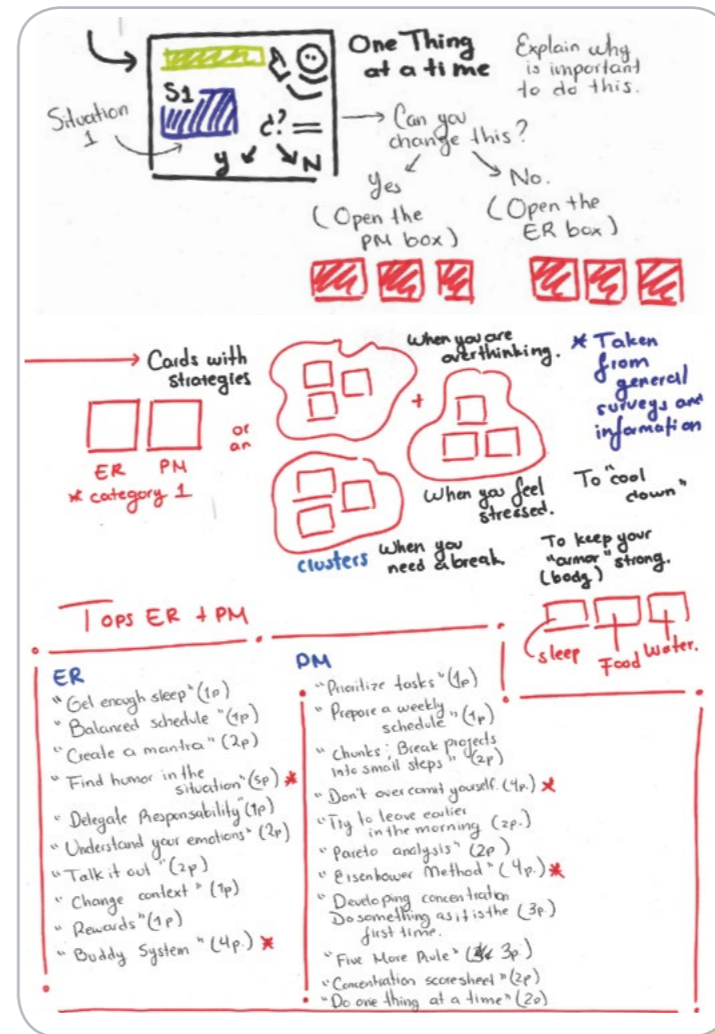
"What if ..."





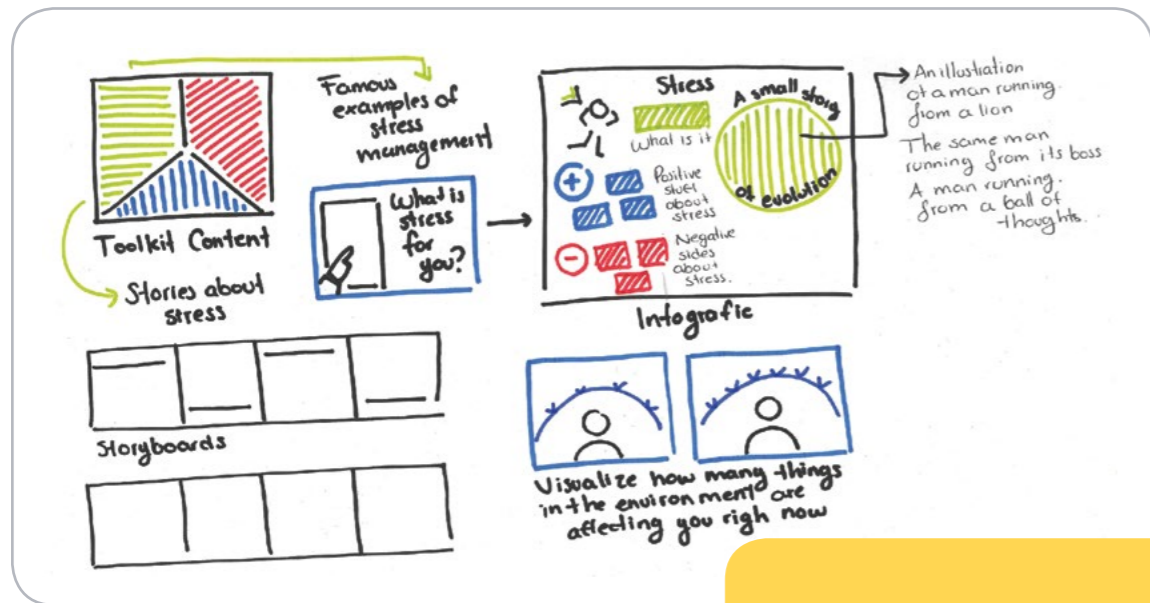
Concept 05: "Randomizer"

- Description:** An activity created for you to randomly pick an ability you want to improve that can be crucial in stress management
- Origin:** Inspired by the "twister" game where you have to pick a color and a body part, plus the opportunity to overcome challenges while trying out activities that will help you reach your goals.
- Value:** If people don't know where to start improving or working this can be a good option to avoid the pressure and leave it randomly.



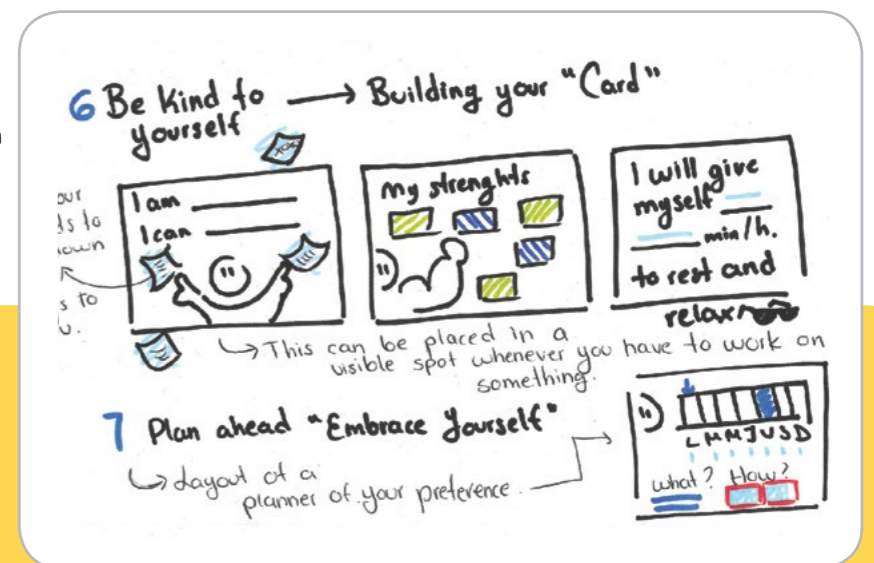
Concept 07: "Stress Strategies Cards"

- Description:** A deck of cards you can consult when you need a specific relaxation, management, or emotional regulation technique.
- Origin:** There are existing decks to teach people about stress, however, more persuasion focus is needed so people can connect with materials and this idea proposes using quick and dynamic activities to make it more engaging
- Value:** Information by itself is not enough to propitiate change, however, enjoyable activities can assist in the creation of good memories and the resemblance can become a habit when it's practiced frequently.



Concept 06: "Stories About stress"

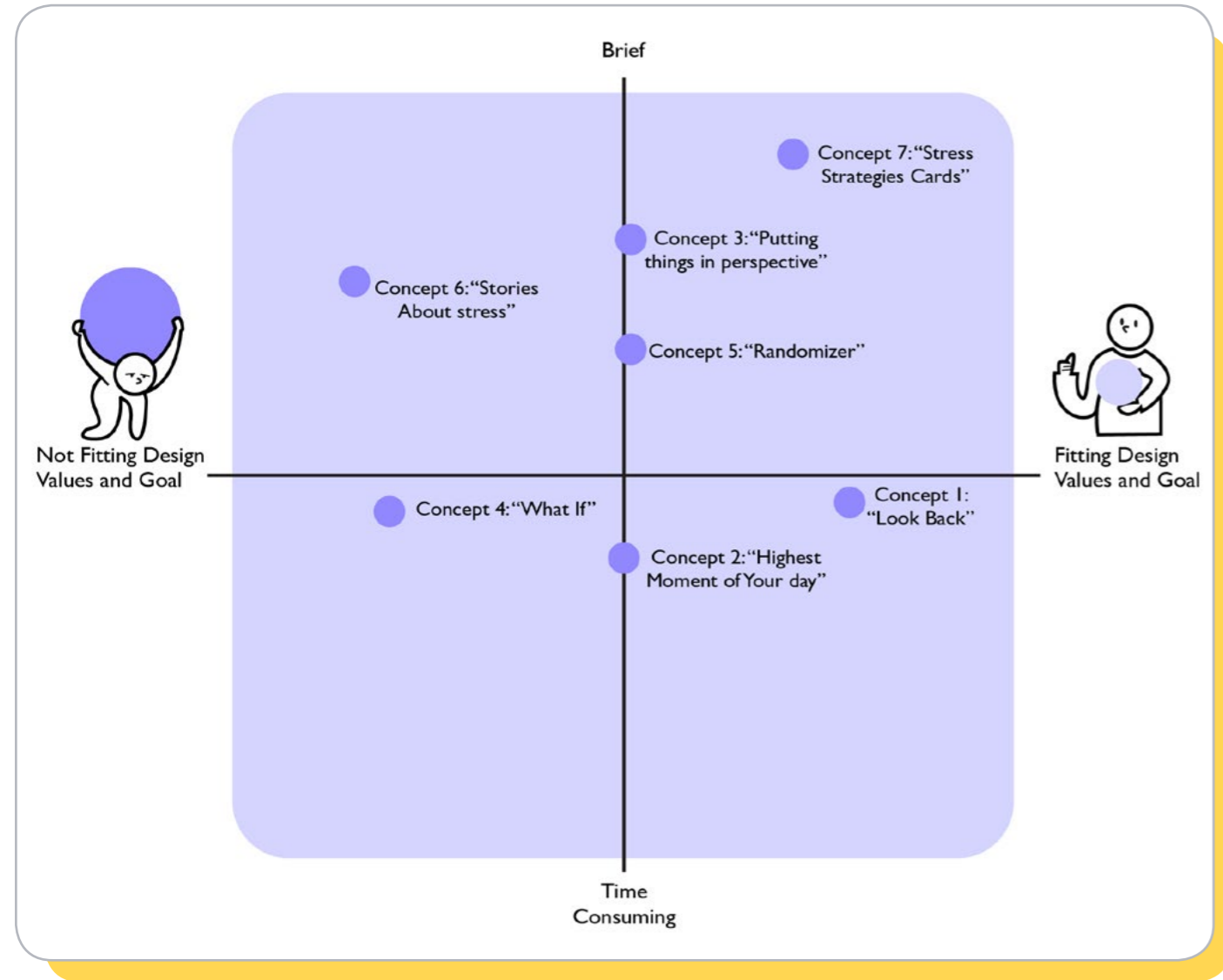
Concept 08: "Build confidence"



- Description:** An activity for people to outstand and reflect on their best qualities.
- Origin:** Positive reinforcement techniques used in therapy help people to build a realistic vision of themselves.
- Value:** People who are demotivated might find this activity refreshing

5.2 Concept evaluations and final selection

Finally, some materials were elaborated based on the ideation stage, to have more accurate results a matrix (See **Figure 40**) was created to select or adapt those activities in which complexity and time frame could be suitable for the testers and their busy schedules.



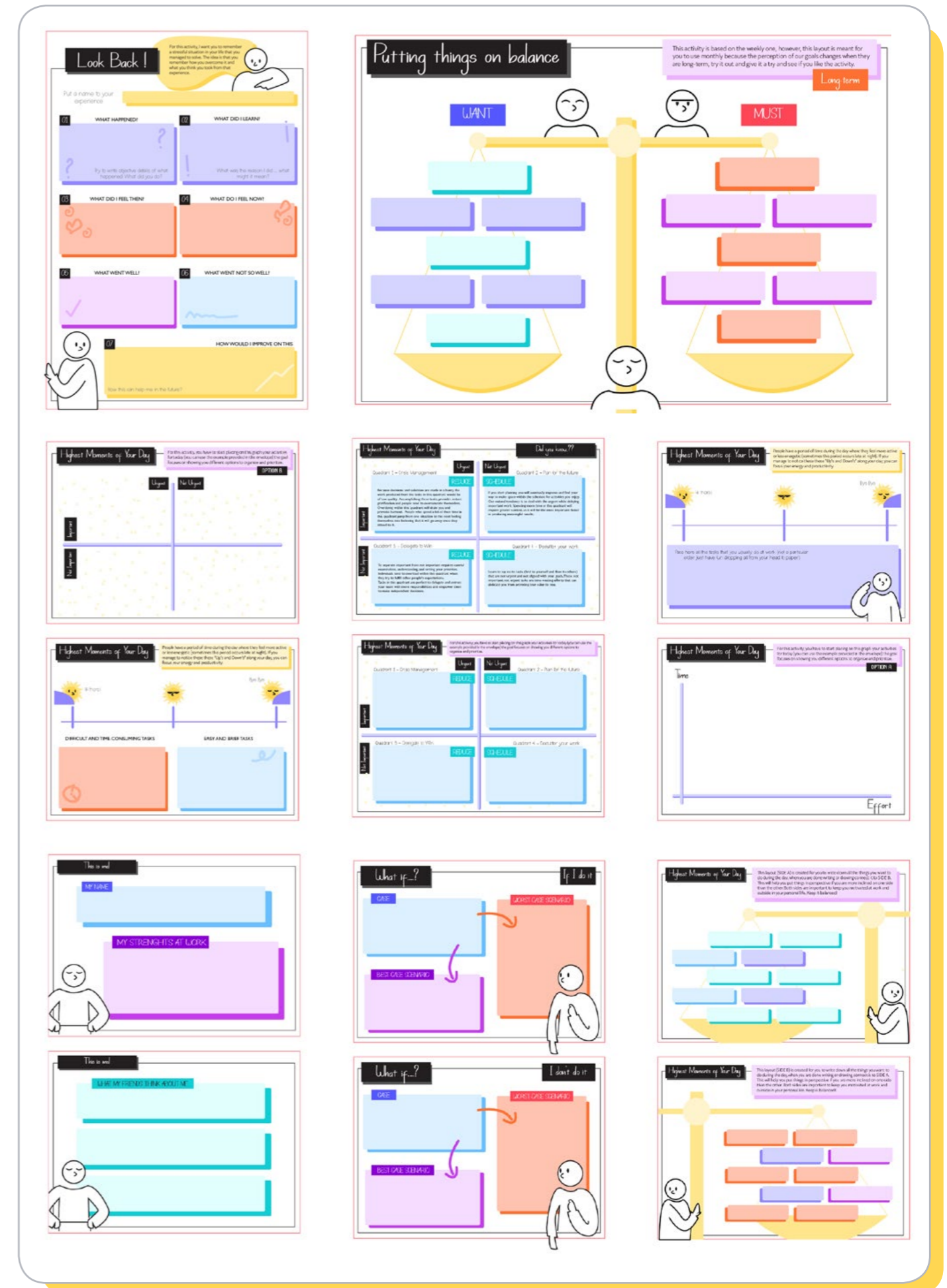
[Figure 40. Concept evaluation]

Once the graphic proposal was elaborated the templates went to an additional filter to merge and connect the activities to compose the toolkit materials and elaborate the prototype

The last selection consisted of 5 materials :

- Activity A: Based on Concept 3, this activity aims to help people find a balanced work day between the things they want/must do
- Activity B: Based on Concept 2, this exercise is meant to help people focus on the most productive moments of their days and plan their activities around them.
- Activity C: Based on the Stress management strategies from Stage 1, this matrix aims to help

- people prioritize tasks throughout the day.
- Activity D: Inspired by the merge of Concept 1 and Concept 4. This activity focuses on reminding the person about their abilities and positive side before starting the day.
- Spinning Wheel and Strategy cards: Taking the idea of randomizing options from Concept 5 and applying it to Concept 7, This set of materials aims for making people take decisions effortlessly but enjoyable enough to keep discovering all the activities included.



[Figure 41. Visual proposal]

In this second part of stage 3, more accurate information regarding the elaboration of the prototypes is presented, and so does the preparation for user tests and data gathering.

6.1 About the User Tests

The prototype was developed following the principles of the IV and the DG and the observations resulted from the conceptualization stage. In addition, two tests were planned for this part of the project; the first test (1-week length) aims to start providing observations from people on the context of use and make improvements

accordingly.

Before the User Tests take place, the elaboration of a test protocol and scenarios was set to give structure to conduct it and gather data efficiently.

6.2 Scenarios

Scenarios are useful when structuring test protocols because they allow designers to foresee possibilities of interaction and usage in specific moments of the experience.

routinary schedule

- Scenario 3: People working at the office extra hours
- Scenario 4: People working at home without defined schedules to work

The workspace of the target group can be versatile, for that reason two variations regarding home and office work were considered in which the materials can be used. Additionally, the time frames in which people work were also considered.

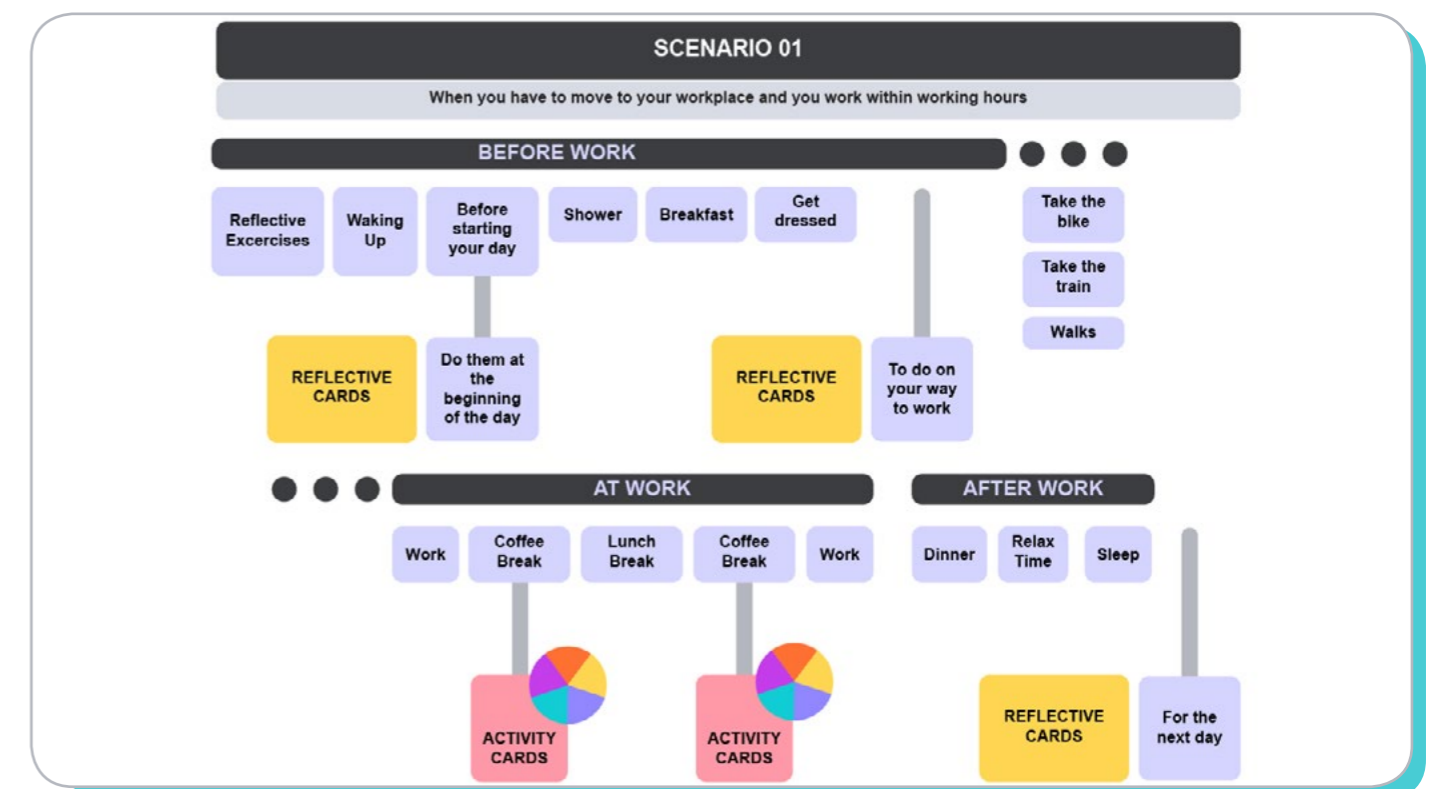
With these perspectives, a diagram was elaborated (Figure 42) and it was concluded that the materials from the toolkit have the potential of being employed either at the beginning or end of the working day or during short breaks. For the reflective activities, it's preferable to do it at the beginning of the day so the person doesn't feel too overwhelmed.

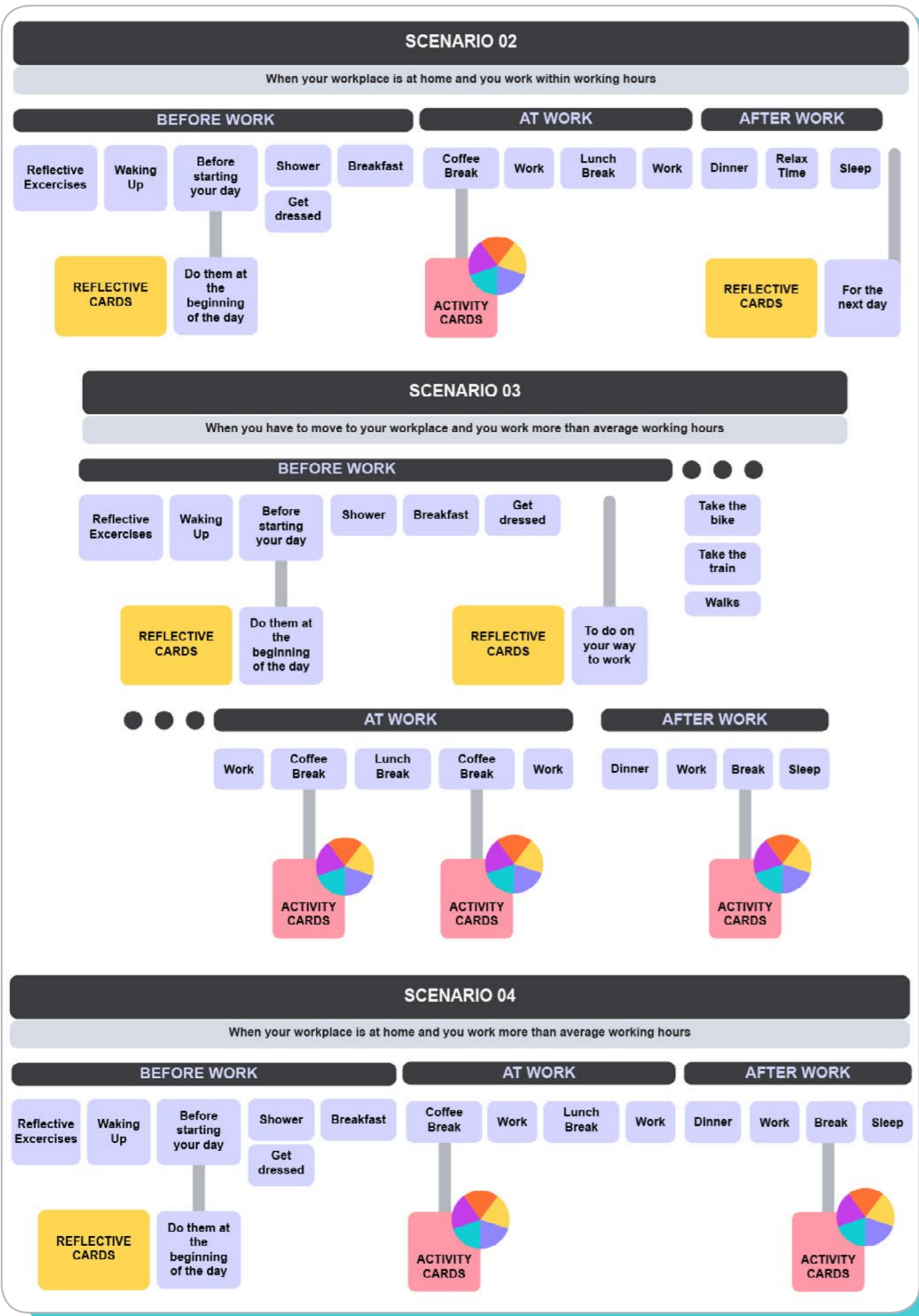
The four scenarios elaborated:

- Scenario 1: For people working in an office with a regular schedule
- Scenario 2. For people working at home following a

Chapter 06. Prototyping and Testing

The focus of this chapter is the User Tests and prototypes, here the protocols to gather data from participants and results are presented





[Figure 42. Scenarios]

6.3 User Tests Explanation

The aim of the test focused on testing if the toolbox applied the values from the interaction vision and the design goal, after the first interaction with the prototype feedback to improve the content of the toolkit was received.

from Prototype 1 Toolkit during a working week. They were asked to sign up confidentiality agreements and Toolboxes were delivered one day before the test. The stages of the process can be seen in Figure 43.

Before starting the tests some questions were formulated to corroborate the efficacy of the design concerning the proposed Design Goal :

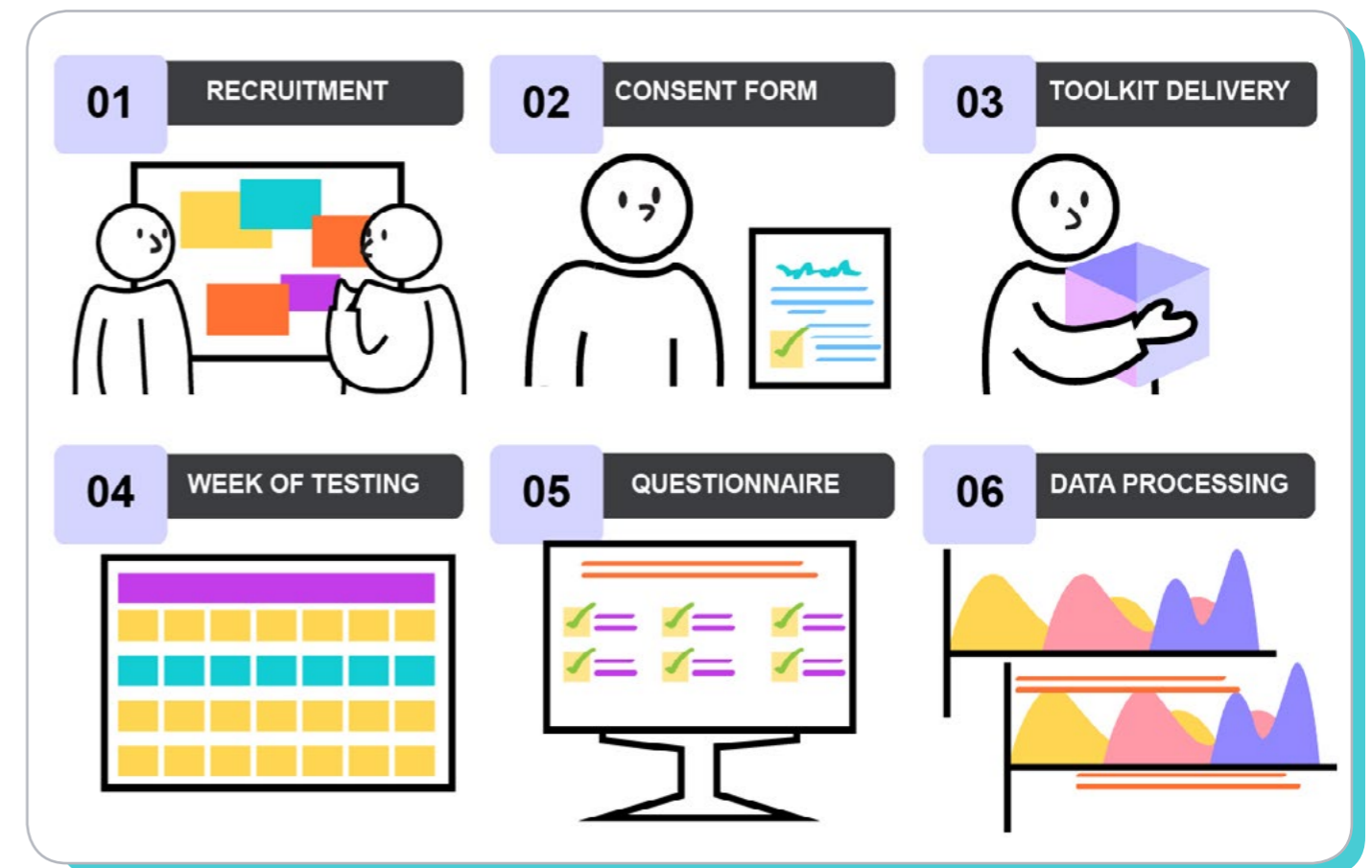
- Do the strategies proposed are clear and easy to apply in the context of use?
- Are the materials used intuitive and dynamic?
- Were the participants able to finish the exercises on time?
- How engaging is the interaction with the toolkit material?
- What positive and negative experiences arise from this test?
- What can be improved?

These participants belong to different Ph.D. and postdoctorate programs at TU Delft.

At the end of the test, people provided feedback and comments about the exercises performed and how to improve the activities according to their needs and context of use.

A small user test (n=6) was conducted to explore the understanding and practicalities of the exercises and improve further the logistics of the design.

A total of 6 participants were asked to test the materials



[Figure 43. Test Protocol]

6.4 Prototype 1

The materials were elaborated taking into account their portability, (A5 size and card standard size). The container selected was a recycled cardboard box with a personalizable label on top of it so the testers could place their name on it.

Among the materials, 1 layout of each activity plus an example of how to fill them in was included. Finally, a spinning wheel and a set of 20 activity cards were set inside with the rest of the tools. (Figure 44)

The toolkit is a physical product because people can explore their senses in a different way than a digital product, however, due to practicality some files were made to have the templates available for people who prefer to use their smartphones, tablets, laptops, etc.

The values of the Interaction Vision are: "enlightening", "unconventional", "fun" and "Challenging", and this is how the IV values were incorporated into the first prototype:

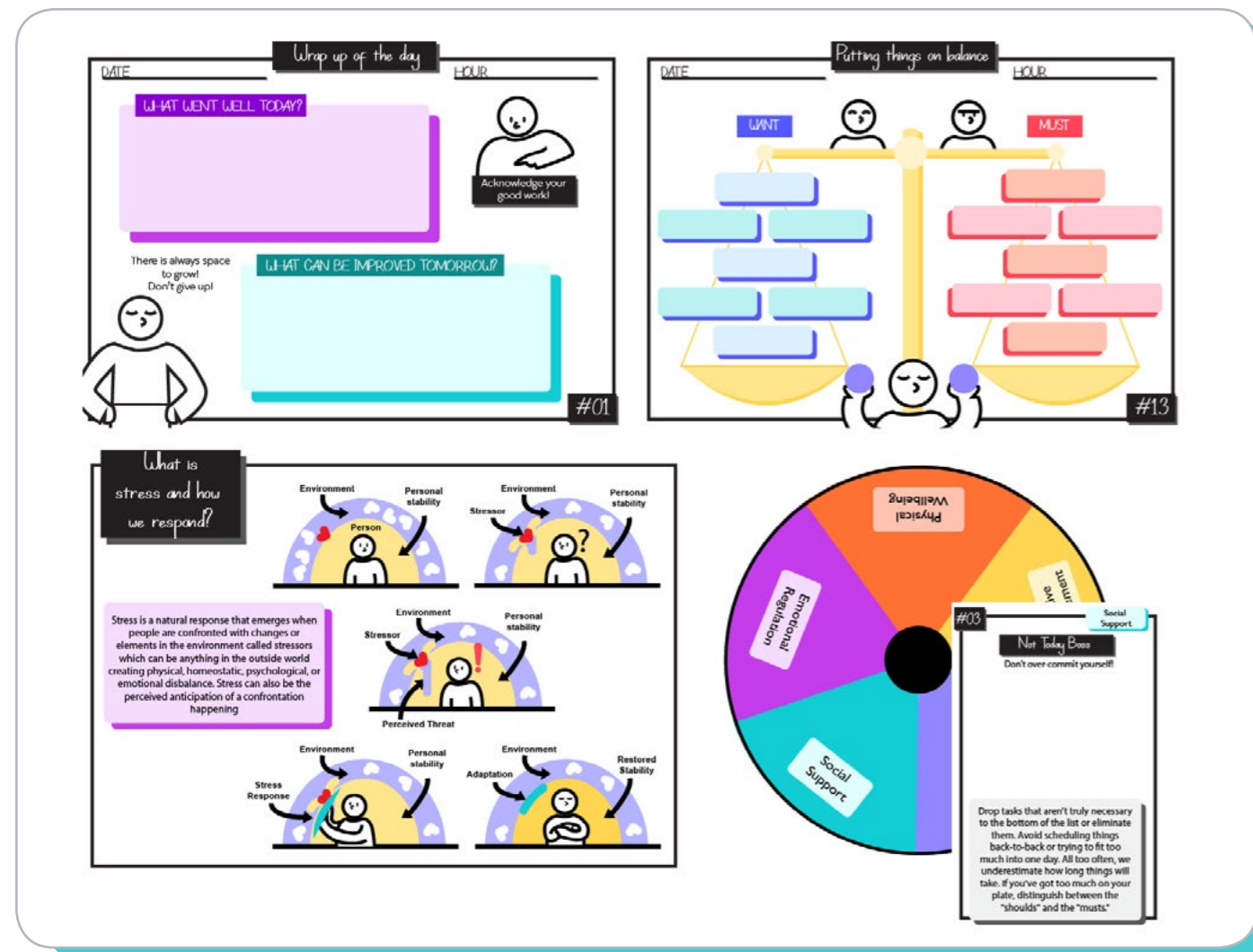
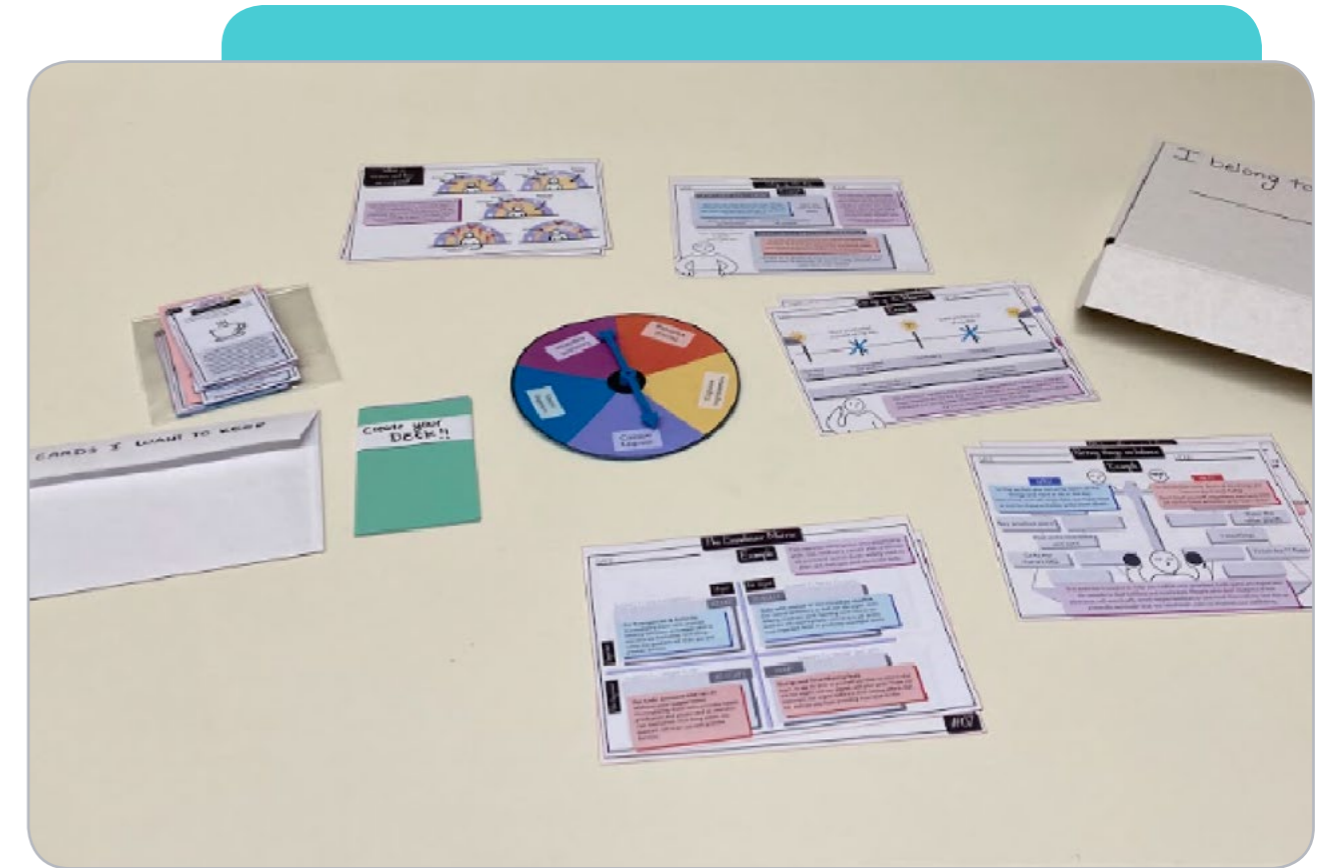
Enlightening: The toolkit comes with a small

explanation about stress and how it affects your health on a regular base, in addition, the exercises allow people to understand themselves and their actions while facing work-related stressors.

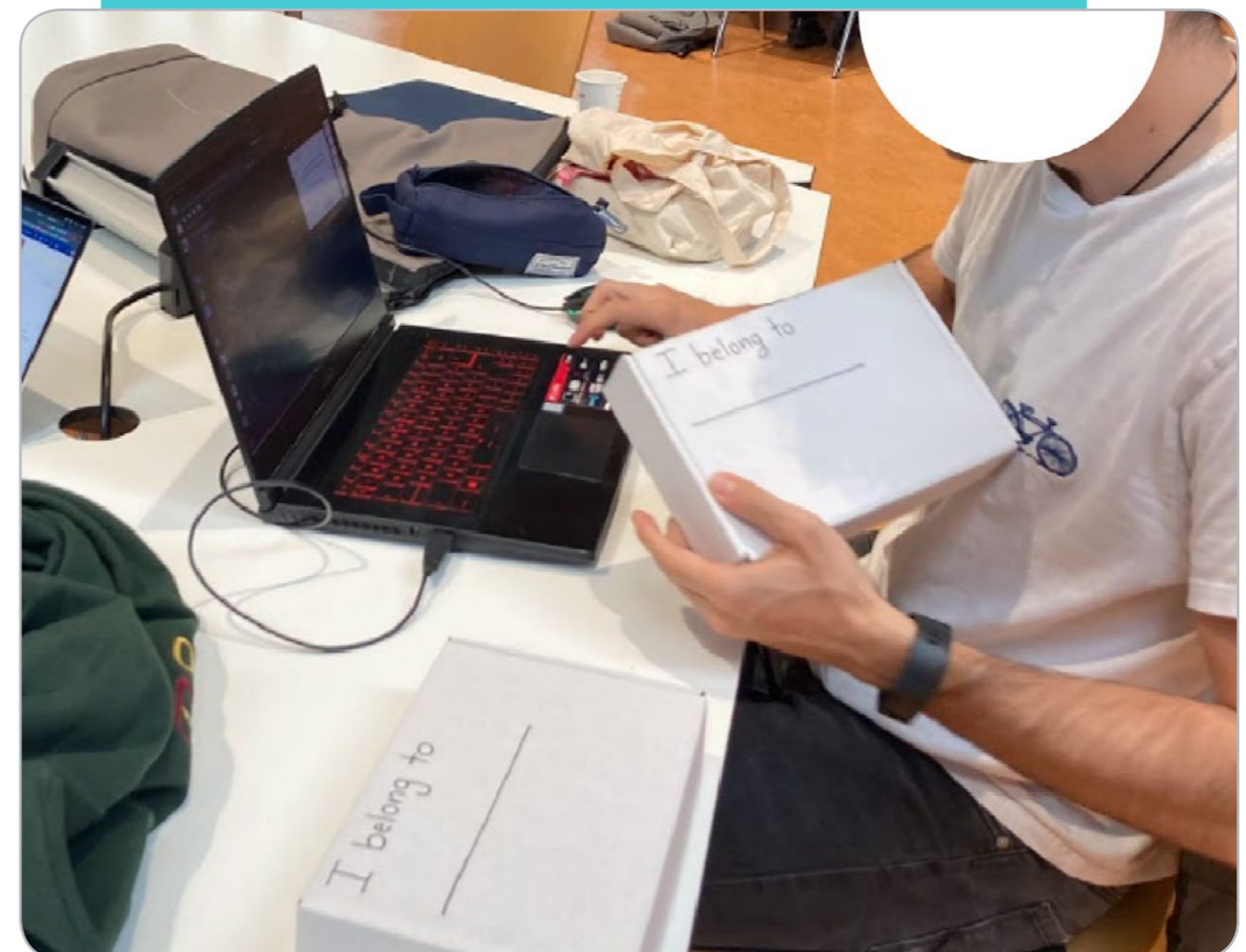
Unconventional: Providing activities that are dynamic in the office or at home is a way to change the perception people have of traditional stress management techniques or manuals.

Fun: The activities are visually engaging but short enough to avoid piling up tasks.

Challenging: The activities in the bigger cards are meant to be reflective so people can take action afterward.



[Figure 44. Graphic proposal]



[Figures 45-46. Physical proposal]

Intended Interaction

The feeling of opening a box to discover something is a thrilling experience and was taken into consideration while selecting the container for the toolkit

The spinning wheel provides two interactions: the first is a physical and dynamic object that you can spin whenever you feel like and the second takes away the pressure from the individual to make decisions and can be used in a fun way.

The deck has visual elements that are minimalistic and straightforward so the person can personalize them or start creating their deck, which makes each deck personal to a certain point and can be consulted whenever the owner feels like doing it.

6.5 User Test Findings. Iteration 1

After the week passed comments about the content and dynamism of the activities from the toolkit were compiled and summarized:

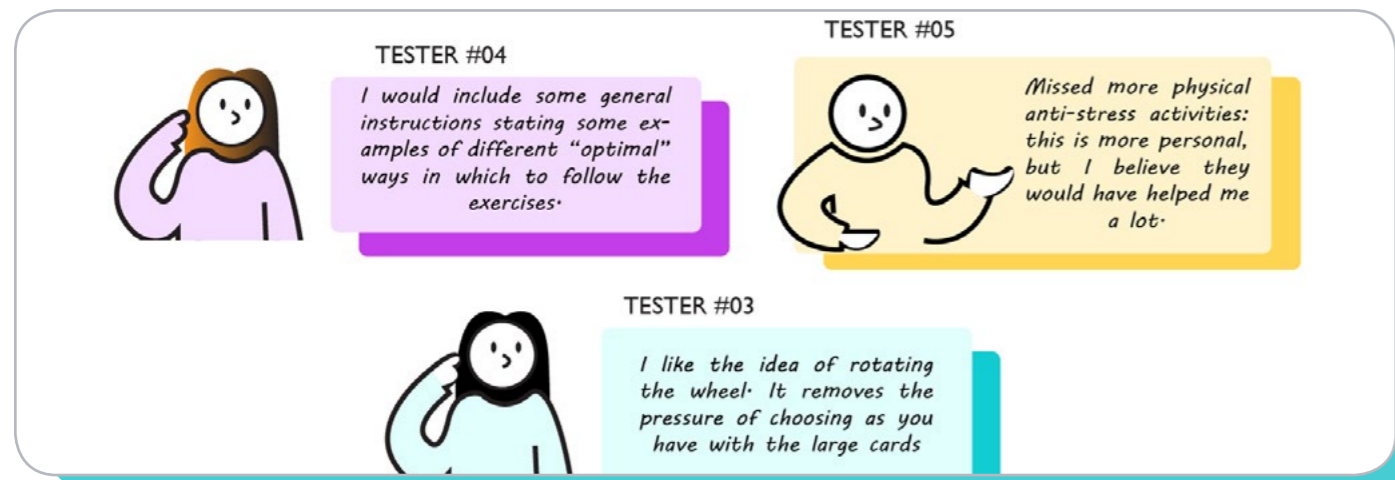
The positive feedback from participants was:

- The visual content was engaging and enhanced my curiosity
- The spinning wheel and cards were the top activity among testers because the timing and dynamism were appealing to them.
- Also, the possibility of giving it randomly removes the pressure of choosing.
- The possibility to keep the card was a highlight for testers
- The top reflective cards were B & D because they give freedom to the person to personalize their goals and they focus on the positive parts of the day/person.

Overall people suggested the following TIPs:

- Clear instructions at the beginning of the box
- Possibility to make the toolkit more portable (the cardboard box was too big to be transported in bags)
- Activity C was the least engaging activity, it sparked more negative emotions due to the frustration it caused by the complexity and confusion it provokes to determine what "productive" means to people
- The "want/must" card was an enjoyable activity, however, a next step is perceived as missing because participants don't know what to do with it afterward
- When people are stressed they want to do less effort, so giving people the chance to choose or do less complex activities might suit them best.

All the results from UserTest01 can be found in [Appendix J](#)



[Figure 47. Quotes from testers]



[Figure 48. User Experience Questionnaire 01]

6.6 Adjustments for Prototype 2

The improvements for Prototype 2 consisted of:

- A new container for the toolbox was adapted so participants can carry the materials easily to the office or whenever they decide to work that day.
- Complex activities were eliminated and the reflection exercises were incorporated with the card system.
- Two visual manuals were elaborated so people know how to organize the activities and avoid investing time and effort guessing what to do first.
- Four envelopes; the first used to keep the reflective cards and the example manual, the other three to make people place their weekly exercises inside each one of them.
- New 12 Strategy Card activities based on the findings and proposals from testers and an upgrade in the original 20-card deck.
- Evaluation options at the back of the cards to know more about the participants' choices

Intended Interaction

The curiosity feeling people triggered from opening a box full of surprises was applied to the design through colorful, practical, and visual materials. The box was chosen and adapted to merge the idea of school materials and a toy thanks to the vibrant colors and shape.

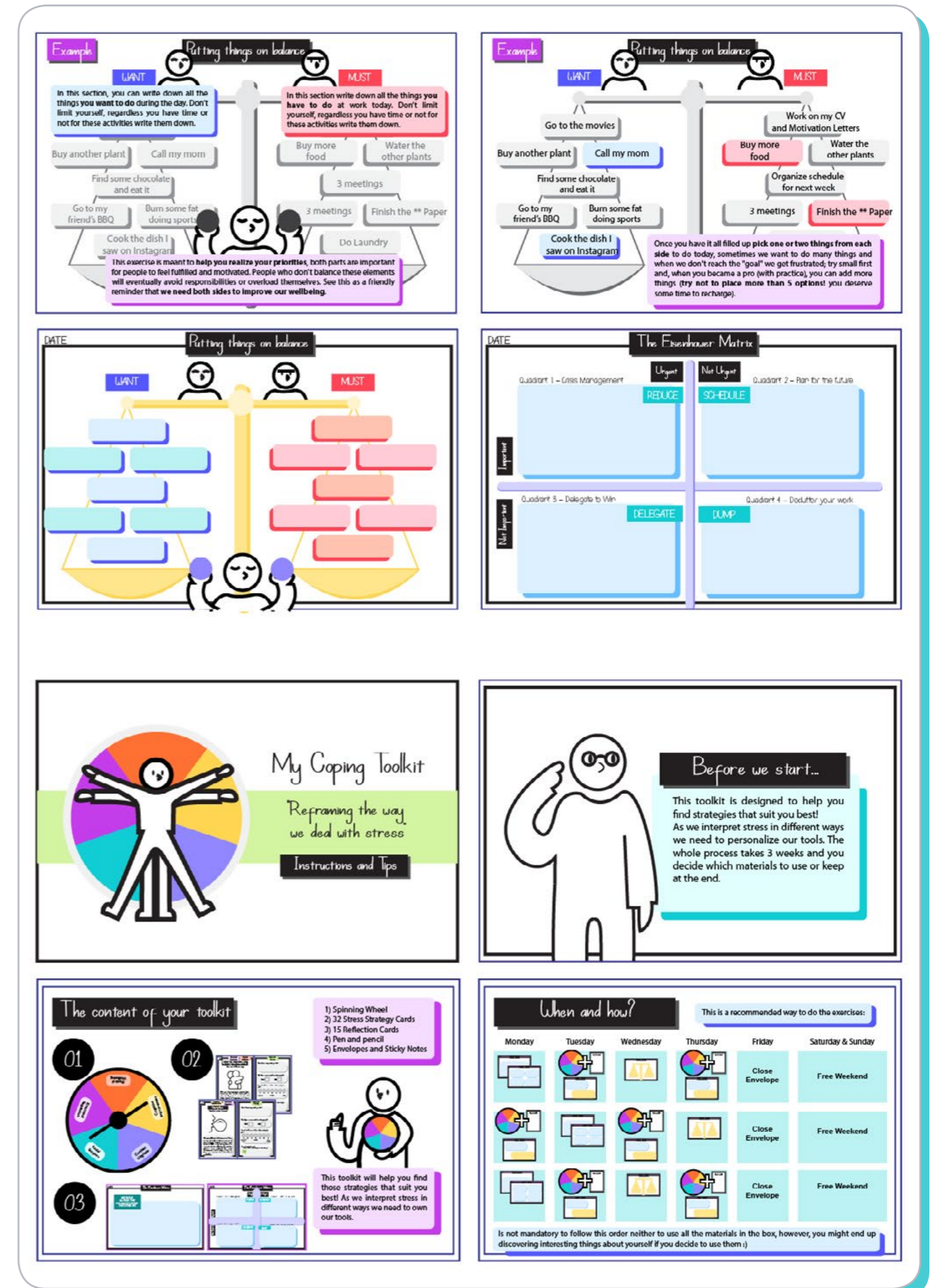
The envelopes selected for this prototype aim to emulate a closure at the end of each week to make users grasp a sense of achievement, when you close an envelope you can get the same feeling as when closing a laptop after a hard day of work.

As kids we tend to assemble our own collections, the card deck is meant for people to choose those activities that vibe more with them and assemble with time their own set of strategies, eventually, the toolbox becomes a reminder of positive experiences while facing stress.

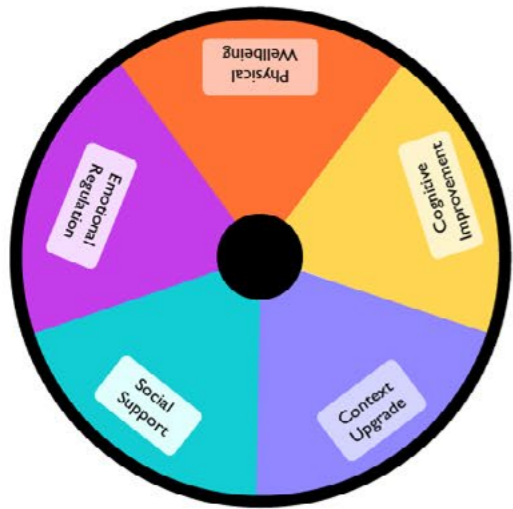
Despite is practical to have a digital backup for materials some of them can't be replaced by a digital version, one example is the spinner used in the spinning wheel. The effect movement has for relaxation and hypnosis in psychology has a positive effect when we grab a physical object as dynamic as this one.

make people place their weekly exercises inside each one of them.

- New 12 Strategy Card activities based on the findings and proposals from testers and an upgrade in the original 20-card deck.
- Evaluation options at the back of the cards to know more about the participants' choices



[Figure 49. Visual proposal]



#30 **Physical Wellbeing** **Cognitive Improvement**

Dancing
The body knows best

Dancing to your favorite music will not only refresh your mind but will instantly uplift your mood and make you feel a lot less stressed. If you don't want to move too much try with your hands first.

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X

#10 **Context Upgrade**

Walk Outside
Connect with nature

Take 8 minutes to go out from your workplace for fresh air, nature and sun! While stress increases our cortisol levels, contact with nature has been proven to lower them. Contact with nature can boost positive feelings!

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X

#16 **Cognitive Improvement** **Emotional Regulation**

Sing out loud
Like Maria Callas!

Pick a song, put it on a CD and start singing. You can do this with more people! A 2017 study measured the amount of cortisol (the stress hormone) in participants' saliva before and after they sang. Researchers in that study found that the amount of cortisol was lower after singing.

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X

#03 **Cognitive Improvement**

Focus Scorecard
Make your own or group challenge and improve your concentration

Whenever doing some important work, use a concentration scorecard. Each time you find your mind wandering, make a checkmark on the sheet and write down the source of your distraction. If you do this consistently, you may find that you have far fewer check marks and far greater concentration, or you will identify things that are not summing up to

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X

#17 **Emotional Regulation** **Physical Wellbeing**

Get a Hug from a Loved One
Connect in different ways

When you hug someone, oxytocin (also known as the "cuddle hormone") is released. Oxytocin is associated with higher levels of happiness and lower levels of stress, true or not it causes a reduction in blood pressure which through other processes make you feel more relaxed.

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X

#08 **Cognitive Improvement**

Write and Throw
Clear your head through pen and paper

If you need to work and you have other concerns that might affect your productivity write them down on a separate piece of paper. After you finish writing throw away the paper and keep on working.

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X

#28 **Physical Wellbeing**

Food Tip
Orange juice with crackers

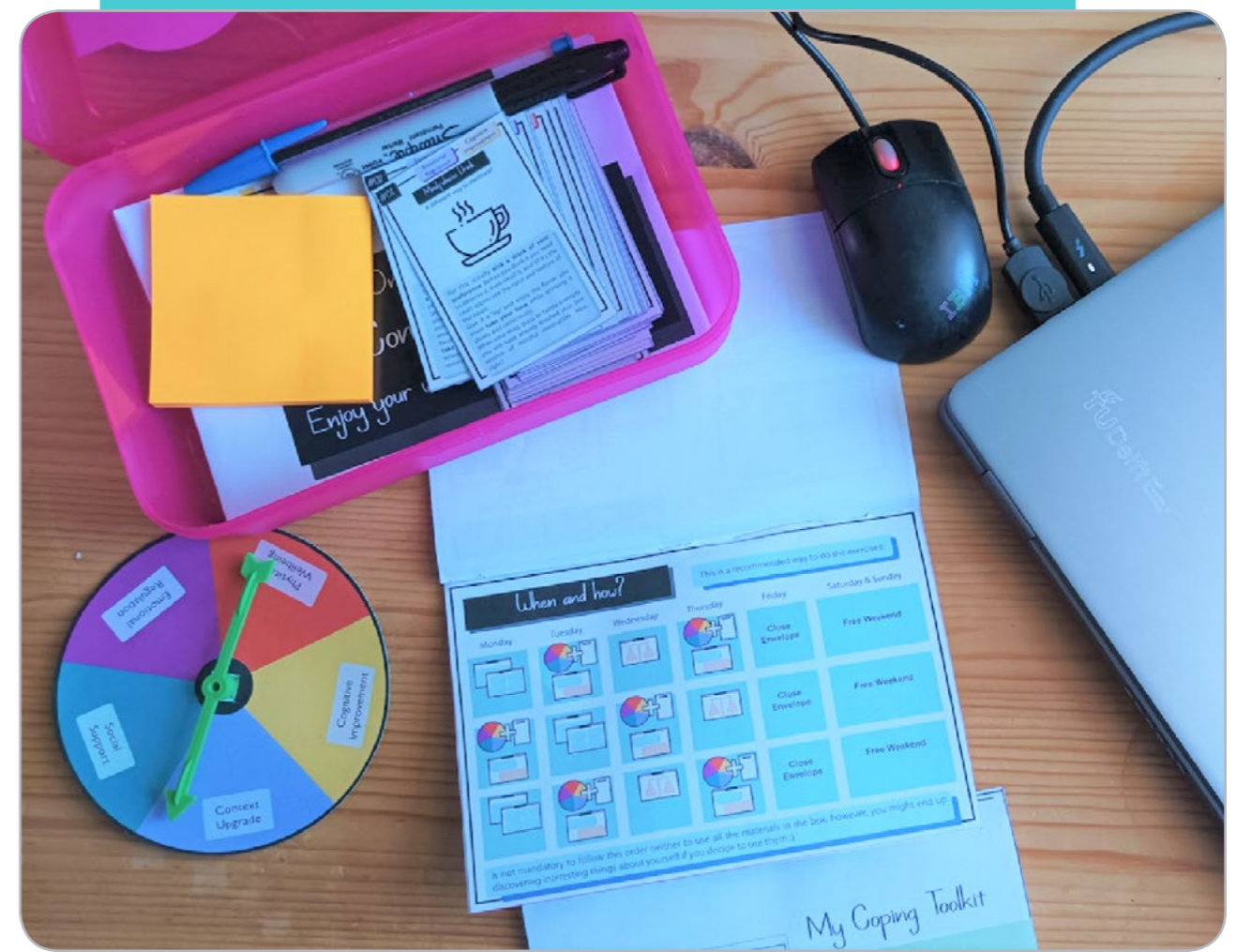
If you feel anxious try munching on crunchy snacks like carrots, nuts, or even crackers; this relieves physical tension and will make you feel more relaxed! Another option is drinking orange juice; high levels of vitamin C are thought to help physiologically reduce stress levels.

How this strategy made you feel?

Would you recommend it to other people?
YES! NO

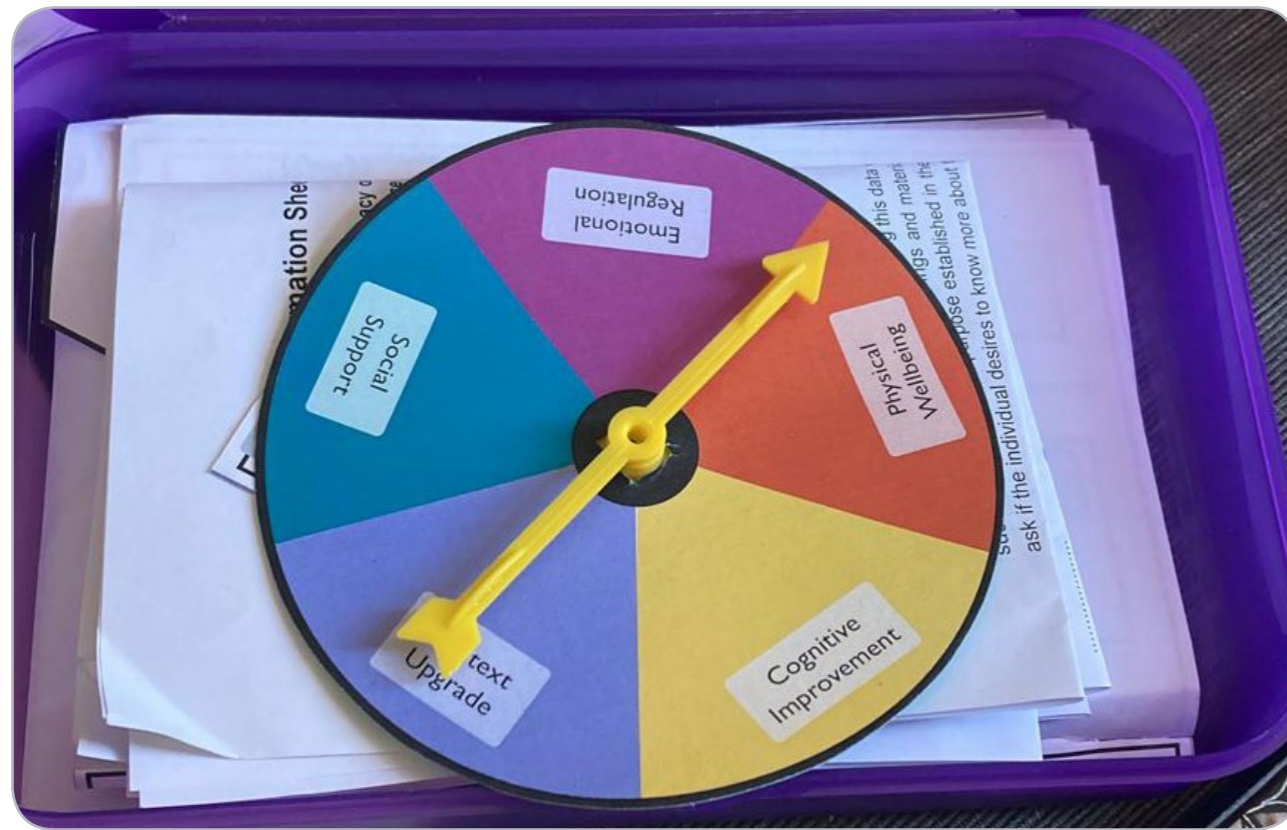
From 1 to 7 how useful was this activity for you?
1 2 3 4 5 6 7
Not useful at all Neutral Very useful

Times I used this card
Leave a mark for each time you use this technique
X



[Figure 50. Visual proposal]

[Figures 51-52. Physical proposal]



6.7 User Test Findings. Iteration 2

The positive feedback from participants was:

- The illustrations give a clear idea of how to make the exercises in the words of a participant “they reflect the importance of personal balance maintenance and self-compassion”.
- The toolkit might be beneficial as a way of discovering activities that can be made into coping habits, which is reinforced by the randomness of the wheel.
- Easy exercises that help organize chores, so you can see what things are important and what are not and you can prioritize. And reduce stress (Eisenhower chart)

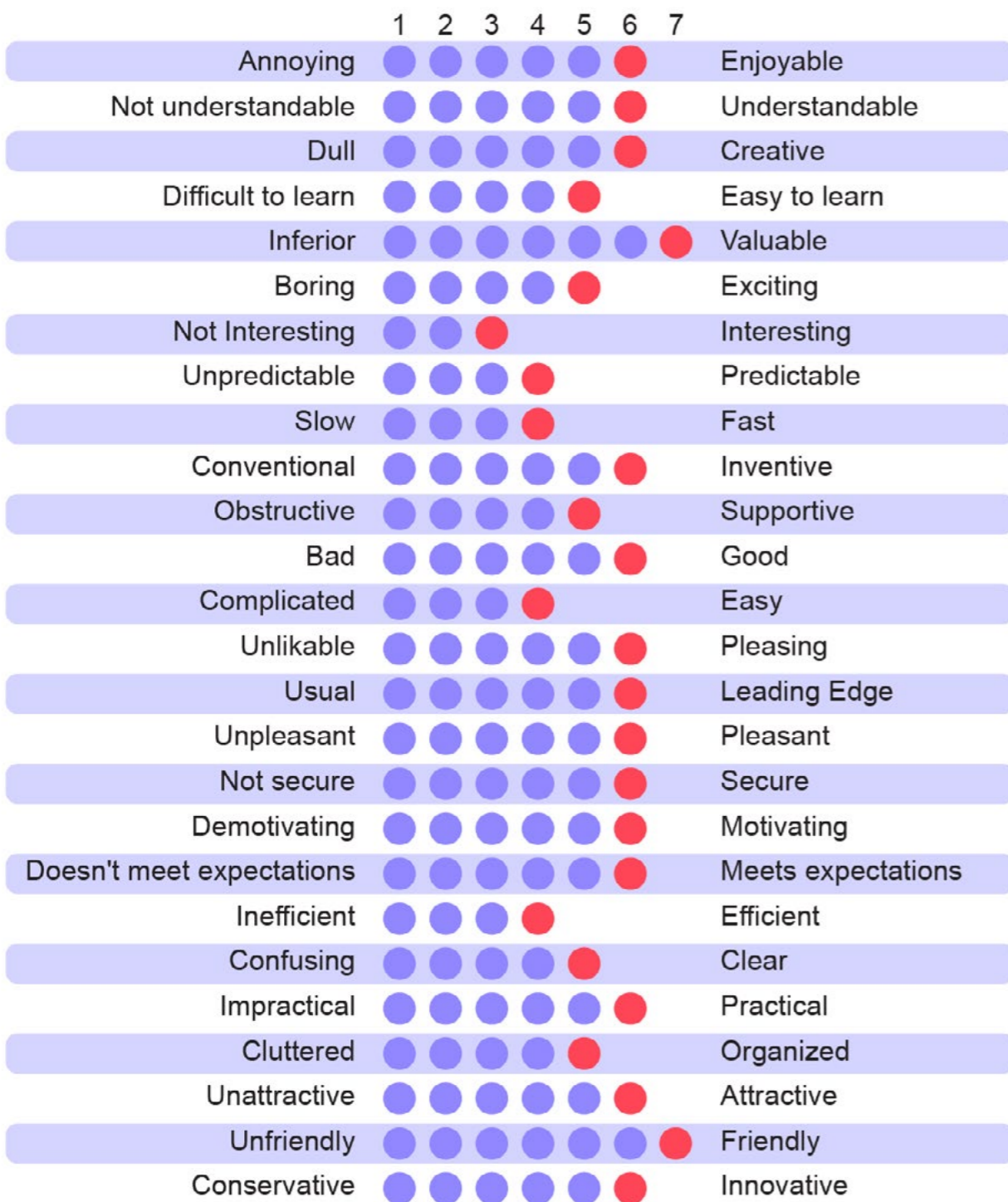
- instructions for everything would be sufficient
- The envelopes are not connected with the rest of the material and they add more confusion
- The number of activities can be stressful, less materials and more fast response activities could work best when people have too many things to do
- The reflective exercises are useful, however in periods where people move away and have many things to solve they become annoying.
- Some more written explanation and some context would have made it better.

Overall people suggested the following TIPS:

- It would be nice to have a printable version of the larger reflective cards in case people want to do it more often every day
- Too many instructions, just one booklet with the



[Figures 53-55. Physical proposal]



[Figure 56. User Experience Questionnaire 02]

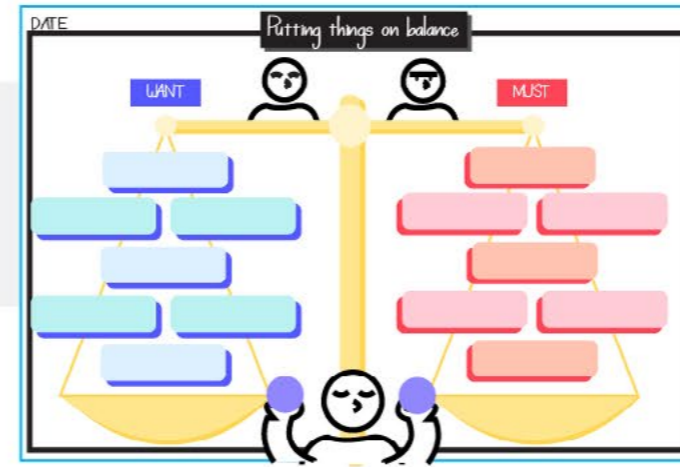
Chapter 07. Final Design

In this chapter findings a description of the final design that came as a result of two 2 User Test Results



My Coping Toolkit

"Reframing the way we deal with stress"



My Coping Toolkit contains 32 card dynamic activities, a spin wheel, and 4 reflective cards

#01 Emotional Regulation Cognitive Improvement

Mindfulness Drink
A different way to meditate!

For this activity pick a drink of your preference. Before you drink it you need to observe it, then smell it, and (if it's the case) appreciate the color and texture of the liquid. Give it a 'zip' and enjoy the flavor, you must take your time while drinking it slowly and consciously. When your mug, glass, or bottle is empty you will have already finished your first session of mindful meditation. Nice, right?

#02 Emotional Regulation Physical Wellbeing

Energetic Fragrance
Let your nose guide you in the right direction!

Next time you are at the office bring a spice/scent you like. After a positive experience at the workplace (accomplishing or finishing something successfully) open the container or bag with your spice and smell it. Next time you feel overwhelmed take a deep breath and smell! It's a relaxing experience and a friendly reminder of your accomplishments.

#03 Social Support

Not Today Boss
Don't over-commit yourself!

Drop tasks that aren't truly necessary to the bottom of the list or eliminate them. Avoid scheduling things back-to-back or trying to fit too much into one day. All too often, we underestimate how long things will take. If you've got too much on your plate, distinguish between the 'shoulds' and the 'musts.'

#04 Emotional Regulation

StandUp StandWork
Find humor in the situation!

When you - or the people around you - start taking things too seriously, find a way to break through with laughter. Drop some jokes or find a funny video, or stand-up routine online. After that go back to work!

#05 Emotional Regulation Cognitive Improvement

Inner Illumination
Create a Mantra

To cast negativism from your mind, you need to exorcise it with a good phrase. Create a mantra thinking of good qualities about you and repeat them every day (e.g say it out loud when you wake up). You can say things like 'I'm an excellent speaker', 'I make the best coffee', etc.

#06 Physical Wellbeing

Plank Time!
One minute of plank competition

Planks are a simple and power-packed total body exercise that can help you build strength in your lower and upper body, engage your core, and stabilize your joints. Even doing just one minute of doing planks each day can achieve amazing results over time, so get started today if you want to feel plank benefits.

#07 Emotional Regulation Social Support

Swap Mugs
Use another co-worker's mug or drink what they usually sip at the office

These tiny changes in your daily routines give you a refresh from monotony, connect you to other people, and reinforce positive experiences.

#08 Cognitive Improvement

Write and Throw
Clear your head through pen and paper

If you need to work and you have other concerns that might affect your productivity write them down on a separate piece of paper. After you finish writing throw away the paper and keep on working.

#09 Cognitive Improvement

Focus ScoreSheet
Make your own or group challenge and improve your concentration

Whenever doing some important work, use a concentration scoresheet. Each time you find your mind wandering make a checkmark on the sheet and write down the source of your distraction. If you do this consistently, you may find that you have far fewer check marks and far greater concentration, or you will identify things that are not summing up to your focus.

#10 Context Upgrade

Walk Outside
Connect with nature!

Take 8 minutes to go out from your workplace for fresh air, nature and sun! While stress increases our cortisol levels, contact with nature has been proven to lower them. Contact with nature can boost positive feelings!

#11 Context Upgrade

Switch Locations
Effective against monotony in your workplace

Try working in a different space from your average working spot, it can be swapped with another coworker's desk or you can explore options on your own! This helps when you need to focus and there are many distractors in your environment. If you work at home try outside in a cafe or a terrace.

#12 Cognitive Improvement

Five More Rule
For those things, you don't like doing but you have to finish.

If you're in the middle of a task and tempted to give up - just do FIVE MORE. Read FIVE MORE pages. Finish FIVE MORE math problems. Work FIVE MORE minutes.

#13 Context Upgrade

Clean your space
Nice desk!

It's proven that a more organized space will increase persistence and you will find things much easier. Overall, a disorganized desk will lead to misplaced documents, lost information, and clutter. Keeping your desk clean will allow you to find what you need, when you need it, without adding stress to the mix!

#14 Social Support

With a little help from my friends
Help a friend or coworker to solve small tasks

Advise a friend or a coworker about how to solve tasks they have been struggling with. It's important to feel supported at work, productive and motivated; the mere idea that we can count on people at our office or workplace lowers/reduces stress.

#15 Physical Wellbeing Context Upgrade

Walk Backwards
Change your view (literally)

This is a short activity that you can do at your workplace. Walk Backwards towards your: office spot, the bathroom, the closest coffee machine, etc. Counterintuitive exercises help the brain reframe things when going through a lot of mental processes (work) at the same time.

#16 Social Support Emotional Regulation

Stressivism
Stress can be your muse

Draw your stressor! This activity can be short or long depending on the level of detail the other person wants to have in the drawing, however, the faster and sloppier it's more effective. This provides you with a different perspective of your problems through the eyes and non-verbal expressions of another human being. You can try this with a friend or coworker!

#17 Emotional Regulation

Swear for your life
Shouting or writing down bad words can be very fulfilling!

Swearing is an emotive form of language, and psychologists suggest that while the person is exposed to moments that cause stress, these expressions can contribute to lowering the negative emotional effect so we can handle the situation.

#18 Emotional Regulation Social Support

Reconnect with a relative and friends
Your emotional support network is key to overcoming stress

Sometimes we are very devoted to our work, which makes us disconnect, it's easier to keep in touch with the people you see in work every day but it's nice to try to reach out to family, friends, and acquaintances from time to time.

#19 Physical Wellbeing

Drink Water
Keep your body hydrated!

One of the most popular edibles at work are coffee, tea, and snacks of all sorts, however, most of these dehydrate us. If you drink sufficient water your body will keep your metabolism at its best! (especially to lower cortisol, usually known as "the stress hormone") Don't wait to be thirsty! Grab a glass of water!

#20 Social Support Cognitive Improvement

Once Upon a time...
To refresh your creativity and your group's

Assemble a quick bizarre story to relax with your coworkers! This activity enhances creativity when we are saturated with tasks and many thoughts at a time (this game aims to help you dump random information out loud and with people). The first person starts saying something like "Once Upon a time..." and then the next person continues the narration (max 2 words per person).

#21 Emotional Regulation

We will rock you
Beat it!

Sometimes while we are stressed we just need to redirect our energy! Pick a powerful song when your energy drops down, "We will rock you" from Queen is a good example but try looking for those beats that move you the most! In short, you will have a full playlist!

#22 Context Upgrade

Your tiny green corner
Bring nature to you!

Place a plant or a vase with fresh flowers from time to time close to your desk or workspace, when we can't go outside often to appreciate nature is nice to have some reminder of how nice natural things are. This detail will make your space lively and might spark good talks with people at the office!

#23 Physical Wellbeing

Stretch and keep stretching
Only for 2 minutes

This is important if you spend a lot of time in front of the computer! You can work for 30 minutes and stretch for 2 minutes, your body will feel much better after each stretch. Extend your arms, move your head and stare at the ceiling and take deep breaths... then keep on working. It improves flexibility, leaving your muscles feeling less tense.

#24 Cognitive Improvement

Pomodoro technique
It's not a tomato its pomodoro!

It's a method developed to increase your productivity! Follow these steps and practice to become a master!
1) Choose a single task you will focus on and write it down.
2) Set the timer to 25 minutes.
3) Work on the task until the timer rings and put a checkmark on your paper.
4) Take a short 5-minute break.
5) Work for another 25 minutes.
6) After 3-4 work periods of 25 minutes, take a longer 20-30 minute break.




My Coping Toolkit

"Reframing the way we deal with stress"

The 32 Activity Cards are meant to be used at your workplace to lower your stress levels when you feel overwhelmed

#25 Cognitive Improvement Physical Wellbeing

Sleepy head
Siesta is the new fiesta!



Naps increase energy, improve reaction time and reduce daytime sleepiness. They induce relaxation which is usually associated with stress reduction. They enhance creativity, increase productivity, problem-solving abilities and cognitive abilities. But careful to not abuse it! Try a 15-minute nap to increase your mental alertness, memory, and motor learning skills.

#26 Cognitive Improvement Emotional Regulation


Sing out loud
Like Maria Callas :)



Pick a song, put it out loud and start singing. You can do this with more people! A 2017 study measured the amount of cortisol (the stress hormone), in participant's saliva before and after they sang. Researchers in that study found that the amount of cortisol was lower after singing.

#27 Emotional Regulation Physical Wellbeing

Get a Hug from a Loved One
Connect in different ways



When you hug someone, oxytocin (also known as the "cuddle hormone") is released. Oxytocin is associated with higher levels of happiness and lower levels of stress, true or not it causes a reduction in blood pressure which through other processes make you feel more relaxed.

#28 Physical Wellbeing

Food Tips
Orange juice with crackers



If you feel anxious try munching on crunchy snacks like carrots, nuts, or even crackers; this relieves physical tension and will make you feel more relaxed! Another option is drinking orange juice; high levels of vitamin C are thought to help physiologically reduce stress levels.

#29 Social Support


A life full with color
Rainbow is the new black!



Pick a color and one day of the week and propose to your coworkers to match their clothes that day with the selection made. This increases companionship and good social relations at work with minimum effort. And everyone has the opportunity to choose one week at a time.

#30 Physical Wellbeing Cognitive Improvement

Dancing
The body knows best



Dancing to your favorite music will not only refresh your mind but will instantly uplift your mood and make you feel a lot less stressed. If you don't want to move too much try with your hands first.

#31 Cognitive Improvement Emotional Regulation

Chewing Gum
Excellent to keep focused



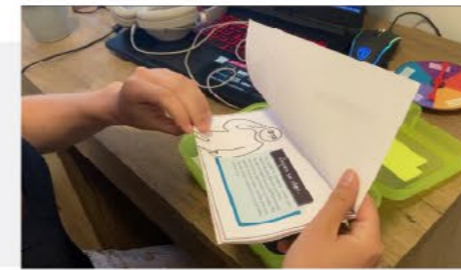
Get yourself some chewing gum. There are many benefits to chewing gum, and one of these benefits is lower stress levels. A 2008 study, led by Australian researcher Andrew Scholey, showed that chewing gum reduced the stress hormone cortisol in study participants. They reported feeling less stressed and more alert.

#32 Emotional Regulation

Talks with myself
Developing positive Self-Talks



Talk to yourself in a more realistic, compassionate manner. When you call yourself names or doubt your ability to succeed, reply with a kinder inner dialogue. Positive self-talk can help you develop a healthier outlook. And an optimistic and compassionate conversation can help you manage your emotions and take positive action.



At work, the person opens the toolkit and explores the materials and instructions on how to use it



The different card activities have different areas of improvement inspired by the findings from several sources of stress



The person will pick a card and practice the strategy



Once the activity is done the person already gets an opportunity to refresh from work and a space to lower his cortisol levels



The users have the opportunity to evaluate which activities suit their needs best



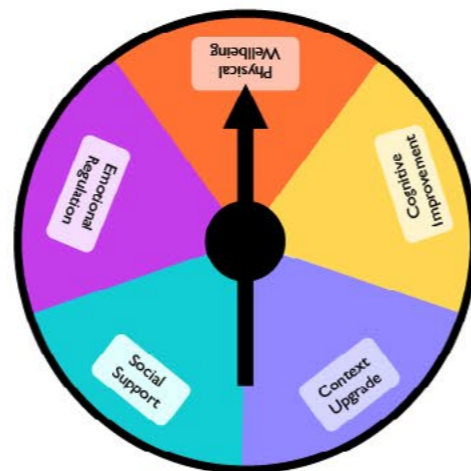
They can share these experiences with more people in their workplace



People can encourage each other to test the activities and get feedback from time to time, this creates a strong bond at work



Individuals can spin the wheel as many times as they want



The challenges are based on different types of abilities (like a physical improvement, context upgrade, emotional regulation, etc)



Different activities for different preferences



My Coping Toolkit

"Reframing the way we deal with stress"

The visual proposal was inspired by The Vitruvian Man made by Leonardo da Vinci. If we can visualize the proportions of a human body why not mapping out the progress of the evolution of our Coping Behaviour?

DATE _____

Putting things on balance

DATE _____

Wrap up of the day

WHAT WENT WELL TODAY?

There is always space to grow! Don't give up!

WHAT CAN BE IMPROVED TOMORROW?

DATE _____

The Eisenhower Matrix

<p style="font-size: x-small;">Urgent</p> <p style="font-size: x-small;">Quadrant 1 - Crisis Management</p> <p style="text-align: center; background-color: cyan;">REDUCE</p>	<p style="font-size: x-small;">Not Urgent</p> <p style="font-size: x-small;">Quadrant 2 - Plan for the future</p> <p style="text-align: center; background-color: cyan;">SCHEDULE</p>
<p style="font-size: x-small;">Not Important</p> <p style="font-size: x-small;">Quadrant 3 - Delegate to Win</p> <p style="text-align: center; background-color: cyan;">DELEGATE</p>	<p style="font-size: x-small;">Quadrant 4 - De-duller your work</p> <p style="text-align: center; background-color: cyan;">DUMP</p>

DATE _____

The Eisenhower Matrix

WRITE DOWN ALL TASKS THAT YOU HAVE TO DO TODAY THAT STRESS YOU

My Road

- Emotional Regulation

X
- Cognitive Improvement

X
X
X
- Physical Wellbeing
- Context Upgrade

X
X
- Social Support

X

My Coping Toolkit

Reframing the way we deal with stress

Instructions and Tips

Four basic reflective exercises that can be available online for people to get access whenever they want to do the materials.

One single manual with all instructions to make the purpose and benefits clear

#16 Social Support Emotional Regulation

Stressionism

Stress can be your muse

Draw your stressor! This activity can be short or long depending on the level of detail the other person wants to have in the drawing, however, **the faster and sloppy it's more effective.** This provides you with a different perspective of your problems through the eyes and non-verbal expressions of another human being. You can try this with a friend or coworker!

About the Strategy

How this strategy made you feel?

Would you recommend it to other people?

YES! NO

From 1 to 7 how useful was this activity for you?

1
2
3
4
5
6
7

Not useful at all
Neutral
Very Useful

Times I used this card

Leave a mark for each time you use this technique

X

A map where you can write down your progress and see how much you have accomplished

Chapter 08. Discussion & Conclusion

RESULTS AND DISCUSSION

People have to deal with the effects of stress throughout their lives, however, through the toolkit implementation, new insights have emerged that may provide an interesting direction for future stress management explorations:

1) People need to understand their personal sources of stress to create effective interventions.

The explorations with SE demonstrated that most people have an idea of what stresses them, however, they rarely look for conscious solutions. This limits their ability to effectively face the next stressful event, even if they know what causes it.

2) Materials proposed need to be conscious of their context.

People with busy schedules need materials that can be available on several platforms (physical tools and digital platforms) so do the type of actions and timing required. If workers have a 10-minute break it will be impossible to expect them to perform 15 min activities. Another observation was that reflection can be incorporated shortly and with time it will slowly create change (further explorations about this can be done).

3) Showing progress encourages people to keep exploring

By creating awareness one step for the intervention was covered, however, maintaining the interest of people throughout the rest of the activities should be considered as an important goal as well. In the latter stages of testing some notes regarding how to improve the toolkit were made and the conclusion reached was that visual assistance of progress can help in making people feel fulfilled.

While elaborating on materials for the tests many situations arose that suggested creating a digital backup for progress may be beneficial; during one of the tests one of the participants got sick and left the toolkit at her workplace, making it hard to continue with the experiment (she was away 2 full weeks and the experiment required 3 weeks).

The project focused on encouraging people to try out different strategies to improve their response to stress at their workplace. As mentioned during the research stage the disbalance stressors produce is inevitable, however, providing a vision in which individuals can face anything with guidance and constant iteration in an enjoyable way can make a difference for people to adopt new tools to improve their CB.

Design methodologies can provide a link between the interaction we have with existing methods to manage stress and the feelings people have towards their particular situations. Tracking every source of stress is not a realistic solution, instead, this project proposes an adaptable material that people can transform progressively. Like the training wheels on a bike, once you learn how to do it you can remove them. The set of materials can become a personal collection for people to teach others or as a physical and tangible reminder of what they know and how they succeeded in past situations.

DESIGN OPPORTUNITIES

Stress is a versatile topic and must be studied from the perspective of the person who experiences it. The combination of sensitizing materials and tools allowed me to understand people's needs better than employing questionnaires or polls. If we are researching for people is important to take into account their core ambitions and needs before imposing certain findings on them.

Stress management by itself is a widespread and popular topic and the importance of making people aware of their daily stressors to overcome disease (mental and physical) and improve wellbeing is crucial.

The bases of this project can be implemented in different sectors:

1) Stress Management for Schools

This idea can help students from early stages to get used to the topic of stress and learn more while growing. We see through this project that time plays an important role to see the progress of intervention, which makes it perfect for kids to learn from early stages and develop further their CB.

2) Coping Toolkit as a way to deal with Loss

No matter what age or life situation we are facing, one of the major stressors that human beings can experience is the loss or sudden loss of a loved one. There are therapy and programs that help with this issue, however, we can't have therapists or other people's support 24/7. These materials that were developed can be adapted so that a person can practice techniques given by specialists or relaxation techniques to pass this difficult period and reflect on the future.

3) Coping with disease

A way of making the toolkit more focused on people and their families to deal with the stress that comes from difficult times can make the process of conditions like cancer or surgery more easygoing. It can create a way to connect parents with kids or relatives in general.

4) Social Design and Stress Management

The WHO and the UN organizations have manuals to assist refugees. from war zones and disputed areas in the world, handle stress. However, there is an opportunity to implement a toolkit that can help teenagers and kids learn how to manage the effects of stressors in critical situations. If the activities can be adapted to a fast response action they can be implemented in cases of a severe stress response.

STRENGTHS & LIMITATIONS

Giving People Options to Test

One highlight of the project was giving people the opportunity at the very beginning to create their cards with strategies to be further researched and incorporated into the deck, this makes the whole interaction more collaborative, and individuals testing can learn from others indirectly.

More time is required to test and improve

This project provides a base for people to try out existing coping behavior strategies. The duration of the exercises is too short to perceive major progress regarding the evolution of people's coping behavior, however, the last iteration showed that having dynamic activities allow people to enjoy and relax in their working environments. At the same time, some of the activities might expose workers to distraction so further suggestions might assist in regulating these activities (e.g. dancing or shouting strategies).

Some people are more confident to show their actions in public than others which limits, in some cases, the activities proposed in the deck.

PERSONAL GOALS AND LEARNING EXPERIENCE

Through the project I learned that planning a realistic amount of work is one of my biggest problems, prioritizing is key to keeping the focus of the project going.

As the topic was focused on stress and Coping Behaviour I found it ironic to experience a lot of stress due to my chaotic planning. One of my strengths is that I can perform well under pressure and deliver results, however, one thing I take from the whole experience is that I need to improve my prioritizing skills (especially when I work with people).

I discovered how challenging is to work with people with busy schedules, you have to consider their timings in your planning and make the design proposal clear enough to avoid wasting time from both sides. In general, the input you get from people is valuable to have different views of your proposals, however, is good to always keep in mind your Design Goal and focus all efforts on answering your research questions, otherwise you can get lost in the process.

CONCLUSION

This project explored a widely studied subject: stress. One of the main findings was the fact that design can do more to encourage people to take care of their health by improving their Coping Behaviour, however, we need to provide a realistic vision of what constitutes stress and what can be done about it.

This project started by asking questions related to the sources of stress and how Self-Experimentation can assist with this. After concluding the testing and delivering the final design we can say that SE is a valuable method to help people iterate and learn from their progress.

In addition to SE, co-creation and sensitizing materials are extremely important if we aim to design targeting people's personal traits and ambitions.

One of the most important findings of this project is that, for people to handle stress effectively, we should encourage them to elaborate on solutions from their perspective and not impose a generalized set of techniques that might overwhelm and frustrate the person if the outcome is not positive.

The context of stressors is linked to the person, which showed the importance of developing interventions with the user before, during, and after proposing a design solution.

GLOSSARY

- **Anxiety:** n. an emotion characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune. The body often mobilizes itself to meet the perceived threat: Muscles become tense, breathing is faster, and the heart beats more rapidly. Anxiety may be distinguished from fear both conceptually and physiologically, although the two terms are often used interchangeably. Anxiety is considered a future-oriented, long-acting response broadly focused on a diffuse threat, whereas fear is an appropriate, present-oriented, and short-lived response to an identifiable and specific threat.
- **Avoidance:** n. the practice or an instance of keeping away from particular situations, environments, individuals, or things because of either (a) the anticipated negative consequence of such an encounter or (b) anxious or painful feelings associated with them. Psychology brings several theoretical perspectives to the study of avoidance: its use as a means of coping; its use as a response to fear or shame; its existence as a personality style or predisposition; and its existence as a component in anxiety disorders.
- **Coping Strategy:** An action, a series of actions, or a thought process used in meeting a stressful or unpleasant situation or in modifying one's reaction to such a situation. Coping strategies typically involve a conscious and direct approach to problems, in contrast to defense mechanisms.
- **Coping Behaviour:** A characteristic and often automatic action or set of actions taken in dealing with stressful or threatening situations. Coping behaviors can be both positive (i.e., adaptive), for example, taking time to meditate or exercise in the middle of a hectic day; or negative (i.e., maladaptive, avoidant), for example, not consulting a doctor when symptoms of a serious illness appear or persist.
- **Defense Mechanisms:** Defined in 1926 by Freud in an attempt to explain how individuals manage stress are patterns of relatively involuntary responses to external or internal factors and involve feelings, thoughts, and behaviors.
- **Eustress:** is positive stress, that comes from positive challenges or exciting experiences.
- **Fear:** n. a basic, intense emotion aroused by the detection of imminent threat, involving an immediate alarm reaction that mobilizes the organism by triggering a set of physiological changes. These include rapid heartbeat, redirection of blood flow away from the periphery toward the gut, tensing of the muscles, and a general mobilization of the organism to take action. Fear differs from anxiety in that the former is considered an appropriate short-term response to a present, clearly identifiable threat, whereas the latter is a future-oriented, long-term response focused on a diffuse threat.
- **Self-Regulation:** n. the control of one's behavior through the use of self-monitoring (keeping a record of behavior), self-evaluation (assessing the information obtained during self-monitoring), and self-reinforcement (rewarding oneself for appropriate behavior or for attaining a goal). Self-regulatory processes are stressed in behavior therapy.
- **Stress:** is a natural response that emerges when people are confronted with changes or elements in the environment called stressors.
- **Stressor:** Anything in the outside world creating physical, homeostatic, psychological, or emotional disbalance.
- **Stress Coping:** as described by researchers such as Lazarus and Folkman, implies a more specific process of cognitive appraisal to determine whether an individual believes he or she has the resources to respond effectively to the challenges of a stressor or change (Folkman & Lazarus, 1988; Lazarus & Folkman, 1987).
- **Self-Efficacy:** A concept originally proposed by the psychologist Albert Bandura, refers to an individual's belief in their capacity to execute behaviors necessary to produce specific performance attainments
- **Self-Confidence:** Bandura poses self-confidence as a common cognitive mechanism for mediating people's motivation, thought patterns, emotional reactions, and behavior. The theory was originally proposed to account for the different results achieved by the diverse methods used in clinical psychology for treating anxiety.
- **Vicarious:** Experienced in the imagination through the feelings or actions of another person

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APPENDIX

Appendix A - Brief

DESIGN
FOR OUR
future

TU Delft

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

! USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".

Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name	Ayala Cruz	5587	Your master programme (only select the options that apply to you):	
initials	M	given name	Miriam	IDE master(s): <input type="radio"/> IPD <input checked="" type="radio"/> DFI <input type="radio"/> SPD
student number	5274249		2 nd non-IDE master:	
street & no.			individual programme:	- - - (give date of approval)
zipcode & city			honours programme:	<input type="radio"/> Honours Programme Master
country			specialisation / annotation:	<input type="radio"/> Medisign
phone				<input type="radio"/> Tech. in Sustainable Design
email				<input type="radio"/> Entrepreneurship

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair	Dr. Jos J. Kraal	dept. / section:	HCD/AED
** mentor	Dr. ir. Natalia Romero	dept. / section:	HCD/DCC
2 nd mentor			
organisation:			
city:		country:	
comments (optional)			

! Chair should request the IDE Board of Examiners for approval of a non IDE mentor, including a motivation letter and c.v.

! Second mentor only applies in case the assignment is hosted by an external organisation.

! Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

APPROVAL PROJECT BRIEF

To be filled in by the chair of the supervisory team.

chair: Dr. Jos J. Maal, date: 24 - 02 - 2022, signature: [Handwritten Signature]

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: 27 EC. Of which, taking the conditional requirements into account, can be part of the exam programme: 27 EC.

List of electives obtained before the third semester without approval of the I&D:

YES: all 1st year master courses passed

NO: missing 1st year master courses are:

name: C. van der Bunt, date: 11 - 03 - 2022, signature: [Handwritten Signature]

C. van der Bunt, Digitally signed by C. van der Bunt, Date: 2022.03.11 14:02:36

FORMAL APPROVAL GRADUATION PROJECT

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, fill/approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
Is the level of the project challenging enough for a MSc, IDE graduating student?
Is the project expected to be doable within 100 working days/20 weeks?
Does the composition of the supervisory team comply with the regulations and fit the assignment?

Content: [APPROVED] NOT APPROVED

Procedure: [APPROVED] NOT APPROVED

comments

name: Monique von Morgen, date: 29 - 03 - 2022, signature: [Handwritten Signature]

Stress Maps; Enhancing Coping Behaviour through Self-Experimentation project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date: 24 - 02 - 2022, 22 - 07 - 2022, end date

INTRODUCTION **

Please describe the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently cooperate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources like money, technology, ...)?

Stress is a natural response every person experiences throughout different moments in their lives. This phenomenon can be explained as where the demands of the environment surpass the ability of a person to alter the situation, the events that provoke stress are known as "stressors". In other words, a stressor is a demand made by the environment that upsets the balance, thus affecting well being and requiring action to restore balance (Lazarus & Cohen, 1977). A stressor can also be the anticipation of such demand (Sapolsky, 2004).

The stress response can become more damaging than the stressor itself, especially when it is purely psychological, this has an impact on our health, especially after constant exposure. Chronic or repeated stressors can potentially make us sick or can increase the risk of being sick, which means people will be more likely to fall victim to a number of infectious diseases, and be less capable of combating them once they have them (Sapolsky, 2004).

The duration of the effects of a stressor varies depending on the individual CE, in which we include the perception people have of a particular stressor that is related to the person's Self-Efficacy (SE) which makes the effects of it different for every individual (what stresses a subject might not be stressful for another at all).

SE can be defined as the individual's belief in their capacities to execute behaviors necessary to produce specific performance attainments (Bandura, 1997), and plays an important role in the development of CB because reflects the individual's confidence in their abilities to exert control over his/her motivations, behaviors, and social environments. That's why it's necessary to implement interventions that target the particular abilities and goals of the individual, in this case through methods like Self-Experimentation (SE). SE method will be used to create a personal guide that can be applied in several situations to answer better the needs, abilities, and demands of its owner.

SE is a branch from the Quantified Self (QS) movement that centres around the interest of self-tracking as a tool for self-discovery (in other words is self-knowledge through numbers), on the other hand SE focuses on creating self-knowledge rather than generalizable knowledge - going from generic contingencies, to more personal ones (Fedmeier, 2021).

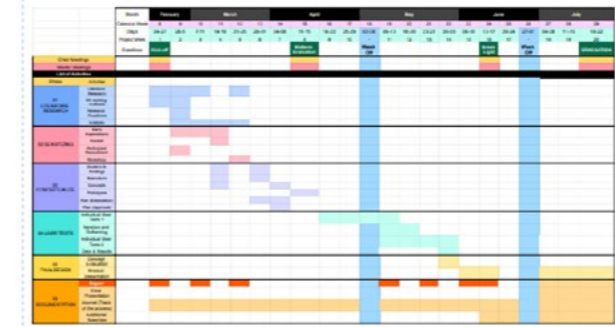
TU Delft research staff will be the target group; they are exposed to stressors constantly at work/school and might need to improve or create more accurate coping strategies so their workload won't affect the quality of their health, by employing SE strategies their SE will increase to overcome multiple stressors (or stressful events).

space available for images / figures on next page

PLANNING AND APPROACH **

Include a Gantt Chart replacing the example below - more examples can be found in Manual 2! that shows the different phases of your project. Deliverables you have in mind, meetings and how you plan to spend your time. Please note that all activities should fit within the given set time of 50 EC = 30 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date: 24 - 2 - 2022, 22 - 7 - 2022, end date



Kickoff: 24/02/2021, Midterms: 11/04/2021, Green light: 13/04/2021, Graduation: 22/07/2022

- Phase 1: LITERATURE RESEARCH: To state why SE is important in enhancing CB I will do Current products and trends research, literature, paper reviews, and interviews with Stress experts. Additionally examples of SE and design methodology.
Phase 2: SENSITIZING: To understand the stress and how it's perceived I'll make short explorations with testers and a workshop with a booklet in between to prepare potential participants for the user test; phase.
Phase 3: CONCEPTUALIZE: Based on the workshops and findings from the literature I'll develop from 3 to 4 concepts to be used in the user test. This will help me to create a base to start with all participants.
Phase 4: USER TESTS: Individual tests will be programmed along the four weeks, using self-documentation and SE design concepts. The results will help evaluate the strategies designed and the iteration will refine the final design.
Phase 5: FINAL DESIGN: A final concept with all materials will be proposed and evaluated to show the efficacy of SE to enhance CB.
Phase 6: DOCUMENTATION: A final report and materials images, posters, infographics will show the progress and findings of the project.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge on a specific subject, broadening your competences or experimenting with a specific tool and/or methodology. ... Stick to no more than five ambitions.

I've always been interested in using design as a tool to create solutions for wellbeing. I believe we need to merge technology and humanitarian and cognitive disciplines to provide environments where we can develop responsibly and plenty. This is important because every behavior we develop seems affected by the elements that surround us.

As an ex former patient with anxiety, I realized the importance of mental health while developing my healing process with a psychologist. From this personal experience, I realize that people are not fully aware of the disease until it is too late to take actions, a lot of resources and effort is spent targeting illness instead of focusing on prevention.

I want to help people change their habits by making them aware of their options and allows preserving their autonomy to fit their personal ambitions/goals. As a designer, I aim to promote critical and cognitive development. I'm interested in learning more about Self-Experimentation and Self-Efficacy and putting into practice co-creation and Contextmapping to organize and create more effective systems that enhance personality and not a general classification of profiles.

I believe we are a reflection of what we do daily. I want to use this project to encourage people to attempt new things, receive guidance, succeed or fail, and keep learning about themselves to stay healthy and plenty. At the same time, I want to improve my project management skills by merging my tools and the knowledge I can acquire from professionals during this design proposal. Behavioral change is an area that interests me that can provide a variety of possibilities to improve wellbeing, performance, and human emotions.

My vision for this project is to give people the possibility of having a set of strategies in the future that they can consult regardless of the time and context. They can go back to their previous explorations and look for those elements that suit their abilities and worked best in the past and face challenges ahead.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

introduction (optional): space for images

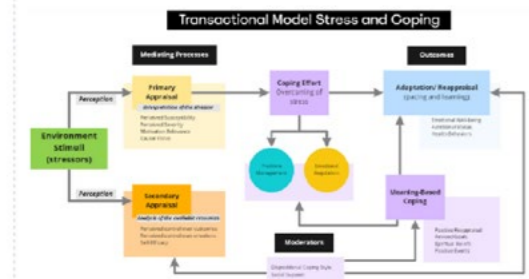


image / figure 1: Revision from the "Transactional Model Stress and Coping" made by Lazarus & Cohen (1977)

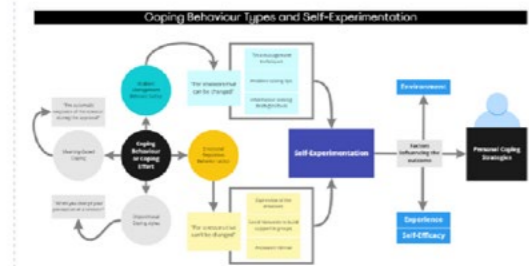


image / figure 2: Coping Behaviour Types and Self-Experimentation

PROBLEM DEFINITION **

I will define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC in 30 full time weeks or 100 working days and clearly indicate what essential should be addressed in this project.

Stress has a direct or indirect impact on our health, and if it's not treated properly can increase and manifest in other ways (anxiety, depression, etc.) People are not always aware of the impact stressors have on their lives until the appearance of physical pain, mood changes, sleep deprivation, etc.

There is a gap that design can explore regarding the methods to create new coping behavior techniques, people might try out techniques not suitable for their skills, and when they don't manage to overcome the stressor (it can be perceived as a lack of self-efficacy) generates frustration leading to more stress.

Awareness is important to succeed during the second appraisal stage, the vast majority of daily tasks within the target group are driven and selected by intuitive processes rather than our rational processes. In other words, we rely on our intuitive processes to function as a sort of "autopilot" for most of the actions and behaviors we take (Heiker, 2013). This autopilot prevents us realize if our current CB is suitable to overcome a specific stressor. Due to the target group's workload, they are constantly exposed to stressors and are at risk of developing chronic stress.

At this point, a guided experience using SE strategies aims to enhance self efficacy, to create, standardize and optimize Coping Behaviour. Self-Experimentation can improve the outcome within the Appraisal Stages and increase the outcome to create Coping Behavior within the capacities of the individual instead of forcing the adaptation (Figure 2).

Some of the questions I will answer throughout the project would be what are these stressors (acute, chronic, episodic)? What are the contexts that define the stressors? How to make the stressor obvious so people can choose a clear strategy, what people can change and they have to learn to endure? How much influence the experience of facing previous stressors has on an individual when facing new stressors?

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issues pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to derive, for instance: a product, a product-service combination, a strategy (illustrated through product or product-service combination ideas, ...). In case of a Specialisation and/or Innovation, make sure the assignment reflects this/those.

This project aims to create a clear guided strategy (visual and tangible) using Self-Experimentation to enhance Coping Behaviour (CB) to overcome stress that fit the user needs and stressors.

The final design will be a physical product to fit the explorative experience of Self-Experimentation. This product aims to create awareness of current CB and show options to build a strategy that fits people's needs and particular stressors. The target group is exposed to different sources of stress, which makes the explorative part crucial with physical materials so they could adapt the provided design materials to fit their activities and time constraints.

The final design would include:

- 1) A visual strategy. A guided manual or map that users will follow (fully or partially) according to their needs and goals during stressful events. This will speed up the decision-making process and will boost the person's self-efficacy to manage strategies in emotional regulation. The product will be physical to make explorations more dynamic, however, the possibility of visualizing the user strategy in a digital product will be taken into further consideration.
2) Maps and diagrams. Design materials will result in the findings of the explorations made with testers at the end of the activities. The idea is to show the progress and influence of Self-Experimentation strategies while creating CP.

Appendix B - Psychologist Interview Notes

Interview with Dr. Alday

Dr. Alday has a degree in Humanist Psychotherapy with 30 years in clinical practice. Specialized in children and youth, with a focus on Gestalt.

The next stress management strategies were mentioned:

- Exploration of senses
Hypnosis
Writing your thoughts
Conversation with yourself
See yourself as an animal
Mindfulness activities
Guided meditation with music
Textures and physical materials

The interview aimed to discover ways to find out more about stress in the psychological field. Many of the findings from the psychological fields focus on the "system of beliefs" in which the perception of the person plays an important role to face stressors in life

People with anxiety or depression have been usually exposed to long-term effects of stress and some of the most shocking events like the sudden loss of a loved one or an accident can increase the damage cortisol has in our bodies.

Dra Alday mentions that the mere act of remembering a traumatic event can trigger the same levels of cortisol as if it were the first time you experienced.

Appendix C - ER & PM List of Strategies

Stress Management Strategies - Exploration

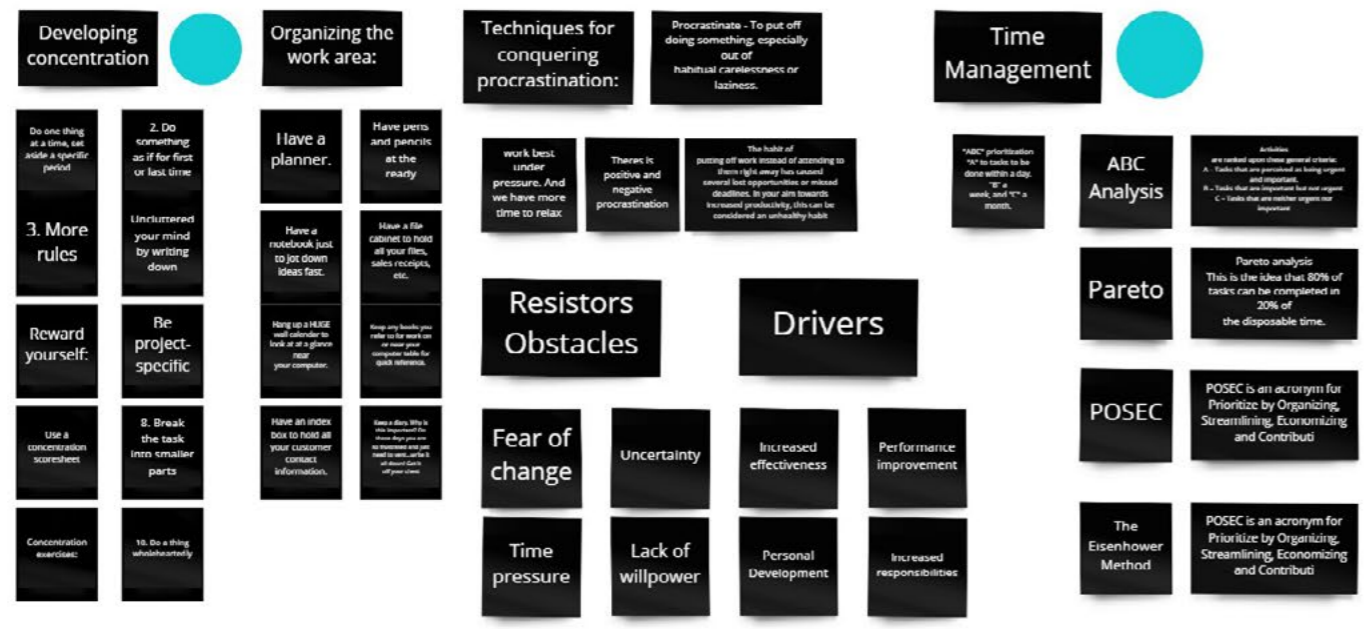


The Classic Approach to Decision Making
 1. Define the objective
 2. Collect relevant information
 3. Generate feasible options
 4. Make the decision
 5. Implement and evaluate

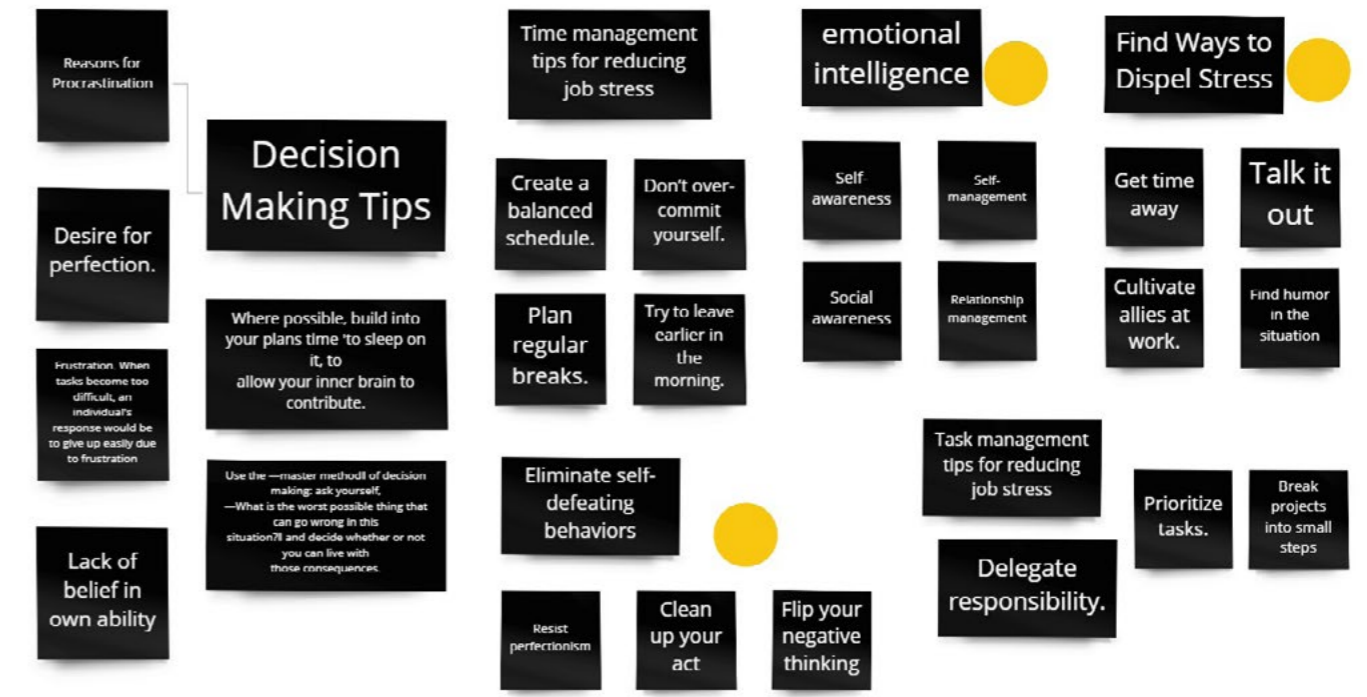
When people feel overwhelmed, they lose confidence and become unable to act.
Get enough sleep
 you are to do...
Make food choices that keep you going and make you feel great
Drink alcohol in moderation and avoid nicotine
Reducing job stress by prioritizing and organizing

Meditation
 1. Creating a Peaceful Atmosphere
 Prepare & Set Up Your Props
 Wear Comfortable And Easy Clothing
 Meditation Techniques: Transcendental Meditation, Mantra Meditation, Vipassana Meditation, Trataka Meditation, Chakra Meditation, Raja Yoga meditation

Importance of planning the day
10 minutes spent at the beginning or end of each day



Stress Management Strategies - Exploration



Appendix D - Perceived Stress Scale Explanation and Results

Perceived Stress Scale Questionnaire RESULTS

- ▶ Scores ranging from 0-13 would be considered **low stress.**
- ▶ Scores ranging from 14-26 would be considered **moderate stress.**
- ▶ Scores ranging from 27-40 would be considered **high perceived stress.**

PARTICIPANT 09

MONTH **23** Moderate stress.
WEEK **29** High perceived stress.

Perceived Stress Scale
The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name Pedro Vazquez Date 11-03-2022
Age 27 Gender (Circle) M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
- In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
- In the last month, how often have you felt nervous and "stressed"? 0 1 2 3 4
- In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
- In the last month, how often have you felt that things were going your way? 0 1 2 3 4
- In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
- In the last month, how often have you been able to control irritations in your life? 0 1 2 3 4
- In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
- In the last month, how often have you been angered because of things that were outside of your control? 0 1 2 3 4
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

Please feel free to use the Perceived Stress Scale for your research.
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23 29

PARTICIPANT 10

MONTH **33** High perceived stress.
WEEK **20** Moderate stress.

Perceived Stress Scale
The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name Bhushan Gaonkar Date 13-03-2022
Age 23 Gender (Circle) M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
- In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
- In the last month, how often have you felt nervous and "stressed"? 0 1 2 3 4
- In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
- In the last month, how often have you felt that things were going your way? 0 1 2 3 4
- In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
- In the last month, how often have you been able to control irritations in your life? 0 1 2 3 4
- In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
- In the last month, how often have you been angered because of things that were outside of your control? 0 1 2 3 4
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

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33 20

PARTICIPANT 11

MONTH **29** High perceived stress.
WEEK **31** High perceived stress.

Perceived Stress Scale
The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name Martin Petrov Date 13-03-2022
Age 20 Gender (Circle) M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
- In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
- In the last month, how often have you felt nervous and "stressed"? 0 1 2 3 4
- In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
- In the last month, how often have you felt that things were going your way? 0 1 2 3 4
- In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
- In the last month, how often have you been able to control irritations in your life? 0 1 2 3 4
- In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
- In the last month, how often have you been angered because of things that were outside of your control? 0 1 2 3 4
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

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29 31

PARTICIPANT 12

MONTH **27** High perceived stress.
WEEK **16** Moderate stress.

Perceived Stress Scale
The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

Name Marco Schouten Date 14-03-2022
Age 24 Gender (Circle) M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
- In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
- In the last month, how often have you felt nervous and "stressed"? 0 1 2 3 4
- In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
- In the last month, how often have you felt that things were going your way? 0 1 2 3 4
- In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
- In the last month, how often have you been able to control irritations in your life? 0 1 2 3 4
- In the last month, how often have you felt that you were on top of things? 0 1 2 3 4
- In the last month, how often have you been angered because of things that were outside of your control? 0 1 2 3 4
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

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27 16

PARTICIPANT 13

MONTH **18** High perceived stress.

Perceived Stress Scale
The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

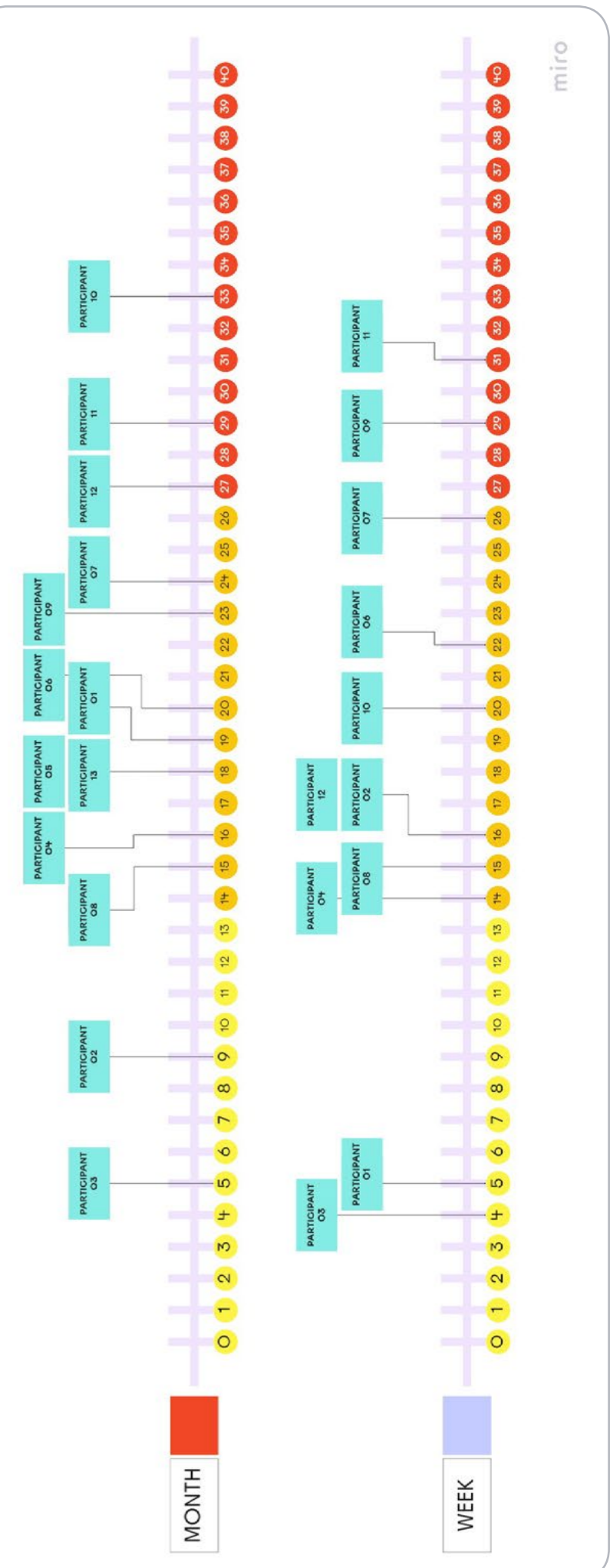
Name Ismael Hernandez Date 16-03-2022
Age 25 Gender (Circle) M F Other _____

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- In the last month, how often have you been upset because of something that happened unexpectedly? 0 1 2 3 4
- In the last month, how often have you felt that you were unable to control the important things in your life? 0 1 2 3 4
- In the last month, how often have you felt nervous and "stressed"? 0 1 2 3 4
- In the last month, how often have you felt confident about your ability to handle your personal problems? 0 1 2 3 4
- In the last month, how often have you felt that things were going your way? 0 1 2 3 4
- In the last month, how often have you found that you could not cope with all the things that you had to do? 0 1 2 3 4
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- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? 0 1 2 3 4

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Appendix E - Survey Results and Relaxation Techniques

SURVEY RESULTS

QUESTION 01: What causes you stress?

Many things to do at once	Having a Huge To Do List for my graduation project	Feeling like I haven't achieved much in a day	Making choices	Being broke	Unfinished important work	Overload of responsibilities	Expenses	Traffic
Toda la Vida en general	Being in dangerous situations	Pandemics	Deadlines	Taking up challenges that I think I can handle but that I can't.	Running out of time	Thinking about what ever is next	Dealing with university stuff	Time
Not knowing what the future will hold.	Taking decisions	Deadline, comparison	The future after graduation (I feel like I have a very bad CV)	Uncertainty	Uncertainty	Uncertainty of the future	Myself	Having days that are too short to balance studies, sports, and friends
Deadlines	Graduation thesis	Me, I cause myself stress	The world is literally ending	Feeling like I haven't achieved much in a day.	Feeling stuck because I don't know what to do next or how to scope sth.	War	The feeling that I cannot make it	Feeling like imm making too many mistakes
Feeling stuck because I don't know what to do next or how to scope sth.	Too many things in mind	Thinking I do not have enough time to fulfill	People that are hard to deal with	Blockers at work	I like to put a bit of pressure on myself to get more done	The feeling of being behind in the things I should be doing.	Anxiety	Achievement pressure
The traumas that caused my c-ptsd	When someone says something that is not true and try to make it true	Busy hectic life	uncertainty about the future	expectations of other people	Bad weather	Lack of a social network	Losing control	Too much to do in the future, no clear oversight.
Feeling like I can't overview the problem any more	Uncertainty	Not feeling supported	not knowing how to manage my time	Performance pressure in my studies	Schoolwork and commitments (responsibility).	Living up to self imposed expectations (long term, momentary, daily tasks).	No fulfilling expectations (due to lack of ability, time, dedication, whatever) is what causes the stress and anxiety.	When my to-do list is piling up
Tasks and responsibilities of work and personal life	Finances sometimes	Social stimuli overload	Travel timetables	Deadlines	Deadlines	Relationships	Not getting things done	When my results depend on other people
Finance	Climate change	Deadlines	deadlines	Too many deadlines	Finding a place to live in case I extend my studies	Work	Deadlines	deadlines
Finding a thesis project was very stressful	people sometimes	Making life decisions	Overwhelming work	Chaos	Too much happening all together	Needing to make too many decisions at the same time.	Uncertainty	Chaos in my head
Dating	when things don't go as I plan them...	Anxiety	Not being liked by people	Guys. Dating :)	Toxic relations	finding a new job	Relationships with people	Feeling that I didn't do what other people expected me to do
Having to take an important decision, particularly when it involves emotions (break, other people).	When I have too many things on my plate and work too hard for too long.	Being in a competitive environment can make it more stressful sometimes.	I keep thinking about work and I don't have time/headspace to relax and recharge.	The feeling that what I do won't be enough	Not knowing	Not understanding things	Not knowing what I'm supposed to to	Lack of collaboration at work, home or uni
Not knowing what to expect	Procrastinating	To be honest not much	Sometimes people	Undesired circumstances that are beyond my control or understanding	Things I don't know how to deal with	work	Uni	Find a job that will not make me miserable
Expectations of society	Keeping my social life and career goals in balance	Dealing with perfectionism	Feeling like a situation is out of my control	Uncertainty	Completing my thesis since I'm unmotivated a lot of the time	Family	My colleagues	Right wing politics
Sexism	Racism	Trying to figure out if I want to continue with school	Being tired doesn't help	Study	Studies (deadlines)	Too much to do	Arguments with parents and friends	Too little sleep
Conflicts with friends and family	lack of time	uncertainty about the future (where to work, what to do, ...)	My own inability to stick to healthy habits	Make as much as I can to take advantage of the time I have	High uncertainty situations	Cope with the workload it entails to perform many activities	university	deadlines
Work load	Deadlines	Skiing	Tests	Lack of boundaries when it comes to saying yes to work	Not having a clear picture of what I'm going to do	Not having enough time to do fun things and socialize	deadlines, too many things to do with too little time	The big problems in the world (e.g. corona, war)
Being in situations where I don't know what's happening or going to happen	Finance.	Loud noise	The feeling of being behind in the things I should be doing.	Decisions, I want to perform/believe as good as possible but time restrictions can make this difficult.	Taking up challenges that I think I can handle but that I can't.	I find it hard to "settle for less". Especially when multiple deadlines arise around the same time.	Relationships with people	Tasks from work that I cannot complete cause medium to high stress.
Feeling that I didn't do what I wanted to	Not knowing how to continue	Presentations in front of large groups	When you want to do it all.	Finish my master on time	writing my master thesis	During Holidays when I don't have to do anything, I feel unproductive :	Forced relaxation	

SURVEY RESULTS

QUESTION 02: How you manage to get rid (or not) of those things, people, situations, etc. that stress you?

Trying to find opportunities	Talking about it with friends	Going outside	Buy an agenda	look for a solution	Not read the news	Just doing the "task". I'm done (most of the times) or close enough.	By doing sports	Hanging out with friends (to talk about our issues)	Have a proper vacation
Anything exhausting	Dancing helps too	Walking when I have control with things when I don't have control I let go. Every time of stress, I feel myself, why do I feel this way, I changed the things in situations, it just makes me feel better. It's a sign.	You change what you can and leave what you can't.	writing everything down	Making to-do lists and a planning	Walking outside (preferably through nature)	I push myself to see people and talk about things. Also xanax helps planning variations etc	Meditate	Talk to people with experiences
Try not to think about it	Writing down what is stressing me	Change your attitude	Going to the gym and other "mindful" activities.	Doing sports	Impressionistic music helps	Talk with friends	Breath	go for a walk or run.	Trying to rationalize and to organize my thoughts
Do sports	Haciendo las cosas tú y preparándome para lo peor, esperando lo mejor	Talk about it with friends and family	Calm myself that it is not that big of a deal and I should not worry about it.	Planning and putting things in perspective	Trying to see things in perspective	Making lists and having concrete plans	I sleep or I tackle them as soon as possible to get rid of them	I whine about it, sharing my stress with others is soothing.	sports
Disconnect for some time. Getting totally drunk	take some walks, talk with friends.	Friends	Painting	Just doing my best. Work hard to make the deadlines	Take a walk	I go to therapy to help with my negative thoughts, and need for achieving, perfectionism etc	Working out	Taking deep breaths	Closing my eyes and just getting my thoughts together. Starting with the things I'm good at first
I try to hang out with friends	Eat something as a treat (like cake)	Talk to my mentors, boyfriend or friends	I try not to take it personal	Understanding that stress is part of life.	Drinking calming tea	Reframe the situation	Sleep	Take time for myself	Writing to analyze the situation
Talking it out with someone	Getting totally drunk	I try taking breaks and organize my time for work/overload related stress.	Music	Sometimes eating sweets and watching series, but in the end it stresses me even more	Eating	I try to rest, to empty my mind	Dancing	Define my priorities	Adopting a nihilist state of mind that reduces all concerns to nothing.
Sports and drinking.	Drinking	Try to solve it or leave it and think in something else.	Meet with/talk to people	Eating	Smoke	Meditation	Go outdoors	The awareness of stress	Overthink
Keeping time for what makes me feel good	Meditation waking up and going to sleep	I try to separate work and fun	Eat healthy	Not knowing what makes it a eating opportunity and expanding my comfort zone, so I try not to reach it too much.	Going out to nature	Just let the nerves in my stomach be	Doing sports	Wisely dividing the things I need to do	Make to do lists
I call a good friend who will hype me up or calm me down.	get things done way before deadline	Making things to get rid of the stressful thoughts	Taking time to workout	Avoid	Eat healthy	Come home to meditate	I remember to be kind to myself	Do something fun.	Do something else
Xanax	Play music I love & dance.	Planning vacations	SWIM	Being aware that I have stress	Spending time in easy activities such as formal photography, writing, reading...	Sports	Doing things I like	Breathing	Procrastination
Try to do different stuff	I shut myself off with the exception of very basic interactions	Enter grinding mode where I just work on what procrastinated until it is finished.	Work through the to-do list.	Archive emails and chats I don't use a lot.	Be around people that you have a mutual caring and loving relationship with.	Tell people I can't make certain events	Going for a walk	Closing my eyes and just getting my thoughts together.	Procrastinating, talking with others (psychologist, family, friends), trying to rationalize and to organize my thoughts
Talk to people communication is key	Give myself time to relax	RUN	Talking with others (psychologist, family, friends), trying to rationalize and to organize my thoughts	I disconnect by practicing some sports	Work hard to make the deadlines	talking with friends	Cooking	Reading	Taking a shower
Talking to others	Talking with someone that can put it in perspective for you	To do list, prioritizing	Avoid the scenarios	exercise is good	Take lessons to learn technique and do it	Exercise	First moment: breathe	Talk to people about it	Meditation
Distracting my mind (watching funny videos, going outside, have social gatherings).	Talk about it	Cook	Go swimming	watch Netflix	Reduce workload as much as possible and grant myself some me time.	Ignore it	Actually finishing the work	Constantly consuming media	I try to do things I like and make me happy
Just try to stop my brain from thinking about it	Literally walking away or dissociating	I talk to other people or them about it	Having an overview over everything I need to do	Some rest helps but is not enough.	Working harder for the deadlines.	Writing things down	I contact my therapist	By being focused on doing something (e.g. working out)	The courage to say no
I just keep working till it's not as hard or doesn't seem as big any more	Playing guitar and drawing	Sleeping	Meditating	Meditate	Talking it out with loved ones	Smartly planning my day	Go for a walk	Figure out why they stress me	Have a positive and optimistic mindset that lets me often see the glass half full.
A hint of what can I change to make the situation more manageable	Talking about it not looking always for a solution	Avoid buying junk food that later I crave for when stressed	Deep breaths	Face it if I have the courage	Go for a run	Close computer	Make a tea	Thinking about the root cause and trying to solve that	Retreat from the world
Eating desserts and snacks	By ignoring it, I try to make it go away	Breaking things down into smaller bits to feel progress	Try not to procrastinate as much!!	BIKE	Use "logic" to work my way through situations, even where that may not work well.	I disconnect when going out with friends	Meditation	Sport	

Appendix E - Survey Results and Relaxation Techniques

SURVEY RESULTS

QUESTION 03: How you manage to get rid (or not) of those things, people, situations, etc. that stress you?

Both	Talking to someone always helps to put things in perspective	Alone	both	Talking about it really helps!	Alone but it would probably be healthier if I would do it with others hahaha	Mostly alone but with a little help from my friends				
It depends, mostly on my own, but my therapist is also a great help	I usually write about my stressors in a journal, and then I talk to my therapist about it. Sometimes I'll just vent to a friend, but my therapist is the most helpful.	Mostly I manage it alone.	It helps to talk about it!	Both, it is usually more helpful when others are involved, but sometimes you have to do it on your own when you're not being properly supported.	Solo	Alone, sometimes support	Someone helps me: therapy assessment			
Someone often helps me through it	My boyfriend helps me to calm down	My boyfriend can kind of act as a mental coach when I'm feeling really stressed.	talking about it with others helps, but the rest you have to do by yourself!	A bit of both but mostly alone	Talking with my roomates	Both, mainly alone through my habits, but I'm also reaching out to friends for advice and to talk about it.	I manage it alone but if I really have trouble I will talk with someone or therapy	Someone helps me through it	See answer above :)	
It depends on the situation, usually I'll check how much I'm stressed, and if it's too much I'll talk to someone, otherwise I'll try to manage alone.	Some and other, I try to get help from people around me, but sometimes I just let it be and try to manage alone.	Sometimes alone, but often tend to vent to someone, especially in the morning and at night.	Bodies of breaths and meditation, moving back to my work life leaving mind with a lot of things, mostly alone.	Mainly alone but sometimes people help a lot	either alone or while discussing with friends or family	Mostly alone, sometimes I share it with my mother or friends	I manage it alone but I try not to burden them with my shit	Someone helps me through it	Depends on the kind of stress, but when it's too much to handle I talk with friends, family or even a psychologist	Alone, Although I think I'm a social person, I recharge and gain energy mostly when I'm alone
Depends on how bad it is, if the stress is severe than will need help from others	I need other people	Sometimes alone and other times I call friends and my bf	Most time, I handle it alone.	Mostly alone but sometimes people help a lot	either alone or while discussing with friends or family	Mostly alone, sometimes I share it with my mother or friends	I manage it alone but I try not to burden them with my shit	Someone helps me through it	Depends on the kind of stress, but when it's too much to handle I talk with friends, family or even a psychologist	Alone, Although I think I'm a social person, I recharge and gain energy mostly when I'm alone
My stress is under control, I usually write about my stressors in a journal, and then I talk to my therapist about it. Sometimes I'll just vent to a friend, but my therapist is the most helpful.	my friends and family	Talk to people about your feelings of stress. A problem shared is a problem halved!	Most time yes	Mostly by myself, but also have support if needed	I manage my stress alone.	Mostly alone but, another's couch does make pulling yourself away from frustrations easier.	In most cases alone, but when I talk to my friends they know if I am stressed	I need to share it with people to liberate stress or cry	I usually manage it better with friends and colleagues, so get more insight suddenly as they are in a similar situation	
De ambas maneras. La personal que usualmente duro para manejar esas situaciones se mi apoyo	My friends	Alone and Friends	Both depending on the situation	Usually a combination of both	not alone for sure, getting help with the end of the thread from people is good	I prefer to manage it alone	I tend to think I can best solve it myself, although sometimes it helps to speak with others			
both, I talk about my stress with friends, but I also release stress by doing hobbies/activities alone	Most of the time alone, but sometimes with other people									

QUESTION 04: Mention something that makes you feel relaxed (Is it a place, person, thing, context, etc?)

Walking in nature, watching movies/series, sports	Reading in my bed & a warm infusion	Crocheting on my couch	Music, and friends	My boyfriend, my bed, familiar favorite TV series	Knowing that after all everything is good in my life. Feeling loved	Being alone in my room, slowly cleaning up, drinking warm tea	Being in control of the situation, things going as I wish, not having things to do, taking breaks to clear my head of being stressed	Nature, the sea, the sound of the waves, the sun, the smell of the water, the smell of a forest, dancing to a cello with my eyes closed.
Watching happy content (dog memes), eating comfort food	Friday afternoons, going home for vacation, my granny's house, going for a bike ride	being surrounded by nature, getting an adrenaline rush after a workout	being surrounded by nature, getting an adrenaline rush after a workout	Doing stuff with my dog in the nature keeps me in the clouds! I forget everything then	Doing stuff with my dog in the nature keeps me in the clouds! I forget everything then	My girlfriend and specific friends. Going for a walk.	My girlfriend and specific friends. Going for a walk.	Having friends around and having a good time with them, exercising, going on a trip, leaving the stressful context
Watching happy content (dog memes), eating comfort food	Swimming, Yoga, Taking time for yourself, watching the sunset...	Friends	Friends	The gym	My girlfriend and specific friends. Going for a walk.	Walking outside and cooking.	Listening to music, playing games, reading books, watching movies/series, cooking, skateboarding/ sport	Classic Music
coffee/beer with friends	A completed to do list	Going on a walk in the nature	Going on a walk in the nature	Swimming, playing football	Swimming, playing football	walking outside and cooking.	Listening to music, playing games, reading books, watching movies/series, cooking, skateboarding/ sport	After a good workout
My purring cat on top of my lap	My couch, my boyfriend, the beach, chilling in the sun, listening to easy music	My cat, silence, walk listening to music, good glass of wine, cooking	My cat, silence, walk listening to music, good glass of wine, cooking	My boyfriend, my bed, familiar favorite TV series	My girlfriend and specific friends. Going for a walk.	Walking outside and cooking.	Listening to music, playing games, reading books, watching movies/series, cooking, skateboarding/ sport	Going to a mountain
taking a shower	Being present	Walking in the sun or buying plants for my home	Walking in the sun or buying plants for my home	My purring cat on top of my lap	Knowing that after all everything is good in my life. Feeling loved	Being alone in my room, slowly cleaning up, drinking warm tea	Being in control of the situation, things going as I wish, not having things to do, taking breaks to clear my head of being stressed	
My purring cat on top of my lap	Going to a sauna/steam room	Nature, going for a walk, not using the phone	Nature, going for a walk, not using the phone	My purring cat on top of my lap	Knowing that after all everything is good in my life. Feeling loved	Being alone in my room, slowly cleaning up, drinking warm tea	Being in control of the situation, things going as I wish, not having things to do, taking breaks to clear my head of being stressed	
My purring cat on top of my lap	Going to a sauna/steam room	Nature, going for a walk, not using the phone	Nature, going for a walk, not using the phone	My purring cat on top of my lap	Knowing that after all everything is good in my life. Feeling loved	Being alone in my room, slowly cleaning up, drinking warm tea	Being in control of the situation, things going as I wish, not having things to do, taking breaks to clear my head of being stressed	

CLUSTERS "WHAT STRESSES PEOPLE?"

- Overload**
 - Too many deadlines
 - Deadlines
 - Studies (deadlines)
 - Busy hectic life
 - Work load
 - Unfinished important work
- Time constraints**
 - Running out of time
 - Thinking I do not have enough time to finish
 - Time
 - Making life decisions
 - Making choices
- Making choices**
 - Right wing politics
 - Sexism
 - Pandemics
 - War
 - Climate change
 - Skiing
 - Racism
 - Loud noise
 - Traffic
 - Corona
- Social Relationships and interaction**
 - Family
 - Dating
 - Relationships
 - Toxic relations
 - My colleagues
- Expectations**
 - Expectations of other people
 - Expectations of society
 - Uncertainty about the future
 - Uncertainty of the future
- Personal expectations**
 - Procrastinating
 - Me, I cause myself stress

CLUSTERS "WHAT PEOPLE DO TO GET RID OF THE STRESS?"

Perfectionism	Comparison/Doubling of your own capacities	Personal expectations
Overload	Not knowing what to do (now)	Responsibilities
Emotions and thoughts	Making choices	Time constrains



Friends

- Talking about it not looking always for a solution
- Talk to people about it
- Talk with friends
- Talk about it with friends and family
- Talk to my partner, boyfriend or friends
- Take some walks, talk with friends
- Talk to quiet people or them about it
- Hanging out with friends (no talk about our issues)
- Take a break from work and do something fun
- Take a good friend who will help the up or calm the down

Confronting Active mode

- Work hard up make the deadlines
- Take lessons to learn to manage and do it
- Learn something new when you have time
- Learn something new when you have time
- Learn something new when you have time
- Learn something new when you have time
- Learn something new when you have time
- Learn something new when you have time
- Learn something new when you have time
- Learn something new when you have time

Social Support

Physical Activity

Dancing	RUN	Sport	Doing sports
sports	Go swimming	SWIM	Do sports
Go for a run	Dancing helps too	BIKE	Go for a walk
go for a walk or run	Taking time to workout	Sports	Working out
Exercise	Sports	Doing sports	By doing sports
exercise is good	Anything exhausting	Going to the gym and other "fitness" activities	By being focused on doing something like working out

Changing Location

Take a walk	Take some walks talk with friends
Going outside	literally walking away or disassociating
Go outdoors	Go outdoors
Going out to nature	

Changing Attitude/perspective

Figure out why they stress me	Winding down what's stressing me	The courage to say no	Just try to stop my brain from thinking about it
Overthink	Reduce workload or make a priority list	look for a solution	When a problem just happens, just let it go
I try to separate work and fun	Thinking about the root cause and trying to solve that	I try to take it personal	Just doing my best. Work hard to make the deadlines
Face it if I have the courage	Thinking about the root cause and trying to solve that	Trying to see things in perspective	Just doing my best. Work hard to make the deadlines
Writing to analyze the situation	Trying to see things in perspective	Change your attitude	Just doing my best. Work hard to make the deadlines
Just let the stress on my stomach be	Change your attitude	Reframe the situation	Just doing my best. Work hard to make the deadlines
The awareness of stress	Reframe the situation	Being aware that I have stress	Just doing my best. Work hard to make the deadlines

Xanax	Eat healthy	Drinking
Eating	Drinking calming tea	Eating
Getting really drunk	Eat healthy	Eat healthy

Edibles and substances

Painting	Reading	Cooking
Doing things I like	Try to do different stuff	Cook
Playing guitar and drawing	I remember to be kind to myself	Do something fun
watch Netflix	Play music I love & dance	Making something you like

Planning

Buy an agenda	Trying to find opportunities	Drinking things when you have time
Making lists and having a calendar	Make to do lists	To do list, prioritizing
Working harder for the deadlines	Define my priorities	Working things down
Working harder for the deadlines	Wisey dividing the things I need to do	Working things down
Working harder for the deadlines	Smartly planning my day	Working things down

Disconnect

Try not to think about it	Impassioned music helps	Not read the news	Come home to meditate	Take time for myself	Disconnect by producing some sports	Close computer	Consistently consuming media	Disconnect for some time, getting totally drunk	Give myself time to relax	First moments breathe	Breathing
Tell people I can't make certain events	Meditate	Meditation	Deep breaths	Ignore it	Avoid the scenarios	Sleep	Avoid emails and what I don't use a lot	By ignoring it, I try to make it go away	Meditation	Music	Procrastination
Taking deep breaths	Closing my eyes and just getting my thoughts together	Breath	Just try to stop my brain from thinking about it	Some rest helps but is not enough	Meditate	Meditating	Making things to get rid of the stressful thoughts	Sleeping	Meditation	Music	Meditation
Meditation waking up and going to sleep	Avoid	Try to take it or leave it and think in something else	Do something else	Taking a shower	Retreat from the world	I disconnect when going out with friends	I shut myself off with the exception of very toxic interactions	By being focused on doing something like working out			

Appendix F - Booklet. Individual Results

DAY 01

We will start with something simple, let's get to know more about your day!

Hour	Hour	Hour	Hour	Hour	Hour
7:30	8:30	9:30	10:30	11:30	12:30
Activity	Activity	Activity	Activity	Activity	Activity
Wake up	Breakfast	Get ready for work	Lunch break	Spreadsheets	Relaxing with watching Netflix

DAY 04

Chose an animal! What animal would you like to be?

Draw your animal or describe how it looks here

Mention 3 things this animal do best

Mention 2 weaknesses of your animal

DAY 02

You are doing GREAT! (This exercise comes in two pages)

Hour	Hour	Hour	Hour	Hour	Hour
8:30	9:30	10:30	11:30	12:30	1:30
Activity	Activity	Activity	Activity	Activity	Activity
Waking up	Getting ready	Starting work	Working	Relaxing	Leaving work

DAY 05

You are doing GREAT! (This exercise comes in two pages)

Hour	Hour	Hour	Hour	Hour	Hour
8:30	9:30	10:30	11:30	12:30	1:30
Activity	Activity	Activity	Activity	Activity	Activity
Waking up	Getting ready	Starting work	Working	Relaxing	Leaving work

DAY 03

Today I want you to tell me what things make you feel happy?

01: It's sunny

02: I love talking to my friends

DAY 05

Look for something which smells nice to you (spice, perfume, soap, etc) and keep in close for the activity

Pick a song from your playlist and turn off all the distractors around you, lay down in bed and smell your scent tool until the song ends

Share the song with us! "Ocean" by John Butler

DAY 01

We will start with something simple, let's get to know more about your day!

Hour	Hour	Hour	Hour	Hour	Hour
7:30	8:30	9:30	10:30	11:30	12:30
Activity	Activity	Activity	Activity	Activity	Activity
Breakfast	Work	Breakfast	Work	Breakfast	Work

DAY 03

Today I want you to tell me what things make you feel happy?

01: Going to the mountains

02: Sleeping in a bed

DAY 02

You are doing GREAT! (This exercise comes in two pages)

Hour	Hour	Hour	Hour	Hour	Hour
7:30	8:30	9:30	10:30	11:30	12:30
Activity	Activity	Activity	Activity	Activity	Activity
Breakfast	Work	Breakfast	Work	Breakfast	Work

DAY 04

Chose an animal! What animal would you like to be?

Draw your animal or describe how it looks here

Mention 3 things this animal do best

Mention 2 weaknesses of your animal

DAY 05

You are doing GREAT! (This exercise comes in two pages)

Hour	Hour	Hour	Hour	Hour	Hour
7:30	8:30	9:30	10:30	11:30	12:30
Activity	Activity	Activity	Activity	Activity	Activity
Breakfast	Work	Breakfast	Work	Breakfast	Work

DAY 05

Look for something which smells nice to you (spice, perfume, soap, etc) and keep in close for the activity

Pick a song from your playlist and turn off all the distractors around you, lay down in bed and smell your scent tool until the song ends

Share the song with us! "Bambino" by John Butler

DAY 01

We will start with something simple, let's get to know more about your day!

Hour	Hour	Hour	Hour	Hour	Hour
8:45am	10:30am	12:30pm	2:30pm	4:00pm	9:30pm
Work Meeting	Work	Lunch	Work	Work	Get for job

DAY 03

Today I want you to tell me what things make you feel happy!

01 Spending time with friends
Why this makes you happy? So that I can share my thoughts and have fun.

02 Sleeping and eating
Why this makes you happy? I feel completely relaxed after doing these things.

DAY 02

You are back for happy to see you. Please cross with an X on the mood that better describe how you felt today (CHECK max 3)

Hour	Hour	Hour	Hour	Hour	Hour
8:00am	10:00am	12:00pm	2:00pm	6:00pm	8:00pm
Learn for work	Work	Work	Work	Work	Work

How did you feel while doing these activities?
 8:00-10:00: excited, happy
 10:00-12:00: tired, stressed
 12:00-2:00: relaxed, happy
 2:00-6:00: tired, stressed
 6:00-8:00: relaxed, happy

DAY 04

Choose an animal! What animal would you like to be?

Wolf

Draw your animal or describe how it looks here

Mention 3 things this animal do best
 - Apex predator
 - loyal and team spirit (wolves hunt in packs)
 - Very protective of their families (wolves will BS from miles away)

Mention 2 weaknesses of your animal
 - Their necks are most vulnerable
 - When hungry, they are less likely to defend themselves.

DAY 05

You are doing GREAT! (This exercise comes in two pages)

Hour	Hour	Hour	Hour	Hour	Hour
8:00am	10:00am	12:00pm	2:00pm	6:00pm	11:00pm
Learn for work	Work	Work	Work	Work	Work

How did you feel while doing these activities?
 8:00-10:00: excited, happy
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 12:00-2:00: relaxed, happy
 2:00-6:00: tired, stressed
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DAY 05

You are doing GREAT! (This exercise comes in two pages)

How did you feel while doing these activities?
 8:00-10:00: excited, happy
 10:00-12:00: tired, stressed
 12:00-2:00: relaxed, happy
 2:00-6:00: tired, stressed
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DAY 01

We will start with something simple, let's get to know more about your day!

Hour	Hour	Hour	Hour	Hour	Hour
7:00am	9:30am	12:30pm	2:30pm	6:00pm	11:00pm
Work Meeting	Work	Lunch	Work	Work	Work

DAY 03

Today I want you to tell me what things make you feel happy!

01 Going to the mountain
Why this makes you happy? Relaxing and enjoying the view of the mountains and the fresh air.

02 Sleeping in a log (not night or night)
Why this makes you happy? Relaxing my muscles, listening to a fire crackling and I feel cozy for something.

02 Cooking / baking and eating!
Why this makes you happy? It's the best way of nourishing myself while having fun and enjoying the time with friends.

DAY 02

You are back for happy to see you. Please cross with an X on the mood that better describe how you felt today (CHECK max 3)

Hour	Hour	Hour	Hour	Hour	Hour
9:00am	10:00am	12:00pm	2:00pm	6:00pm	10:00pm
Learn for work	Work	Work	Work	Work	Work

How did you feel while doing these activities?
 9:00-10:00: excited, happy
 10:00-12:00: tired, stressed
 12:00-2:00: relaxed, happy
 2:00-6:00: tired, stressed
 6:00-10:00: relaxed, happy

DAY 04

Choose an animal! What animal would you like to be?

Chicken

Draw your animal or describe how it looks here

Mention 3 things this animal do best
 - It's very intelligent on feeding itself
 - It's very hard to catch

Mention 2 weaknesses of your animal
 - Can't fly for a long time
 - Can't resist very cold temperatures

DAY 05

You are doing GREAT! (This exercise comes in two pages)

Hour	Hour	Hour	Hour	Hour	Hour
9:00am	10:00am	12:00pm	2:00pm	6:00pm	10:00pm
Learn for work	Work	Work	Work	Work	Work

How did you feel while doing these activities?
 9:00-10:00: excited, happy
 10:00-12:00: tired, stressed
 12:00-2:00: relaxed, happy
 2:00-6:00: tired, stressed
 6:00-10:00: relaxed, happy

DAY 05

Look for something which smells nice to you (spice, perfume, soap, etc) and keep in close for the activity

Pick a song from your playlist and turn off all the distractions around you, lay down in bed and smell your scent tool until the song ends

How did you feel after this activity?
 - Relaxed, happy


Scent used and why you picked it?
 - Vanilla, it's my favorite scent and it's very relaxing.

Share the song with us!
 - "Beneath the Snow" - from: Anna

Appendix G - Co-Creation Results

APPENDIX

HELLO WELCOME TO THIS
CO-
situation
etc. make you overloaded
(mental, physical)



What do you usually do about it?

Overwhelming
→ People coming over
→ Saying 'No' to someone
→ Not able to put my word.

Silence walks
- To many thing on my mind to remember
- When someone else is stressed next to me

Many people
- When my room is not organized
- Wet floors

Life future decisions
* Yash Barchani & working with him
I have to see him for his to do his part of the job.

When you have to work with people that just makes up excuses to avoid working

Being stuck at some point and not finding the solution.

Not knowing if I did enough
- Not having an instructor to follow

Make a list of things
- Clean my environment
- Start singing.

Organize my time
- try to finish all my tasks as soon as possible

not having a clear plan for some stuff (work)

WEED
a) Make an excuse. (lie)

Not finding the solution to a problem:
* Sports
* Videogames
* Take a break before continuing

The feeling of less of control due to accelerationism and the path to less of human wellbeing

having too many deadlines close to each other
- having a lot to do but not organized
- time pressure too many emails/messages to answer

Existential Nihilism

uncertainty

Drawing
- working out
- Cleaning my room

Overthinking
- Presentations
- People who don't respect my hours, boundaries.
- Tiny close space.
- Deadlines
- Wasting my time.

Taking up too many responsibilities

Appendix G - Co-Creation Results

APPENDIX



More strategies!

Interested in

Interested in

EMOTIONAL REGULATION

Get enough sleep

When you're well-rested, it's much easier to keep your emotional balance.

EMOTIONAL REGULATION

Balanced schedule

All work and no play is a recipe for burnout. Try to find a balance between work and family life, social activities and solitary pursuits, daily responsibilities, and downtime.

PROBLEM MANAGEMENT

Don't over-commit yourself

Avoid scheduling things back-to-back or trying to fit too much into one day. All too often, we underestimate how long things will take. If you've got too much on your plate, distinguish between the "shoulds" and the "musts." Drop tasks that aren't truly necessary to the bottom of the list or eliminate them.

PROBLEM MANAGEMENT

Try to leave earlier in the morning.

If you have to arrive to a place try to leave earlier so you can take a few minutes to set and then start. Don't add to your stress levels by running late.

PROBLEM MANAGEMENT

Prioritize tasks

Make a list of tasks you have to do, and tackle them in order of importance.

EMOTIONAL REGULATION

Breaks

Take short breaks throughout the day to sit back and clear your mind. Also, try to get away from your desk for lunch.

PROBLEM MANAGEMENT

Chunks! Break projects into small steps

If a large project seems overwhelming, make a step-by-step plan. Focus on one manageable step at a time, rather than taking on everything at once.

EMOTIONAL REGULATION

Delegate Responsibility

If other people can take care of the task, why not let them? Let go of the desire to control or oversee every little step. You're letting go of unnecessary stress in the process.

EMOTIONAL REGULATION

Understanding your emotions

Document in a journal (physical or digital) how you feel about situations in the daily bases and detect those negative feelings to either avoid the situation or do something about it.

EMOTIONAL REGULATION

Create a Mantra

In order to cast negativity from your mind you need to exercise it with a good phrase. Create a mantra thinking of good qualities about you and repeat them everyday (e.g say it out loud when you wake up)

PROBLEM MANAGEMENT

Prepare a Weekly Schedule

The weekly schedule allows you to schedule small blocks of time for day-to-day activities.

EMOTIONAL REGULATION

Find humor in the situation

When you – or the people around you – start taking things too seriously, find a way to break through with laughter. Drop some jokes or find a funny video, stand up routine online. After that go back to work!

PROBLEM MANAGEMENT

TASKLIST

A list of tasks to be completed, such as chores or steps toward completing a project. When you accomplish one of the items on a task list, you check it off or cross it off.

EMOTIONAL REGULATION

Talk it out

Sometimes the best stress-reducer is simply sharing your stress with someone close to you.

PROBLEM MANAGEMENT

"ABC" prioritization

"A" items were the most important, "A-1" the most important within that group, "B" next most important, "C" least important.

PROBLEM MANAGEMENT

Pareto analysis

The idea that 80% of tasks can be completed in 20% of the disposable time. The remaining 20% of tasks will take up 80% of the time.

EMOTIONAL REGULATION

Change Context

Walk away from the situation. Take a stroll around the block sit on a park bench, or spend a few minutes meditating. Even if you just find a quiet place and listen to your music, it can reduce stress.

PROBLEM MANAGEMENT

POSEC method

Interested in the acronym is a hierarchy of self-realization which mirrors Abraham Maslow's "Hierarchy of needs".

- 1. **PRIORITIZE**-Your time and define your life by goals.
- 2. **ORGANIZING**-Things you have to accomplish regularly to be successful. (Family and finances)
- 3. **STREAMLINING**-Things you may not like to do but must do. (Work and Chores)
- 4. **ECONOMIZING**-Things you should do or may even like to do, but they're not pressingly urgent. (Golfing and Socializing)
- 5. **CONTRIBUTING** By paying attention to the few remaining things that make a difference. (Social Obligations)

EMOTIONAL REGULATION

Buddy System

Just knowing you have one or more co-workers who are willing to assist you in times of stress will reduce your stress level. Just remember to reciprocate and help them when they are in need.

PROBLEM MANAGEMENT

Eisenhower Method

All tasks are evaluated using the criteria important/unimportant and urgent/not urgent and put in according to quadrants. Tasks in unimportant/not urgent are dropped. Tasks in important/urgent are done immediately and personally, tasks in unimportant/urgent are delegated and tasks in important/not urgent get an end date and are done personally.

PROBLEM MANAGEMENT

Top 3

Get organized by identifying your top 3 priorities for the day and then block out a period according to your estimate to complete the task.

EMOTIONAL REGULATION

REWARDS

Decide before starting your work how you would like to reward yourself when you finish. The reward can be anything that makes you happy and relaxed.

PROBLEM MANAGEMENT

Concentration Scoresheet

Whenever doing some important work, use a concentration scoresheet. Each time you find your mind wandering, make a checkmark on the sheet. If you do this consistently, you may find that you have far fewer check marks and far greater concentration.

PROBLEM MANAGEMENT

Developing concentration: Do one thing at a time, set aside a specific period

Focus your mind on the details of the job and how you plan to do it. Let not your attention wander to other things during this time.

PROBLEM MANAGEMENT

Developing concentration: Do something as if for first or last time

To develop focus and observation, try to look at tasks that you do every day as if you are doing or seeing them for the first or the last time. This will encourage you to observe details that you may have missed before, thus improving your observation, concentration and also gaining new insights.

PROBLEM MANAGEMENT

"Five More" RULE

If you're in the middle of a task and tempted to give up – just do FIVE MORE. Read FIVE MORE pages. Finish FIVE MORE math problems. Work FIVE MORE minutes!

EMOTIONAL REGULATION

Write and throw

If you need to work and you have other concerns that might affect your productivity write them down in a separate piece of paper. After you finish writing throw away the paper and keep on working.

PROBLEM MANAGEMENT

Scheduled Responsibilities

If certain tasks need to be done daily, try and do them at the same time each day.

PROBLEM MANAGEMENT

Night Daily Creature

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4. **ECONOMIZING**-Things you should do or may not like to do, but they're not pressing or urgent. (Costumes and Socializing)
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EMOTIONAL REGULATION

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PROBLEM MANAGEMENT

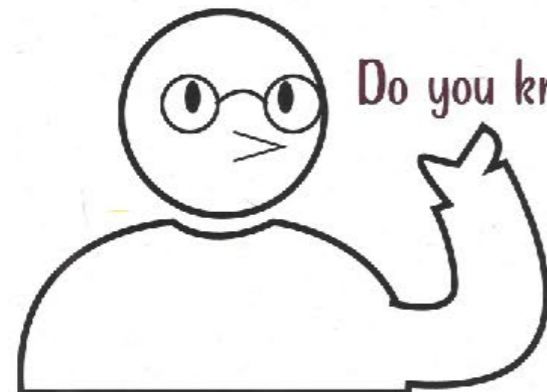
Night Daily Creature

Get organized by identifying your best time of day. Then schedule your priority tasks for that time if possible, when you are at your performance peak.

Appendix G - Co-Creation Results

APPENDIX

Also known as emotion-focused coping, a stress-management strategy in which a person focuses on regulating his or her negative emotional reactions to a stressor. Rather than taking actions to change the stressor itself, the individual tries to control feelings using a variety of cognitive and behavioral tools.

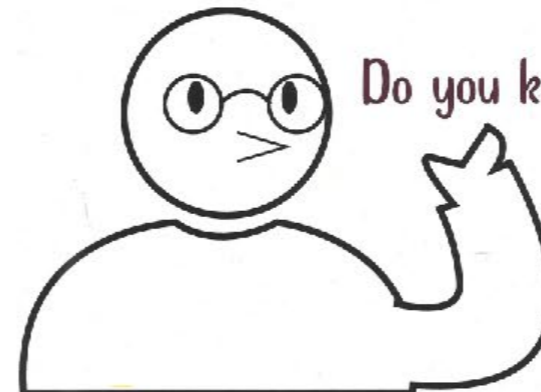


Do you know that....

Procrastination is not always bad, It's a different way to disconnect and recharge!



Also known as emotion-focused coping, a stress-management strategy in which a person focuses on regulating his or her negative emotional reactions to a stressor. Rather than taking actions to change the stressor itself, the individual tries to control feelings using a variety of cognitive and behavioral tools.



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Appendix G - Co-Creation Results

APPENDIX

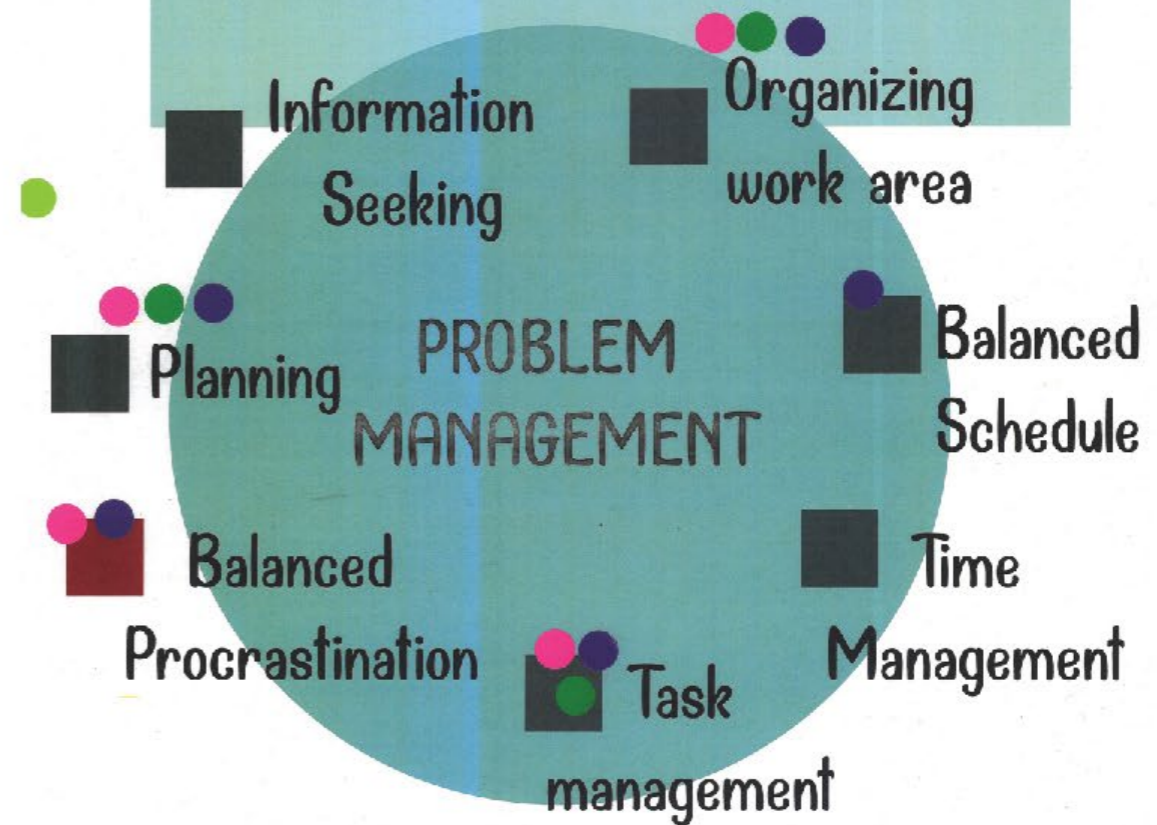
a stress-management strategy in which a person directly confronts a stressor in an attempt to decrease or eliminate it. This may involve generating possible solutions to a problem, confronting others who are responsible for or otherwise associated with the stressor, and other forms of instrumental action.



Dogs can develop chronic stress from their owners

Stress can be purely psychological and still causes the same physical and emotional damage

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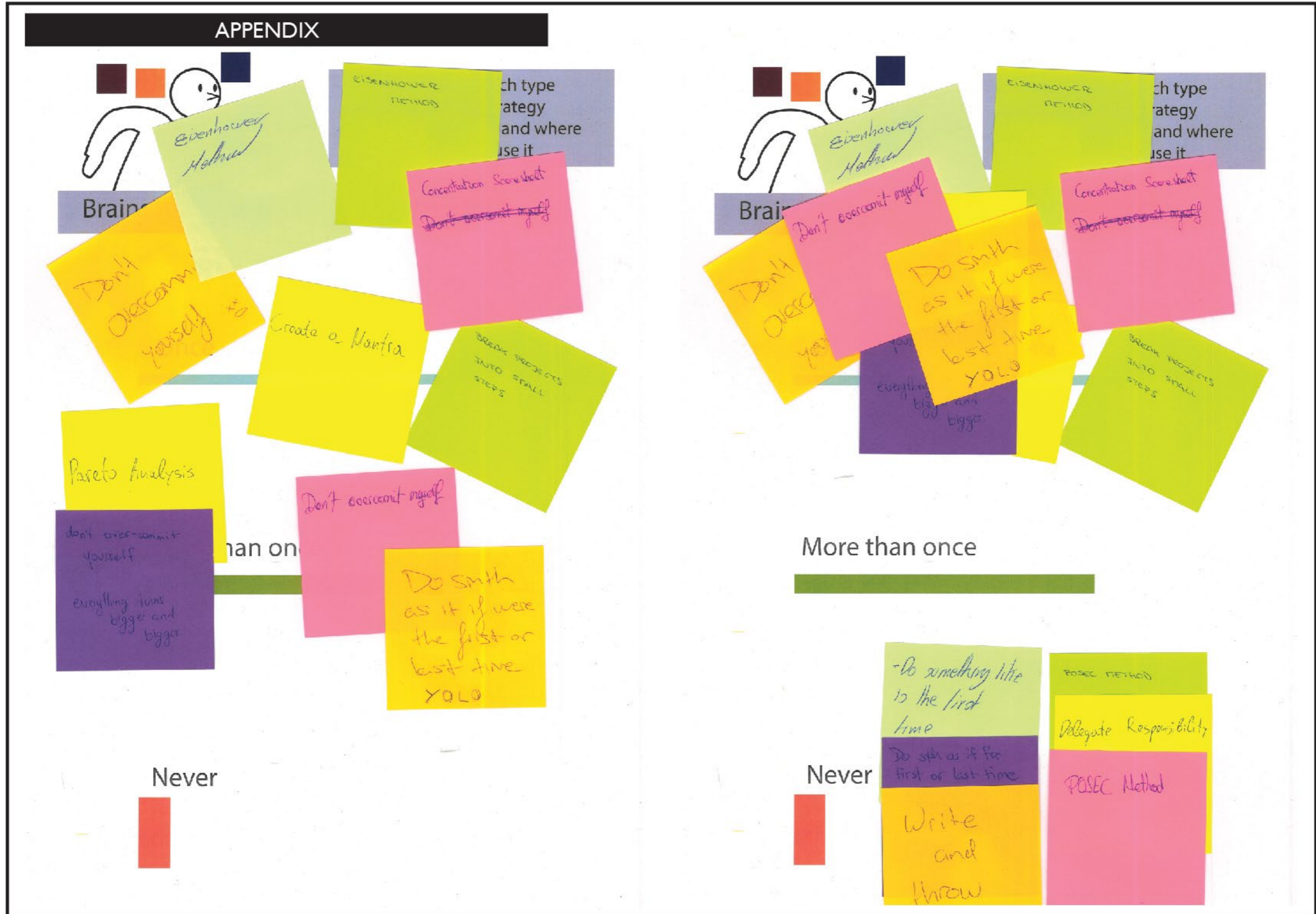
Dogs can develop chronic stress from their owners

Stress can be purely psychological and still causes the same physical and emotional damage

Appendix G - Co-Creation Results



Appendix G - Co-Creation Results



Appendix G - Co-Creation Results

APPENDIX

Left Cluster Notes:

- Buddy Check
I think this will be very interesting in the workplace and school. It will make me feel more confident knowing that I have someone.
- Concentration Secret
- Find humor in the situation
- CREATE A MANTRA
- Create a Mantra
- CREATE A MANTRA
- Don't over-commit yourself
- Buddy system
- EISENHOWER METHOD
- BREAK PROJECTS INTO SMALL STEPS
- Rewards
- Buddy System
- Montly
- Talk it out
- Eisenhower Method
- Don't over-commit yourself
- Do with as if it were the last time

Right Cluster Notes (around red circle):

- Violence
- THERAPY
- Liberal
- Talking is power
- Pet something
- Something funny

Right Cluster Notes (around teal circle):

- Physical Activity
- Set
- Cry
- Influence

Appendix H - Target Group Interviews, transcripts, notes, and survey results

PARTICIPANT	1) What makes you feel overloaded at work?	2) Which tasks (within your work environment) cause you to feel stressed and why?	3) In which situations while doing your work do you feel stuck and why?
01	<p>Too many tasks in short time Lack of regularity/continuity</p> <p>For one, being overloaded, so having too many tasks and too little time in my agenda. Second, when my schedule is quite chaotic. To be concrete, my current schedule of teaching differs quite a bit each week, so there is not really a sense of rhythm/regularity/continuity... that increases a feeling of overload - not just psychologically, but also because it logically requires more time planning around these irregular events.</p>	<p>Working with other people Depending on other people's time resources Time management and coordination</p> <p>Tasks that require the contribution from/cooperation with many other people can cause a feeling of stress, as it requires more management and coordination. And obviously, for the progress of the task I am more dependent on the response or actions of others, which takes the progress out of my control and invariably delays the entire process...</p>	<p>Depending on other people's time resources Smart about what should be the best course of action</p> <p>Once again, I mainly feel stuck when I have to await other people's response or action in order to continue my task. Another reason for feeling stuck is when I am unsure of what to do, unsure of what would be the best course of action. This is more easily remedied though, as I can consult a colleague or supervisor quite easily.</p>
	<p>4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)</p> <p>depends on the urgency Postponing as a way to process information better</p> <p>This also depends on the urgency, if the deadline is near at hand, I act right away. If the deadline is relatively far away (or there might not even be a clear deadline), then I might postpone for a bit, which allows me to let it 'soak' for a while. This soaking sometimes proves valuable, as the problem is somehow being processed a bit better and the solution might appear more clearly over time.</p>	<p>5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?</p> <p>Prioritizing There is more than just work Prioritizing</p> <p>Feelings of stress and anxiety. Prioritizing is a great skill to have. Also, I can manage them by putting it all in perspective, if I fail at some task, it won't be the end of the world by any stretch of the imagination. Also, I realize that there are more important things than work: taking time for my family for an obvious example, but also just taking time to practice my hobbies. Letting some task flow on the side of priorities go to sleep and experiencing that life just continues is sometimes enough. Nobody is perfect.</p>	<p>6) What feelings emerge when you overcome a task you struggled with?</p> <p>relief Proud Evaluate the confidence before and after a task</p> <p>I guess mostly a feeling of relief, like that weight being lifted from my shoulders. Depending on my insecurity about the task at the beginning, I might feel pretty proud about myself if I had any doubts about whether I would be able to do it. Haven't felt this kind of doubt in quite a while, though :)</p>
	<p>4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)</p> <p>Avoid postponing Wait for others or for opportunities</p> <p>Over the years I learned to avoid postponing. There are still things on which I have to wait for others, or for opportunities, but I try to minimise the times I wait for myself.</p>	<p>5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?</p> <p>Frustration</p> <p>That depends what you mean by overloaded, if the things can be managed efficiently, that's not overloaded. The main feeling is probably frustration (but I expect Pieter Desmet's emotion catalog has more options)</p>	<p>6) What feelings emerge when you overcome a task you struggled with?</p> <p>Enjoyment</p> <p>Enjoyment, brief pause. Don't forget to notice the moment and don't immediately jump into the next unfinished task. There are always unfinished tasks waiting.</p>

SURVEY TARGET GROUP			
PARTICIPANT	1) What makes you feel overloaded at work?	2) Which tasks (within your work environment) cause you to feel stressed and why?	3) In which situations while doing your work do you feel stuck and why?
03	<p>Not all tasks are visible from the beginning Some tasks require unexpected effort</p> <p>Sometimes, there are a lot of organizational tasks in parallel but they are not visible at the beginning. Such as communication via email and managing the progress with external partners. These require unexpected efforts and sometimes may interrupt my main work. To solve these, I need to overwork in my leisure time because I don't want to delay my main progress.</p> <p>Overwork in leisure time</p>	<p>Sharing opinions is a large group Guidance to work with others</p> <p>I am not good at sharing my opinions in a big group. Recently I feel so eased when I am coaching a group with 16 students. I put lots of time to prepare but eventually, I still feel I was not a helpful coach. I think some of us may need professional guidance to understand how to better organize a group making with students and promote students in an effective way.</p>	<p>Not enough knowledge to complete a task Depending on others</p> <p>When I don't have enough knowledge to complete the task. Or when I need to depend on others to make decisions. I like to have things under my own control.</p>
	<p>4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)</p> <p>Depending on others</p> <p>I will first try to make a structure but I won't act right away to devote myself to it. I will postpone it for a bit until there is no time to finish it. I was the person pushed by DDL.</p> <p>postpone until it's too late</p>	<p>5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?</p> <p>To do list Using the task regularly to do it right away</p> <p>Normally I will make a to-do list to help me build a goal to strive for. My feelings depend on if I like the current state. If I like more of them, I will feel excited and eager to finish all of them soon. If not, I feel reluctant and I will postpone devoting myself as I mentioned in (4). Sometimes, I put the hardest part in the evening since I am not sleepy and I can still work at night rather than in the early morning.</p> <p>Handled just as a normal day when you are more productive</p>	<p>6) What feelings emerge when you overcome a task you struggled with?</p> <p>Relief</p> <p>Relief. Normally I will not feel a sense of achievement if I overcome a struggled thing. I am just happy so see it has passed.</p>
	<p>1) What makes you feel overloaded at work?</p> <p>Overlapping tasks</p> <p>A build up a deadlines on top of each other</p>	<p>2) Which tasks (within your work environment) cause you to feel stressed and why?</p> <p>Self-Expectations</p> <p>Not the task per se, but the expectations I set on myself to production quality mean that I find it difficult to short cut. This can cause stress, yes.</p>	<p>3) In which situations while doing your work do you feel stuck and why?</p> <p>Know how to</p> <p>Sometimes I do not know all the answers, nor do I know what questions to ask.</p>
04	<p>4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)</p> <p>For the report make a visual about how people used this platform to choose the best alternative Pause before action</p> <p>I usually think about it a bit to really consider what's involved. Then I act.</p>	<p>5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?</p> <p>problems with sleeping and relaxing</p> <p>Sometimes I have trouble sleeping or relaxing outside of work. Usually I would exercise to feel better.</p>	<p>6) What feelings emerge when you overcome a task you struggled with?</p> <p>Satisfaction Fulfillment</p> <p>Satisfaction, fulfilment.</p>

SURVEY TARGET GROUP

PARTICIPANT

05

1) What makes you feel overloaded at work?
Constant flow of tasks while leaving others

too many tasks, always new tasks coming while trying to get old tasks done.

2) Which tasks (within your work environment) cause you to feel stressed and why?
Management of different types of tasks

making time for conceptual tasks (thinking, ideating, writing) between all the management tasks that keep coming all the time

3) In which situations while doing your work do you feel stuck and why?
Space for specific tasks is missing

not being able to start conceptual tasks.

4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)
Act too fast

usually i act right away, sometimes to fast...

5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?
Restless, Worried, Tired

restless, worried, tired. i manage this by blocking these feelings, but it doesnt go away fully...

6) What feelings emerge when you overcome a task you struggled with?
Proud, Relief, Positive?

proudness, relief, new horizon:)

PARTICIPANT

06

1) What makes you feel overloaded at work?
Self imposed deadlines, Less flexibility

when i fail to meet the deadlines i set for myself and/or when my diary is so full that i don't have any flexibility the next week (ie if someone wants to make an appointment with me and i have to tell them i have time in three weeks or further)

2) Which tasks (within your work environment) cause you to feel stressed and why?
Solving conflicts

non specifically. I don't feel stressed about specific tasks. If anything I would say 'resolving conflicts', but that does not qualify as a 'task'.

3) In which situations while doing your work do you feel stuck and why?
Asking for advice is not out of it's

i rarely feel stuck because i have a good social network that i use to get unstuck (eg asking for advice)

4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)
"Cool down" emotionally

depends how you define 'difficult'. Cognitively difficult i tackle straight away. Emotionally difficult (e.g. conflict or critique) i follow Brene Brown's strategy of letting it rest until i feel less emotional.

5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?
Difficult to express a feeling, Physical activity to overcome this

difficult describe. I would say a stressful feeling. I manage by physical exercise for example running.

6) What feelings emerge when you overcome a task you struggled with?
Relief

relief?

SURVEY TARGET GROUP

PARTICIPANT

07

1) What makes you feel overloaded at work?
Not focusing on what fully due to other things that need to be done

When I have time pressure and/or I don't get many 'deep work' done when my days are filled with meetings

2) Which tasks (within your work environment) cause you to feel stressed and why?

More open-ended types of work such as writing activities (& where there is a deadline)

3) In which situations while doing your work do you feel stuck and why?
Lack of clearance

Sometimes when coming up with a conceptual framework and I don't know where I'm going yet or when writing a paper or report

4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)
Short tasks go first

it depends, sometimes I postpone it to the next morning. I try to put my most difficult tasks as my first thing in the morning. However, if it's a short task (less than 10 min), I try to do it right away.
Difficult tasks in the morning

5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?

Restless and frustrated. However, nowadays it rarely gets to that stage or only lasts a short time. My time management has gotten a lot better and I am more calm/mindful and simply focus on the task rather than giving my attention to the feelings of restlessness and frustration.
Restless, Frustrated, The need to focus on these feelings or otherwise trying to solve the task rather than the management problem

6) What feelings emerge when you overcome a task you struggled with?

Relief mostly, happy it's over and I can move on. You have to celebrate your wins (even the small ones) a little bit.
Relief, Happy

4) When a situation or problem seems difficult to do you act right away or postpone for a bit? (an example can help describe it better)

depends on the urgency
Postponing as a way to process information better
Asking for advice is not out of it's
Wait for when you have opportunities
Depending on others
Postpone until it's too late
For the report make a visual about how people were this project to check the best approach
Pause before action
Act too fast
Tired
Frustrated
Short tasks go first
Difficult tasks in the morning

5) What feelings emerge when you feel overloaded? Can you manage them efficiently? How?

Prioritizing
Giving the problem it's accurate importance
There is more than just work
Prioritizing
Frustration
To do list
Using the task implies me to do it right away
Handled part of a problem of the situation you would prefer
problems with strength and relaxing
Restless
Worried
Difficult to express a feeling
Physical activity to overcome this
Restless
Tired
Frustrated
The need to focus on these feelings or otherwise trying to solve the task rather than the management problem

6) What feelings emerge when you overcome a task you struggled with?

relief
Proud
Evaluate the confidence before and after a task
Ask in the interview where does this moments of doubt stopped occurring
Enjoyment
Relief
Satisfaction
Fulfillment
Proud
Relief
Positive?
Relief
Relief
Happy

1) What makes you feel overloaded at work?

Lack of regularity/continuity
Too many tasks in short time
Dependence on other people
Unclear tasks
Overtime in leisure time
Some tasks require unexpected effort
New tasks are added from the beginning
Overlapping tasks
Constant flow of tasks while leaving others
Less flexibility
Self imposed deadlines
Not focusing on what fully due to other things that need to be done

2) Which tasks (within your work environment) cause you to feel stressed and why?

Working with other people
Being responsible for others
Practical things are usually ok
Sharing responsibility to a large group
Management of different types of tasks
Solving conflicts
open ended tasks

3) In which situations while doing your work do you feel stuck and why?

Depending on other people's time constraints
When you have to wait for the best time to do a task
Not enough knowledge to complete a task
Space for specific tasks is missing
Know how to
Lack of clearance

QUOTES FROM INTERVIEWS. TARGET GROUP

04

"A lot of that lies in this idea of cognitive flexibility. So our ability to really permit alternative points of view in our process".

you get to that point where stress becomes a bit more distressful

Strict with myself like I will, regulate through, you know, good exercise. Making sure that I don't overwork.

I think I will look at my calendar. I'll see, OK. Here is a stressful period. And I'll work well in advance to make sure. I'm hitting that time and everything in its place.

If something upsets me that leads to poor work performance in the end, like, unsurprisingly.

My strategies come from having to have had psychological counselling earlier.

You know there is a high workload and there is a high pressure, but you just have to work and trust in your process and I think a lot of people struggle with just letting go of control.

letting go

Turn it into a strength

Some people don't thought about themselves

you just have to be kind to yourself

you have to sort of manufacture confidence from nowhere. Sometimes this happens, you know, you feel flat. You have to remember there's a reason why I'm doing this job, not anybody else

I think they'd probably need some facilitation there just to look back and say and to see that there were moments where they did great work

01

this is going to take a lot of work to reassign them to new studios and drawing instructors, etc. And wasn't necessarily like panic mode, but okay, oh, other things besides must do this first.

I also prioritize in the sense of what is really important than what isn't. But if it fails, or it isn't executed 100% perfectly, is it really that much of a disaster?

How do you define the feeling of stress? Is it anxiety? Or is it something else? Or is it a combination of what is actually a feeling of stress?

People who have gone through all these processes over and over can develop resilience long term.

I guess the best way to get that confidence is to experience it.

I'm just going to do it. I'm going to do it. And at the very least, if I feel I learned from it, fine. That's also confidence.

sometimes experiencing stressors is not necessarily a bad thing.

I think I could have gained more insight earlier by these kinds of conversations just knowing about it, of course, half of the solution.

more and more serious elements are going to be a part of your life at some point. Which you don't have to be a fearsome off. But by that point, you might want to have some stress resilience or well-functioning mechanisms.

07

What I find challenging the most is maybe like the, the management of the stakeholders, like, keeping up to date with everybody, but also involving them in the process at the same time.

But at the same time, you're still developing ideas, and you're not certain where the direction is going. So that's one of the difficulties I've been having.

If you have less sense of direction that was kind of like swimming a little bit, now that things are becoming more clear, my work has also improved.

Task Avoidance

All the time? Of course. Okay, I mean, I think everybody does this period where I had less direction, for example, I will definitely be avoiding and like pushing things off.

If you don't know what you're supposed to be doing, then it's very easy to become very passive.

external pressures

the pressure of supervisors of stakeholders that stress in that sense. Is what pushed you out of it, or at least pushed me out. Stress makes us dynamic, evolve.

tried to schedule most of my deep work like my most intensive or most most labor intensive work it started the day because I feel I get the most done before noon before one or so.

In the afternoon more meetings, or like work that is a bit less cognitively taxing.

I know a lot of people in academia, they tend to work long hours, but I really try to cut off my working day around five or six.

the most enjoyable part is eventually the goal that I'm working towards, that is a personal process, that journey of like kind of figuring out your, your own routines over time.

he purpose of trying to design my life in a better way that I, it's easier for me to cope with my conditions, for example, to make have an easier life, a better life, basically. So I've been very reflective in that process.

behaviors are the type of routine I have with the type of life I want to live. this is a slow process, right?

it has to be a meaningful challenge. it's rewarding to do a small challenge. it will exhaust you, you know, there will be some costs to actually taking on the challenge. So, in that sense, the meaningfulness is very important, right to keep you going.

in a PhD, you're kind of on the edge of what we know, and you're trying to do something new, or try to find out something new. the challenge itself is meaningful is what makes to challenge bearable. Say, so it makes it worth to carry that responsibility.

because there is a higher goal, you will be more likely to try and find out.

I think a lot of people are more like, a little bit more passive, in a sense.

I think it really is really necessary to, for people to find something that they really identify with.

if people don't feel like it fits with them, or don't feel like it's not what we already mentioned, is not having a benefit. That then becomes very difficult. Right? So it's really finding the sweet spot for what fits with you.

it helps by giving them options, there needs to be a level of commitment.

it's pretty generic, but it should become more individualized and personal for people.

02

two years ago, I was research director, director on the faculty, I was in many more management meetings than I am now.

my day was already booked. In my agenda. For I will say, Well, all of the hours are booked, because I was restricted direct to people wants to make points on my agenda. So I will book time for myself ahead.

I start my day with a planned set of meetings goes for many of my colleagues. Usually arrive at the office half an hour before I have a meeting.

But first time in the day, is at some phases of your life, that's the most productive one.

to manage other people's contributions, remind them of stay on good terms. And that's different people have different skill levels that that for some people it comes naturally for others need to turn it into an explicit way of working.

the education is very predictable, it's intensive, but it's very predictable.

you have to deal with it, research tends to be woven around.

I see stress as a condition, a way of being and the level of how I am at the moment, which can be higher or lower.

depends very much on the circumstances on the rest of me on my agenda on the other stuff that comes with me. So I think all of that will be also what I know from some areas of theory, on workload, etc, is that stress becomes a problem when multiple sources come at the same time.

this story, closer to experience.

m, you can say that something is a stressor, when it brings stress.

there are things that I run into, on a day through the day, some of which will bring stress and others may actually relieve stress.

sometimes you'll see that people's reactions do not reduce the stress.

And that is a tech recommend doing that because it has been one of the most strange experiences in my life. During that with good teachers, because it is so counterintuitive. people who were in the same course who do not, did not experience that benefit.

the way of dealing with an opponent is to yield.

keep listening.

the path is that something which unfolds over weeks.

procrastination is good, procrastination is the habit of always not doing the things you need to do. And then it becomes a problem.

I would ground their understanding, in short example, situations, stories of what stress is like.

There are not enough lions anymore. To give us any stretch.

miro

Appendix I - Design Goal and Interaction Vision Construction

6.4 Prototype 1

The materials were elaborated taking into account their portability, (A5 size and card standard size). The container selected was a recycled cardboard box with a personalizable label on top of it so the testers could place their name on it.

Among the materials, 1 layout of each activity plus an example of how to fill them in was included. Finally, a spinning wheel and a set of 20 activity cards were set

inside with the rest of the tools.

The toolkit is a physical product because people can explore their senses in a different way than a digital product, however, due to practicality some files wer

Enlightening Knowledge

Unconventional Yield, being unpredictable

Fun Entertaining

Challenging Overcoming, accepting, failing

Informative You discover something new

Counterintuitive Goes against the established way or is unpredictable

Playful What provides amusement or enjoyment

Reflective Overcoming, accepting, failing

Winning at things

Being complimented

Having a clear goal

People smiling at me

Feeling supported by people I care

A beer

Being determined on my goals, knowing clearly what I want to do

Self-affirmations to get over my insecurities :)

People's opinions don't matter if you don't love yourself first :)

being able to do things I like, and spending time with friends, family giving me compliments (only from people I care/about/like) doing sports - sort of feel stronger? then reflects confidence positively

I like also → good outputs influence on mood, confidence

feeling good = feeling confident

complements

Getting good grades

feeling fulfilled

Being social

Having purpose

Knowing what to do next makes me feel a little more confident, working!

* How we get or absorb knowledge?

- Through authority (someone telling us what to do)
- Rationalism (using a premise)
- Empirism. (observation and experience)
- Scientific Method (systematically collecting and evaluating)

*When you try something new you are curious.

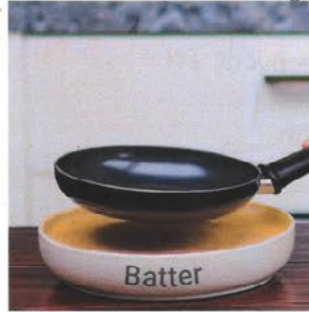
Reframes.

changing the way you

Interaction Visión

My interaction vision would be like discovering a new way to cook your favourite dish

To be enlightened you need instruction which is different from guidance.



What are you getting from these?
↓
Guided to help you manage your stress.

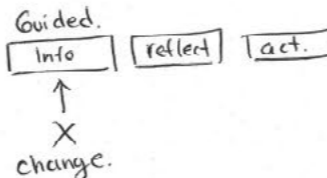
"Out of the bounds of what is established"
Unconventional

"It's entertaining to watch, sparks curiosity."
Amusing

Challenging

Enlightening *

"greater knowledge and understanding"



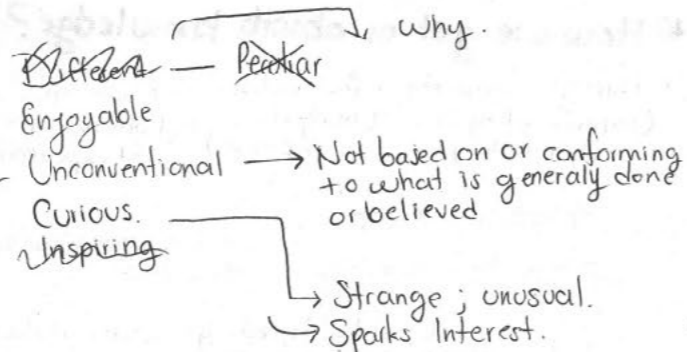
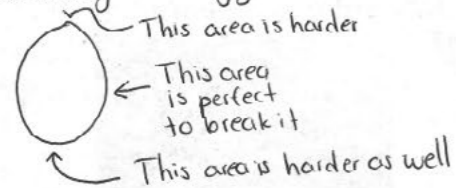
Enlightenment is an act of enlightening, or the state of being instructed.

↳ Enlightenment is profoundly satisfying and transformative.

Enlightenment

↳ You are very capable already you just focus your energy in the wrong way.

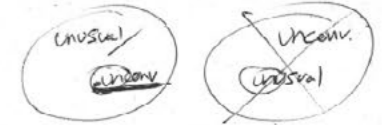
Dealing with stress is like breaking an egg.



El diseño puede ser:
sparks reflection.

The Problem(s)

- Unfocused energy.
- No time for you within your working schedule.
- No breaks between tasks that causes burn out

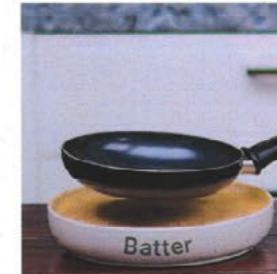


Design Goal

My goal is to design a physical TOOLKIT to make my users feel confident to try new ways to confront their daily work stressors implementing emotional regulation and problem management strategies.

Interaction Visión

My interaction vision would be like trying a new way to cook your favourite dish



diferente
ineficiente
preterioso
entretinido
experimental

Unconventional

Challenging

Entertaining

Enjoyable
Engoyment

Interesting.
Surprising
Experimental
Novedoso
Surprising
Engoyable

Creates awareness
Unexpected

• Sparks curiosity

• You aim for something you want regardless the process.

Unconventional

Because

- Goes against the established way.
- You might need to try it more than once to master it

Challenging

Because

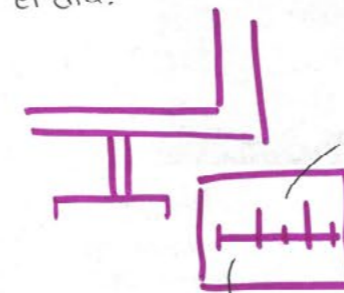
1 The person has moments in the day worth working where they are more productive

Diferente Divertida Poco Convencional

* Maquina de Estados. → Scenarios.

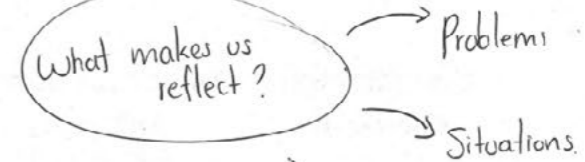


*El primer ejercicio puede ser... darse cuenta de tu momento más productivo durante el día.



Marca con X los momentos donde te sientes fastidiado.

Marca con Y los momentos en los que te sientes activo y eficiente.

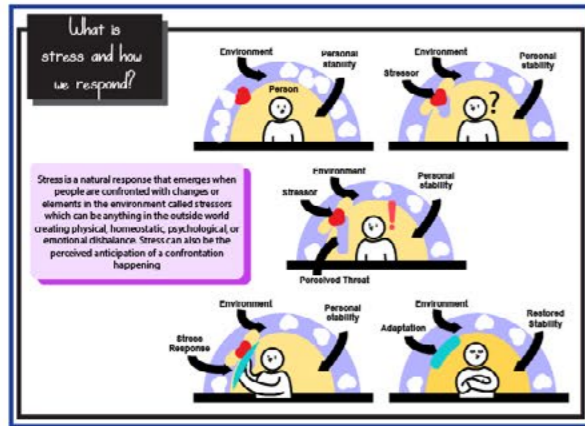


Things beyond our understanding.

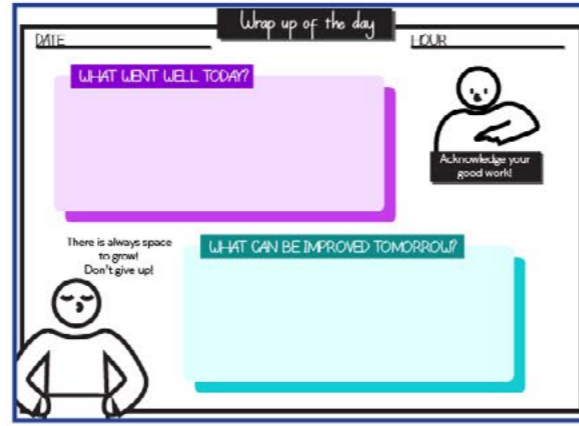
Unconventional
Enjoyable
Surprising
Challenging
Interesting



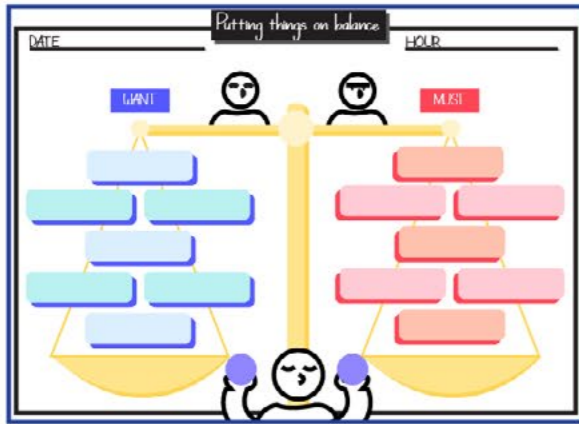
Appendix J - USER TEST 01. Results, comments and graphs



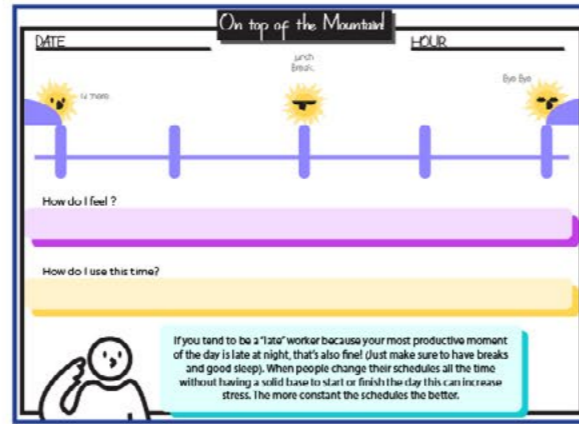
A)



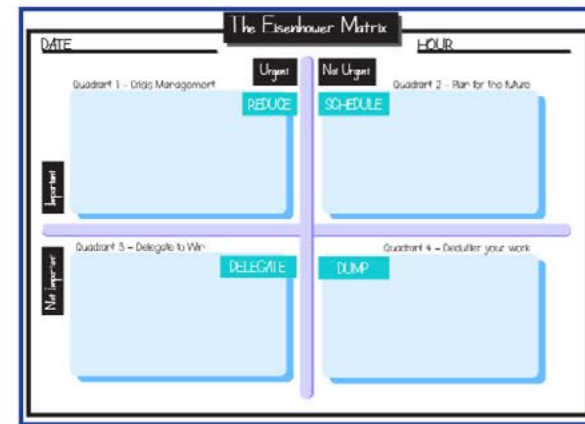
B)



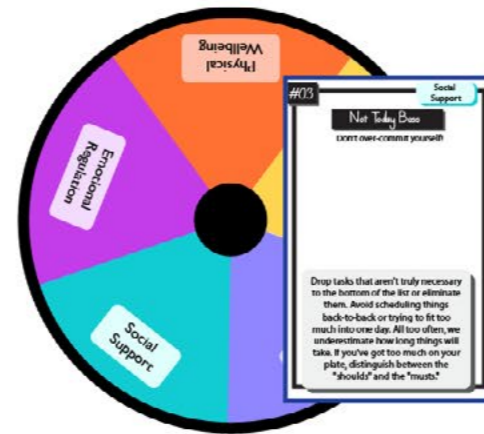
D)



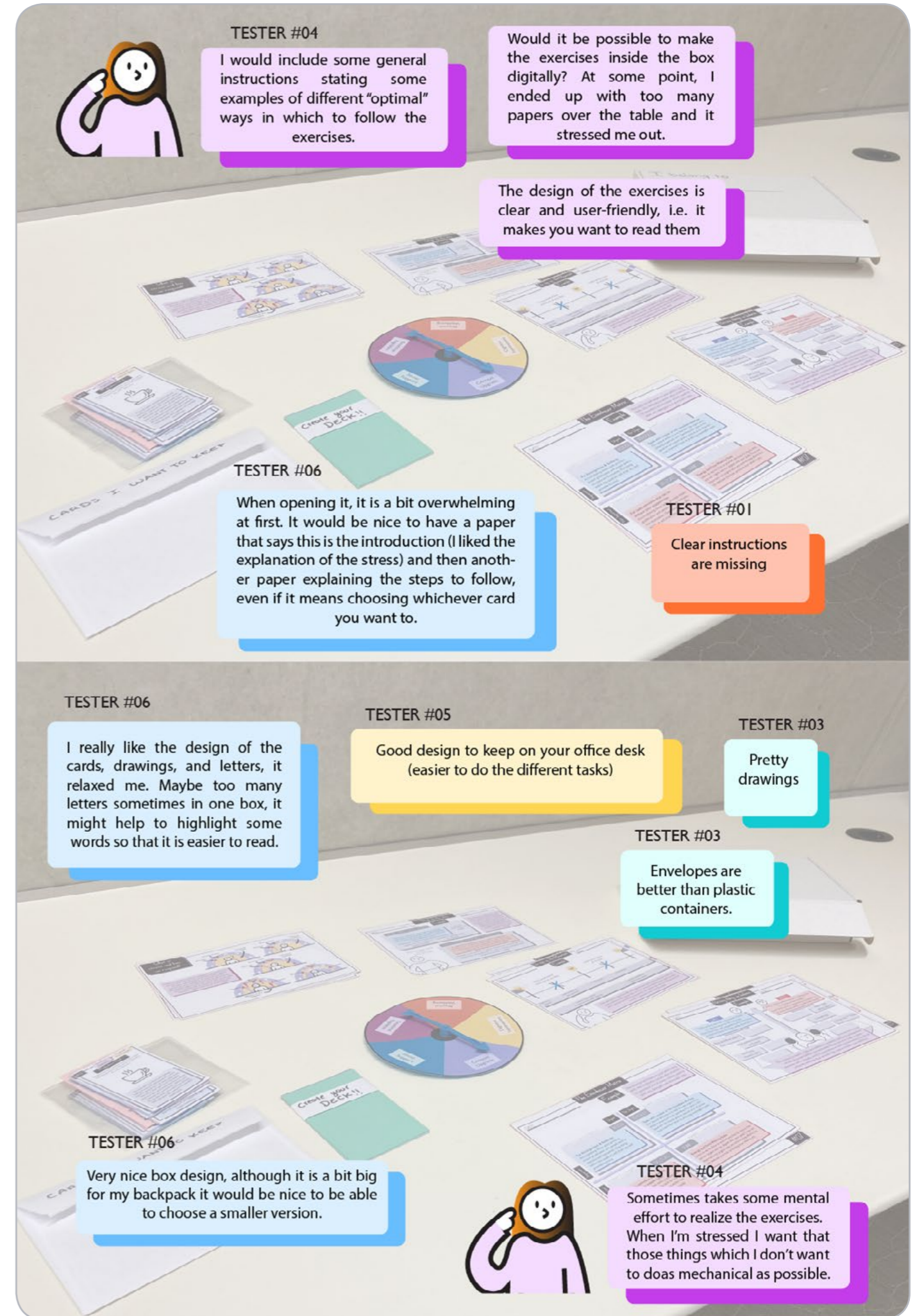
C)



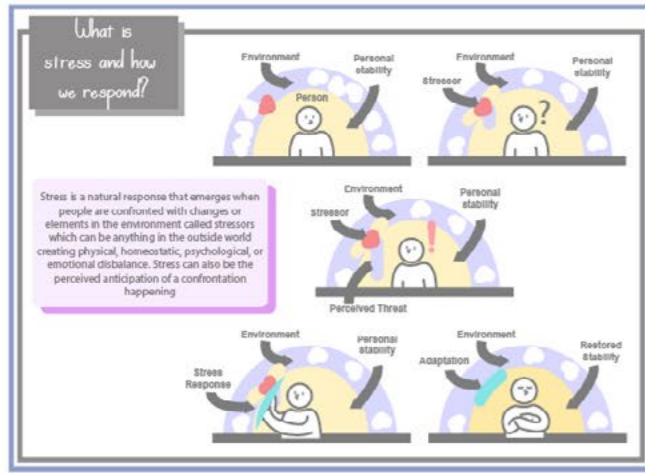
E)



F)



A)



TESTER #05

The more complex activities (where you had to keep track, annotate, etc.) were not appealing to me. Although they are good I think, in this short term and due to my personal stress situation I simply felt they would add more stress than what I already had.

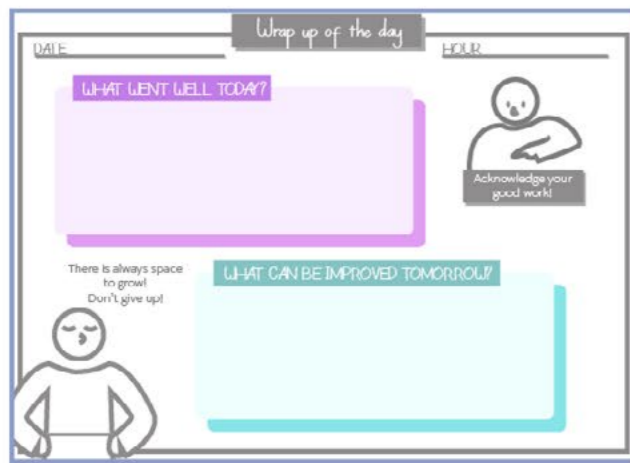
TESTER #03

The introduction text (2 big cards) has no clear purpose and no clear order. Perhaps it could be made into a single card.

TESTER #05

In one week it was difficult to test everything, I think I would need more time

B)



TESTER #03

Great activity super clear. Very positive since it focuses on what went wrong with a positive twist.

TESTER #06

I really like the wrap-up of the day as well. I feel it really helps. Actually, I have a book that improves gratitude and it is very similar, it consists in writing the things that went well and what are you grateful for on that day and it really makes you feel better.

TESTER #06

I really like the examples of how to use each of the cards

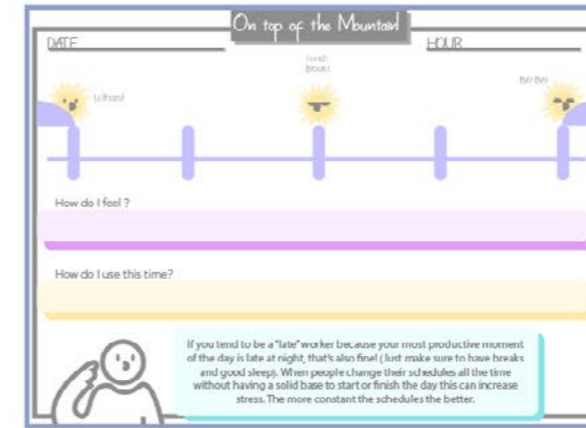
TESTER #03

the drawing that says "acknowledge your good work!" is a bit aggressive

TESTER #06

I feel like the what went well today box is related to work but adding another box related to nonwork things for which to be grateful might help the person, especially on the days that work didn't go so well :)

C)



TESTER #03

Top: Focuses on how I feel first

TESTER #03

I think the exercise needs more explanation and perhaps separate the tasks: first record how you feel throughout a day, and only later assign the time

TESTER #03

This exercise depressed me more than helped, most feelings were negative, and could not find a "productive time".

TESTER #04

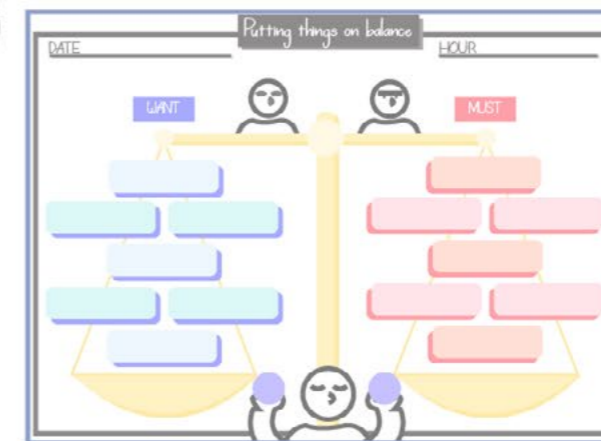
I just only wrote it once because my routine is always kind of the same. I felt it was repeating too much of what I just wrote another day.

Maybe you could think of two versions: one on paper and the other one digital to let the people choose

TESTER #06

I didn't understand when to use the "on top of the mountain" card, I guess it is meant to be used during the day by filling the gaps but I never found a moment to use it, also because I felt I couldn't identify the most and least productive parts of the day but that might be my fault or my situation in the week I have tested it.

D)



TESTER #03

Nice idea, clear what the task and purpose are. The example helps understand the exercise

TESTER #03

It's unclear what you are supposed to do with the information whenever you are done, how do you choose the balance? It can create paralysis and more stress in some people

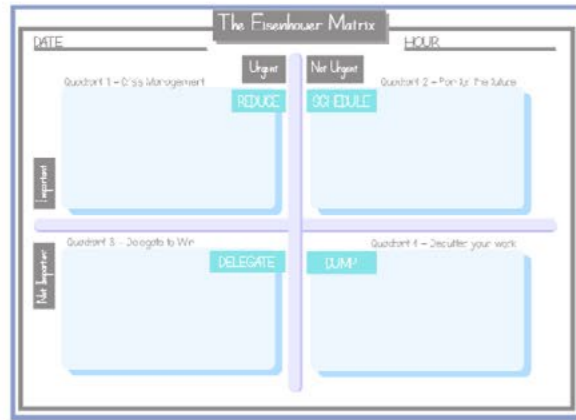
TESTER #03

Indicate that is the beginning of your workday activity, I don't think it makes sense to do it halfway through the day.

TESTER #04

The design of the exercises is clear and user-friendly, i.e. it makes you want to read them.

E)



at the end of the day I was too tired and I didn't want to write or think a lot about these things. When I finished them it was satisfactory but at first, I was lazy about it.

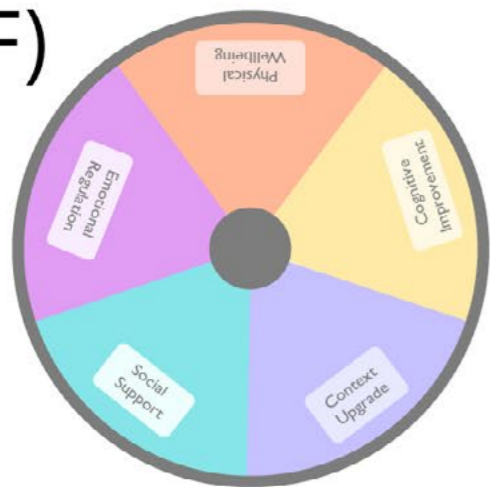
TESTER #05
Urgent and delegate were confusing, are they the same? or how are you supposed to fill it in?

TESTER #03
It's clear what you need to do with the assorted task, it not only divides them into quarters, but it also allocates already an action.

TESTER #03
It would be better to convert this exercise into a two-step exercise. First, make a list of the things that you need to do, or that are stressing you out, and then put them in the matrix.

TESTER #06
it really helped me to use the "Eisenhower matrix" when I was feeling overwhelmed with tasks. After distributing the tasks between the boxes I took a calendar and wrote when the deadlines were and when to finish each task and it really helped me. That could be a part of the exercise maybe or another card?

F)



TESTER #03
I like the idea of rotating the wheel. It removes the pressure of choosing as you have with the large cards

TESTER #06
Also, instructions for the roulette, how and when to use it, and how it is beneficial.

TESTER #06
I used some of the cards for breaks: mindfulness drink, plank, and write and throw. I want to try the energetic fragrance but haven't had the opportunity yet. I always forget to bring the fragrance.

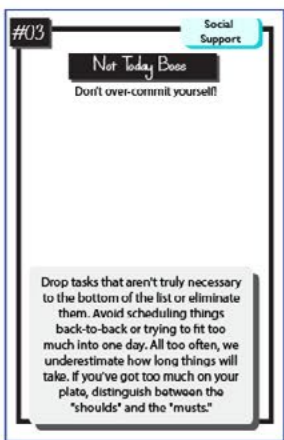
TESTER #05
Some personal preferences "physical wellbeing pool should be increased"

What I enjoyed the most was the individual exercises like the "Five More Rule", "Switch Location" and "Write and Throw". For sure I will keep on applying some of them in the future

TESTER #05
Mindfulness Drink: Never Tried the choco creme, quite good, useful for disconnecting/ doing something different

1min plank activity was the most appealing card to me, used that recurrently

Missed more physical anti-stress activities: this is more personal, but I believe they would have helped me a lot.



Appendix J - USER TEST 02. Results and comments

Participant 01

In general, I appreciated the booklets in the box explaining stress and the exercises. They were very clear, especially the page explaining personal balance and how multiple stressors can impact it. As the saying goes, "a picture is worth a thousand words", your illustration was brilliant and 'blew my mind'. It made me reinterpret my idea of 'stress'. I look at that image very often to remind myself to daily invest in 'personal balance maintenance' and self-compassion.

On the same note, my favorite activity has been the day-starter "putting things in balance". Again the image was very on point, I empathized a lot with the stick-person juggling wants and musts, and putting in writing the duties and desires/needs of the day working! It helped me to find a little bit of time every day for my hobbies and passions. If possible, it would be nice to have a printable version of this exercise, I would like to use it as a daily to-do list template.

On the other hand, I found the Eisenhower matrix activity mostly useful in analyzing my weekly tasks at the beginning of the week, rather than using it as a day starter. Using it at the beginning of the week gives me enough time to delegate or dump things with enough time. Yet, categorizing my to-dos in the 4 quadrants was very useful.

As a final note, I would like to thank you for the opportunity of testing your toolkit, it helped me during these stressful weeks before the end of the academic year.

Participant 02

- I quite like the idea of gathering different activities that can help with stress relief and their categorization on more specifically what they are supposed to help with.

- I have been using it quite erratically, so I haven't got that much experience with the material. I wanted to use it at least once per day each day, but in the end, I used it less.

- My way of using it initially was as explained: you spin the wheel, take a card corresponding to the category, and do the thing.

- There were some activities that I didn't think would go well with normal working environments, like shouting

and screaming. I get these are legitimate coping activities, but I did not want to do them with other people around, especially colleagues. Even others like walking backward I did not feel like doing.

- In the end, I dispensed with the wheel and just did some that I felt like doing or that seemed useful to the situation at the time. For example, I want to do a desk cleanup as suggested by a card, but just because I saw it in the stack and it sounded like a good idea.

- The first impression of the box is that there is so much stuff, and you have to dig in for what you want to find. Also, some things are meant to be done for planning in the morning or to wrap up in the afternoon. These don't seem connected to what I perceived was the main value of the kit, which was the cards with activities. I got the feeling that the experience might be just easier if it was focused on those cards.

- The wheel is, I think, a clever way to gamify the use of the cards, but it is not necessary to get to the benefit of the activities, so I stopped using it but I see how removing it entirely would make the kit worse.

- There were instructions and tips on one hand and how to do the exercises on another. I was quite confused by this, I would expect just one booklet with the instructions for everything. The researcher explained to me the materials, so I knew more or less what was up, but I didn't find the instructions particularly helpful because, in my opinion, it overlies on images and jumps from one thing to another. I think the style is good, but some more written explanation and some context would have made it better.

- I did not get the point of the envelopes for the week, so they are just in the way when I am digging for other stuff. The suggested structure might be good for research purposes if followed, but I think the user does not need it, and also the user might want to do some of the activities on a Friday, which the suggested schedule doesn't include.

- For quite some days I have been too lost in work or working with other people to find the time to do the activities, and just gone for the good old tea at the coffee machine. I find that less effective than some of the things which are in the cards, but it is an automatic habit that serves a similar purpose.

- The toolkit might be beneficial as a way of discovering activities that can be made into coping habits, which is particularly helped by the randomness of the wheel.

Appendix J - USER TEST 02. Results and comments

Participant 06

What I liked:

- The organization of the material.
- Motivational messages throughout the exercises.
- Very nice and attractive material to work with.
- Easy exercises that help organize chores, so you can see what things are important and what are not and you can prioritize. And reduce stress (Eisenhower chart)
- The exercise where you do the reflection of the day.
- Especially useful for those days when you think you haven't done anything, but you start writing and realize that you have done things.

What I didn't like:

- The way the roulette exercise and the cards are organized.
- There were letters that I did not use, and in a moment of stress, the fact that an exercise does not help me generates more stress. What I did was pre-select those cards that I know would be useful to me and then, in a moment of stress, choose one at random and do that exercise.
- This last round did have more instructions so it could be followed well. But I think it can be improved even more.

