

MOOD

Designing for Conscious Social Media Use Among Adolescents



Master Thesis
Design For Interaction - TU Delft
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Foreword

I am not a social media hater. In fact, I actually use it and enjoy them myself. I like creating and sharing things online, and for me it has been a place for creative expression and inspiration, also when growing up. I have seen how social media can broaden your world, connect people, and give space to share ideas.

At the same time, it feels like we have reached a point where social media is no longer just a fun harmless social platform. The digital world moves fast, and algorithms often turn social platforms into individual bubbles designed mainly to keep our attention. In that sense, it sometimes feels more like “individual media” than “social media.” People spend hours scrolling without really noticing the time passing. This behaviour is increasingly linked to negative effects on wellbeing, especially among young people.

It is therefore not surprising that social media has become a common topic in research, media, and policy. When I started this project in September 2025, the conversation mostly took place in papers and sometimes public debate. By the end of this project, the discussion had grown much wider. Some countries, such as Indonesia and Australia, have already introduced bans on social media for children under 16, and similar discussions are happening here in the Netherlands. It is good that the problem is being recognised and taken seriously.

However, I believe that a ban alone is too simple for such a complex issue. Change is needed, but the real question is what kind of change we want and how we can achieve it. That is what I wanted to find out and also why I approached this project with an open perspective, exploring the context from different angles.

This project was developed together with the designers and researchers of Scroll Scroll Scroll, Marcel and Puck, who are working on this topic and supported me throughout the process. I would also like to thank my supervisors, Gijs and Mathieu, for their guidance and feedback. Finally, I want to thank all the involved adolescents who shared their experiences, thoughts, and wishes. Their input helped shape and validate the final concept: MOOD.

This report reflects a process with many layers, much like the topic itself. I hope it offers insight into the context, ideas, and choices behind the final concept, and perhaps inspires new ways of thinking about how we (could) use social media.

Janne

Executive summary

This graduation project explores how design can support adolescents (11–14 years old) in using their social media more consciously. Social media plays a central role in the lives of young people, shaping both their physical and digital experiences. While these platforms provide opportunities for connection and self-expression, they can also negatively affect well-being when use becomes excessive. The aim of this project was therefore to explore how design can help adolescents use social media more consciously and inspire each other to do so.

The first phase of the project focused on gathering insights into adolescents’ social media use. This started with a literature review (chapter 1) exploring adolescents’ digital lives, their social lives, the dual impact of social media, and current approaches that aim to address overuse. In addition, the topic was discussed with public during Dutch Design Week and with experts to gain real-life current perspectives on the issue.

Based on these insights, a focus for generative research was defined. Social media was approached as one of the ways adolescents spend their free time, making leisure time a central research theme. The generative research (chapter 2) consisted of two sessions: one context-mapping session with a secondary school class to gain a broad and diverse perspective, and a diary study with two participants to gain a more detailed and realistic understanding of everyday experiences.

The collected data from both the literature review and the generative research sessions was analysed through an on-the-wall thematic analysis (chapter 2.4). This process resulted in twenty clusters, which were organised into eight key themes within the context. From these themes, four design directions (Chapter 3) were formulated that guided the following ideation phase.

During the ideation phase (Chapter 4), multiple ideas were generated, combined, and evaluated, resulting in five concept proposals. These concepts were reviewed with the target group, after which the concept, Any Case, was selected based on user feedback, project criteria, and personal design considerations.

The concept was further developed through a co-creation session with a secondary school class (chapter 5). Insights from this session informed the forming of the final concept: MOOD (chapter 6). The concept was developed into a working prototype and first reviewed through a pilot test. Based on these results, three improved prototypes were made and tested during a three-day user study with adolescents in their daily lives (chapter 7). Additionally, a brand identity for the concept was developed and also discussed with the target group.

The final concept was evaluated on both usability and its potential impact. The findings informed final design iterations and led to recommendations for further development and possible future expansions of the concept (chapter 8).

The report concludes with a critical reflection on the concept and a reflection on the personal learning goals and development achieved throughout the project.

Introduction

In a world where screens dominate daily life, adolescents are growing up surrounded by digital technologies that shape their identities, routines, and relationships. Social media platforms offer endless opportunities for connection and self-expression, but they also use persuasive design strategies that make it increasingly difficult for young users to disengage. While the digital environment promises empowerment, it often results in stress, dependency, and a growing sense of dissatisfaction among youth who describe their time online as “meaningless” or “unproductive.”

This graduation project takes place within Scroll Scroll, an initiative founded by designers and researchers Marcel Schouwenaar and Puck Siemerink. Their work critically examines the addictive design of social media and aims to strengthen young people’s resilience against its negative effects. Within their current project Reclaimer, children aged 10–14 are encouraged to reflect on their screen habits and explore offline alternatives through social engagement. My project is situated in the same domain and targets a similar age group, yet operates independently of Reclaimer’s predefined structure. This allows space for a different perspective.

The relevance of this topic extends beyond the digital well-being of children. Parents, educators, youth organisations, and policymakers all recognise the urgency of fostering healthier media habits and supporting social connection. National and municipal programmes, such as Amsterdam’s Actieplan 2025-2026 Online Leefwereld Jongeren, underline the growing societal concern regarding excessive social media use and its impact on learning, health, and social interaction.

Within this complex context, the design challenge is to explore how positive peer influence can be used as a natural, motivating force for behavioural change. Instead of focusing on restriction or control, this project seeks to empower children to inspire one another to use social media more consciously and to rediscover the value of offline experiences.

As part of the master programme Design for Interaction, this project embraces a Human-Centred Design approach. The process combines research through design, behavioural insights, and co-creation with the target group. Ultimately, the project aims to contribute a design intervention that activates reflection, autonomy, and positive social engagement among adolescents in their everyday environments.

Glossary

This glossary lists the main terms used in the report and explains what each of them means within the context of the project.

Adolescents

Young people roughly between 11 and 18 years old, who are in a developmental phase marked by puberty, identity exploration, and increasing importance of peer relationships.

Agency

The feeling that you can direct your own behaviour and make choices that matter, instead of simply reacting to external pressures (from apps, peers, or adults).

Autonomy

A basic psychological need: the experience of having ownership over your choices and behaviour.

Co-creation

A design approach in which end-users (here adolescents) actively help generate ideas, make decisions, and shape the final concepts, rather than only reacting to finished designs.

Cultural probes

Playful and open-ended tools (e.g. booklets, photo tasks, small assignments) that participants use in their everyday life to document experiences. They both sensitise participants and provide rich material for later interviews.

Digital environment

The broader ecosystem of devices, platforms, apps, algorithms, and online interactions that is interwoven with everyday lives at home, at school, and in public spaces.

Digital well-being

A state in which digital media use supports rather than harms a person’s mental, social, and physical health. For example by contributing to connection, learning, and balance instead of stress or overuse.

Fear of Missing Out (FoMO)

The anxious feeling that others are having rewarding experiences without you, often leading to a strong urge to stay constantly connected or present.

Free time / leisure time

Time that is not filled by school, (home)work, or obligations, and which can be spent on activities they choose themselves.

Generative research

Research that invites participants to create things (e.g. collages, drawings, letters) in order to surface tacit and latent knowledge: insights they know but rarely put into words or have not articulated before.

Online–offline integration

The idea that for today’s adolescents, online and offline life are not separate worlds but intertwined: friendships, identity, and daily routines move fluidly across screens and physical spaces.

Peer influence

The way attitudes and behaviours are shaped by what people see, think, and feel that friends and social surroundings approve of, or expect from them.

Persuasive / addictive design

Design strategies used by digital platforms (e.g. endless scroll, notifications, likes, personalised feeds) to keep users engaged for as long as possible, often making it harder to stop or use them consciously.

Social media platforms

Public or semi-public platforms where users create and share content with a wider audience (e.g. TikTok, Instagram, YouTube), often driven by algorithmic feeds and engagement metrics.

Social interaction platforms

Platforms primarily designed for direct communication with known contacts (e.g. WhatsApp, Signal), usually focusing on messaging rather than public broadcasting, and generally seen as less strongly “addictive.”

Digital rights

The idea that children not only have a right to be protected online, but also to participate, express themselves, and benefit from digital opportunities in ways that are safe, fair, and supportive of their development.

The Project Brief

Assignment

The assignment of this graduation project is to:

Design an intervention that enables adolescents aged 11–14 to inspire one another to be conscious of their social media use and to spend more time engaging in offline activities.

The form of the intervention is not predetermined; it may be physical, digital, or experiential. What matters is that it is engaging, fitted to the target group and independent of adult supervision or specific settings.

The final outcome will be a design intervention that empowers adolescents (11-14) to influence one another in positive ways and can be scaled across different contexts.

Some requirements for the intervention are:

- It fits into their everyday lives and resonate with their language and culture.
- It activates alternatives and reflections in a way that is engaging, not restrictive.
- It is scalable and self-sustaining, without relying on adult guidance.

Personal Learning Goals

Throughout this project, I aim to explore how design can be a driver for reflection, awareness, and ultimately meaningful change. I am particularly interested in how design can help people think differently about their daily behaviours and choices, not by using restrictions but by inviting curiosity and conscious action.

Working on societal topics such as youth and digital well-being motivates me because they are both urgent and complex. These themes challenge designers to communicate in ways that are authentic, relatable, and effective. My ambition is to go beyond framing social media as a problem and instead highlight positive alternatives, showing the value of spending time offline and engaging in fulfilling activities.

To achieve this, I want to strengthen several skills:

- **Behavioural and social design:** Deepening my understanding of how design can influence attitudes and social norms.
- **Co-creation and participatory research:** Learning how to facilitate creative collaboration with adolescents and translate their lived experiences into actionable design insights.
- **Scalable intervention design:** Developing the ability to create interventions that are both meaningful and adaptable across different contexts and audiences.
- **Interdisciplinary collaboration:** Gaining experience in working alongside researchers, designers, and clients to bridge creative and scientific perspectives.

Ultimately, I hope to deliver a project that not only contributes to the field of digital well-being but also reflects me as a designer, demonstrating my capacity to design for social impact and serving as a project I can proudly include in my professional portfolio.

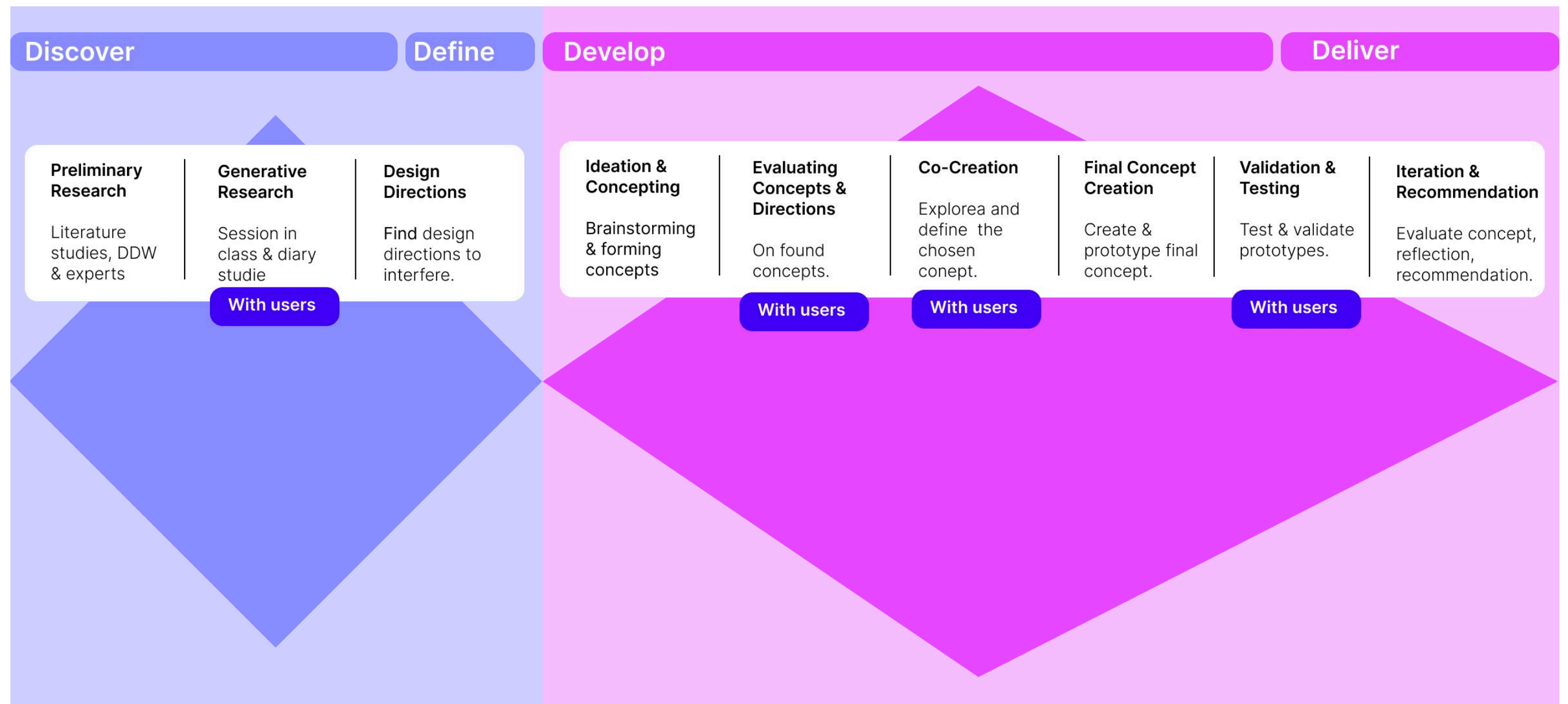
Project Roadmap

The structure of the project follows the Double Diamond model.

- **Phase 1** — Discover: Explore the problem space through literature, expert views, and exploratory talks with adolescents, parents, and educators. Identify drivers and challenges in social media use.
- **Phase 2** — Define: Conduct context-mapping and generative sessions with children to reveal their motivations, social dynamics, and (everyday) experiences. Synthesise findings into design directions.

- **Phase 3** — Develop: Facilitate co-creation sessions, ideate and prototype concepts. Test these concepts and prototypes with target group.
- **Phase 4** — Deliver & Evaluate: Evaluate the final concept through user testing and reflection. Present the final design and design recommendations.

Throughout all phases, digital tools such as Miro (for clustering and ideation), Figma (for reporting, prototyping), and on-site workshops will support collaboration and documentation.



Methods

This project combines generative research, co-creation, and user testing to understand how adolescents experience their free time and how social media shapes their daily lives.

The approach is inspired by the Convivial Toolbox (Sanders & Stappers, 2012), which emphasises creative, participatory, and reflective ways of involving people in the design process.

Generative Research

Two activities will help explore adolescents' thoughts, emotions, and dreams about their leisure time:

1. In-class session:
Collage making and a letter to their future self.
This playful session encourages to reflect on how they spend their time now, how it used to be, and how they would like it to be in the future.
2. Individual diary study.
A small booklet inspired by the Cultural Probes method from the Convivial Toolbox will let participants record their daily experiences as preparation for follow-up interviews.

Co-creation and Development

After the research phase, a co-creation sessions will be organised where adolescents help to create and refine the concept idea together. This ensures that the final intervention fits their world, language, and motivations.

This session uses participatory design and generative co-creation methods like creating a timeline and using the hero-villain method.

Analysis and Testing

The collected data will be analysed thematically and visualised using (a digital) on-the-wall method.

The final concept will then be developed into working prototypes, which will be tested during a three-day user test in participants' daily lives. Following the test period, post-test interviews will be conducted to evaluate usability and the impact of the concept

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Preliminary Research

This section presents the preliminary research conducted to build an understanding of the project topic and context. The research explored key themes related to adolescents' relationship with social media, combining literature analysis with practical insights from public and expert conversations.

The following sub questions were investigated:

1. Digital life: What does social media use among adolescents look like (screen time, platforms, purposes)?
2. Social life: What characterises this life stage and social environment (puberty, social changes, peer influence)?
3. Dual Impact: What is the impact of social media on adolescents (positive, negative, influencing factors)?
4. New Approach: What are current and possible approaches to stimulate change (existing solutions, gaps, opportunities)?
5. Practical insights (at DDW): How do visitors reflect on their digital experiences and vision for balance?
6. Expert perspectives (Thuis en in de Kluis & ConnectLab): What are experts' views on the current situation and needed change?

The findings from this preliminary research form the foundation for the research goal, activities, and questions of chapter 2: Generative Research.

1.1 Digital Life

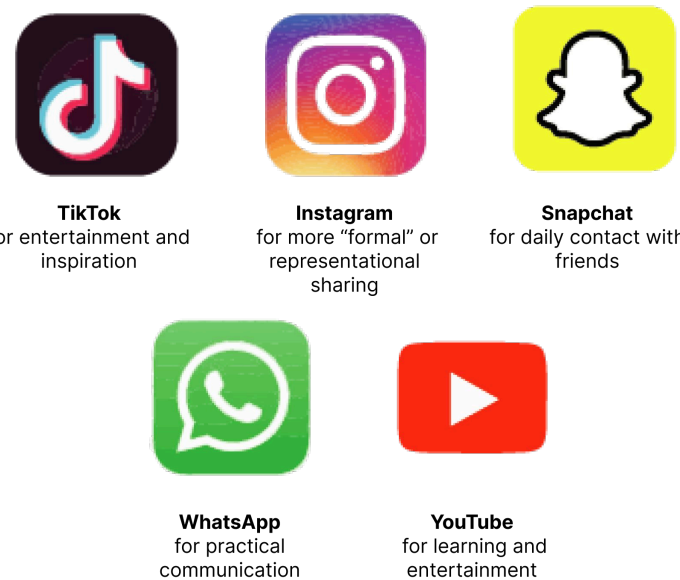
What does social media use among adolescents look like?

Adolescents today grow up in a world where screens are part of everyday life. Smartphones, social media platforms, and apps have become extensions of both their social and personal worlds. Numerous studies have examined screen time among children and adolescents. This infographic illustrates the digital lifeline of youth from ages 0 to 17, showing the average daily screen time and the main types of activities they engage in. The data is based on research from Ienemiene Media, the Trimbos Institute, Netwerk Mediawijsheid, and the University of Amsterdam (UvA).

As seen in the infographic, the target group of this project, youth aged 11 to 14, is in a crucial phase of development, in which screen time increases rapidly, mainly due to the growing use of social media.

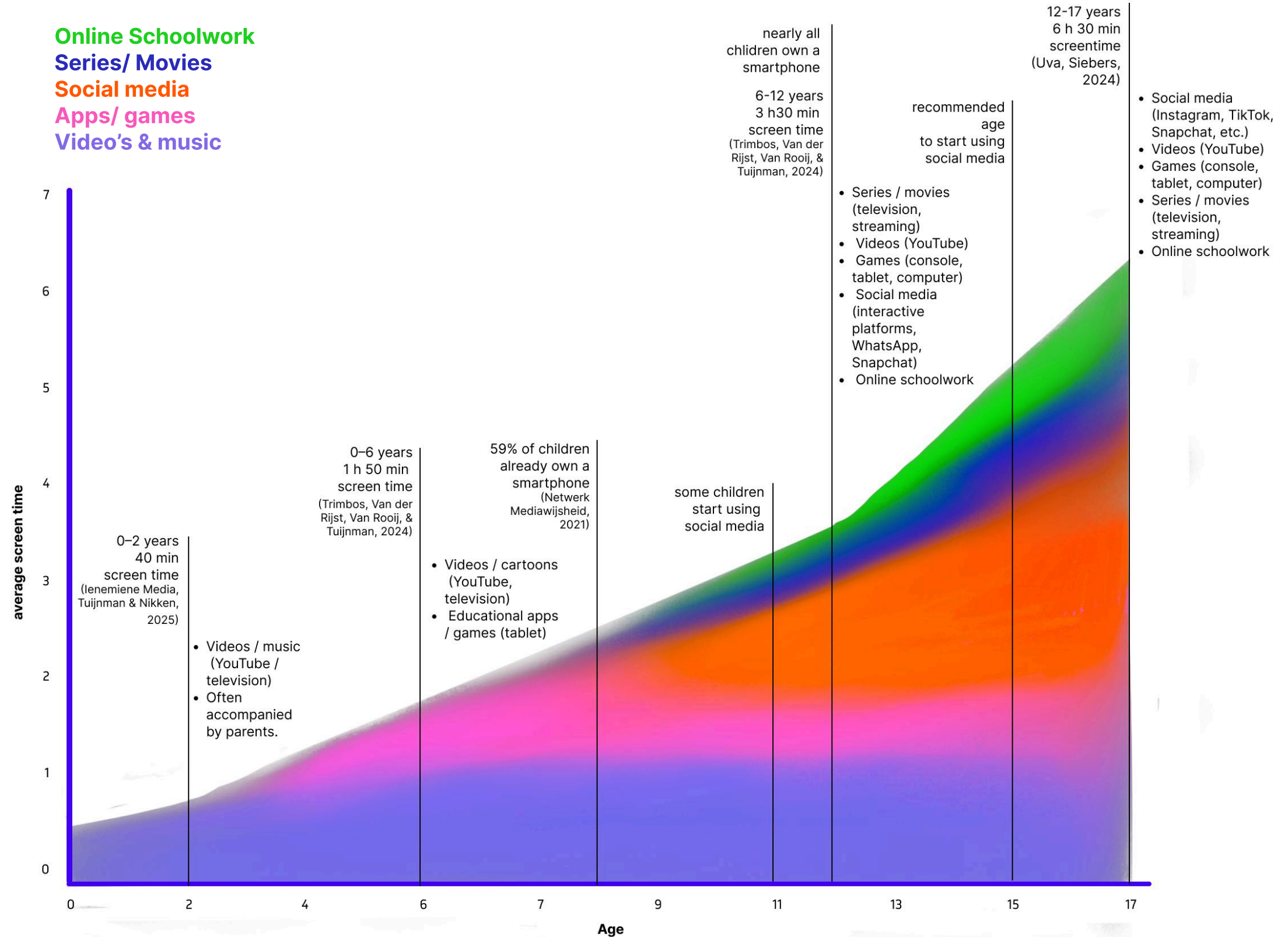
Dutch data show that around one-third of all internet users are under 18, and that secondary school students spend an average of 6.5 hours per day on screens. Of this, about 2 hours and 40 minutes are devoted to social media (Koning & Vossen, 2025; Van der Wal et al., 2024).

Adolescents often use several platforms simultaneously, each serving its own function (Van der Wal et al., 2024). Together, these platforms form a personal repertoire of apps, each fulfilling specific social or emotional needs.



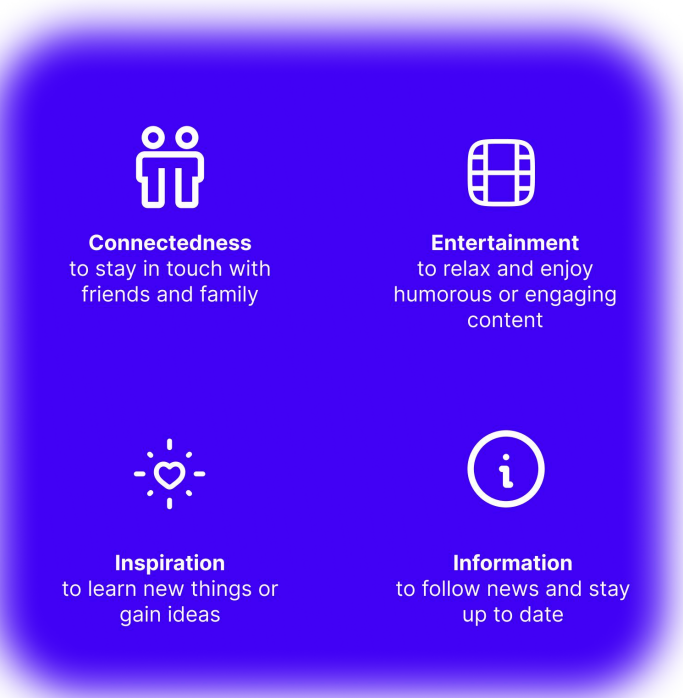
(Fig. 1 Social Media Platforms & use type)

Online Schoolwork
Series/ Movies
Social media
Apps/ games
Video's & music



(Fig. 2 Digital Lifeline)

The motivations for social media use are relatively consistent across studies. Most adolescents use social media for four main reasons:



(Fig. 3 Main Reasons for Social Media Use)

Social media have become one of the main ways for youth to keep informed about current events (Robb, 2017). In addition to consuming content many adolescents also create their own material. They write blogs, maintain websites, and share photos, videos, or music. All these activities support self-expression, creativity, and civic participation (Livingstone et al., 2011).

In short, today's adolescents have grown up in a digital world where social media play a central role in how they connect with others, learn about the world, and explore their identities.

Personal reflection notes

- The screen-time is mainly growing so fast due to social media usage. If this falls away, would other online activities be bigger or would they be more online?
- Are there other forms to provide connectedness, entertainment, inspiration and information? (could be useful to investigate in order to design an alternative)
- These apps of use change constantly (for example snapchat is more common now to use for direct communication among children, this used to be WhatsApp) So it is good to not only focus on specific platform characteristics but keep more of an holistic view.
- Even in schoolwork screens are highly integrated, so children have to use screens as part of their (educational) development.

1.2 Social Life

What characterises adolescence and the social environment?

Adolescent behaviour does not occur in isolation but is shaped by both the physical and social environment in which they grow up (Michie et al., 2011). To understand how adolescents use social media, it is therefore essential to understand the broader social world they live in, especially during early adolescence (ages 11–14).

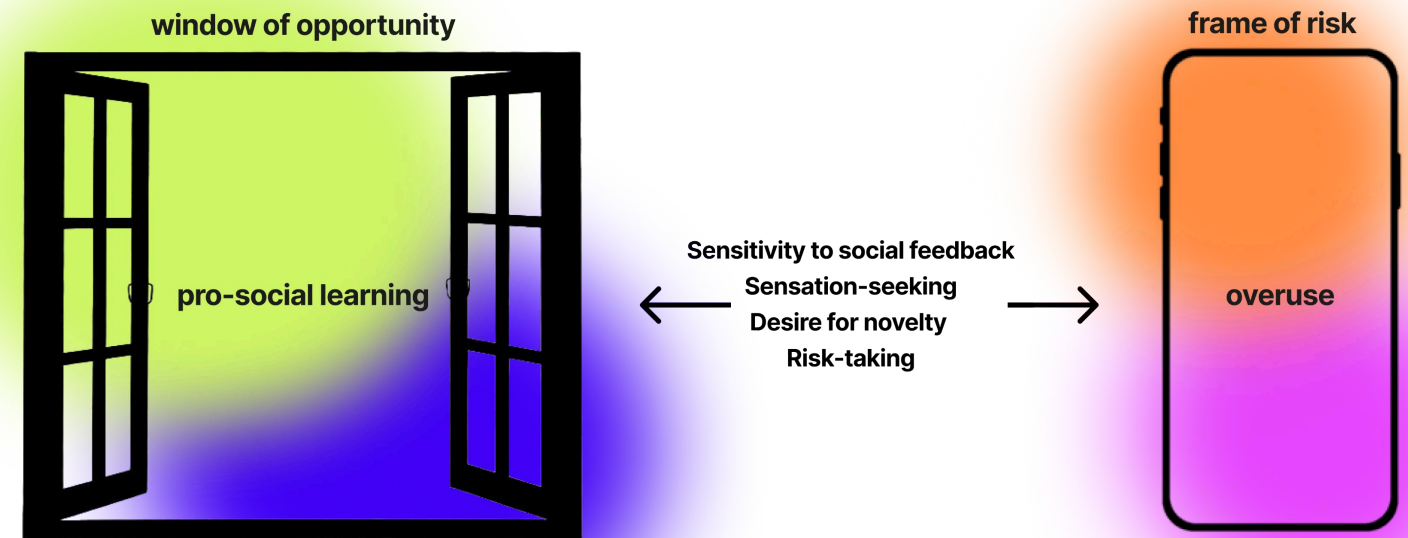
The onset of puberty is accompanied by major social, emotional, and motivational changes. During this period, sensitivity to social feedback, sensation-seeking, and the desire for novelty and risk-taking all increase. Adolescents also develop stronger motivations to engage with peers and to gain social acceptance. According to Dahl, Armstrong-Carter, and Van den Bos (2024), adolescence represents a neurodevelopment “window of opportunity” for social and prosocial learning. This process is driven by an emerging motivation to matter (feel socially valued) and an increasing ability to care (act pro-socially).

When opportunities for positive social learning are limited, young people may instead turn to antisocial strategies to gain agency, such as aggression or social exclusion.

Research shows that adolescents rely heavily on peers for guidance and advice. A recent Dutch study found that adolescents primarily seek information and support from friends, rather than adults or professionals (Slagter, Gradassi, Van Duijvenvoorde, & Van den Bos, 2023).

Peer opinions strongly shape social norms and influence how young people perceive acceptable behavior, both online and offline (Sadza, Rozendaal, Daalmans, & Buijzen, 2024).

The constant connectivity of modern life further amplifies the desire to belong. Smartphones make social interaction continuous, but they also heighten the pressure to stay involved and visible. Studies on Fear of Missing Out (FoMO) demonstrate that the need for social inclusion can lead to compulsive checking behaviours and increased stress. In a Dutch study, De Bruijn (2021) found that FoMO and peer pressure were strong predictors of more intense and problematic social media use among adolescents.



(Fig. 4 Window of Opportunity vs. Frame of Risk)

In summary, the social and developmental dynamics of early adolescence create powerful opportunities for learning and connection but also increase vulnerability. While social media can fulfil key needs for belonging and self-expression, it can also lead to overuse and emotional strain.

Personal reflection notes

- This need for online availability can increase the feeling of fear. Not only to miss out, but also create a feeling of fear when it is not possible to contact people online. (fear to be offline)
- In puberty adolescents like to rebel. Can being offline be seen as an rebellious act against expectations?

1.3 Dual Impact

What is the impact of social media on adolescents?

Recent studies show that around 60% of adolescents experience negative effects of social media on their mental well-being (Valkenburg, Van der Wal & Beyens, 2023). This is concerning and has led to public debates in which social media are often portrayed as inherently problematic. However, this view is too one-sided: social media also have positive aspects that should not be overlooked. Van der Wal et al. (2023) describe this duality as “screen happiness and screen sadness.”

Positive Effects

Social media contribute to cognitive growth, as platforms like YouTube and TikTok allow young people to access information in engaging and easily digestible ways. This can increase their motivation to learn and improve their ability to retain information (Cortesi et al., 2020). Many adolescents also use these platforms to learn more about their physical and mental development, which enhances self-understanding.

Social media also play an important role in social connectedness. Through WhatsApp and Instagram, young people maintain friendships and social contact, strengthening their sense of belonging and support (Van der Wal, Valkenburg & Van Driel, 2024). Adolescents report that social media help them to explore their identity and self-expression.

As one 14-year-old participant in Van der Wal et al. (2024) expressed:
“Social media have helped me discover who I am and what I like or don’t like.”

In addition, social media stimulate creativity and civic awareness. By creating videos or posts, adolescents experience positive emotions such as inspiration, humour, and motivation, while developing their personal style and identity. They also become more aware of social issues such as diversity, racism, and gender equality (Cortesi et al., 2020).

In short, social media offer adolescents not only entertainment but also opportunities for learning, self-development, and connection.

Negative Effects

At the same time, intensive social media use can have significant downsides. Adolescents may be exposed to harmful content or unwanted interactions such as cyberbullying or harassment (Livingstone, Mascheroni & Staksrud, 2018). Such experiences can lead to anxiety, stress, and feelings of insecurity, directly affecting mental health.

Excessive and passive use is also linked to poorer concentration and reduced academic performance (Carlson, 2005; Chen & Yan, 2016). Late-night social media use disrupts sleep, leading to fatigue and lower cognitive functioning (Cain & Gradisar, 2010). Moreover, heavy users often spend less time on other developmental activities such as reading, exercising, or outdoor play (Kirschner & Karpinski, 2010).

Another common issue is the feeling of addiction. Many young people report difficulty stopping their use, even when they notice negative effects on their mood or productivity. Addictive design features (such as constant notifications, and algorithmically tailored feeds) reinforce this dependence. As a result, adolescents have fewer quiet moments for self-reflection, and despite being constantly connected, they often feel lonelier.

Social comparison also plays a crucial role in negative experiences. Especially girls feel pressure from idealised images on Instagram and TikTok, which can lead to jealousy, insecurity, and lower self-esteem.

As a 14-year-old girl explained in Van der Wal, Valkenburg & Beyens (2023):
“On social media you shouldn’t compare yourself to others, but that’s easier said than done.”

Overall, these findings show that social media poses significant risks to mental, social, and cognitive well-being.

Economic / Educational
(Finance, learning, productivity)

- Digital Skills
- Learning Motivation
- Easy access to knowledge and information
- Entrepreneurship opportunities

- Distraction & multitasking
- Shorter attention span
- Lower academical performances
- Irresponsible consuming (dark patterns)

Cultural
(society, norms, engagement)

- Awareness of societal issues
- Civic participation & activism
- 'online'community building
- Pressure to conform to trends and ideals
- Encourages unrealistic standards
- Spreading bias, stereotypes & misinformation

Social
(Networks, relationships, connection)

- Stronger friendships
- Social support
- sense of belonging
- Connection across distance
- Safe spaces for marginalized groups
- Social comparison & pressure
- Cyberbullying & exclusion
- Hate speech & social stress
- Loneliness & isolation

Personal
(Health, leisure, self-development)

- Self-knowledge & personal growth
- Emotional support & relaxation
- Inspiration & motivation
- Creativity & self-expression
- Feeling anxiety, stress and low self-esteem
- Risk of addiction and loss of self-control
- Lack of rest & self-reflection

(Fig. 5 Screen Hapiness vs. Screen Sadness)

2. Social Interaction Platforms

These platforms are primarily designed for direct communication between people.

- Direct interaction: Their main purpose is to exchange messages, photos, and videos with one or more known contacts, often in group chats.
- Less addictive: They contain fewer persuasive or addictive design features compared to social media platforms.
- Positive effects: Research indicates that these platforms generally have a positive effect on well-being, as they help maintain friendships and strengthen social connectedness.
- Examples: WhatsApp, Signal.

This distinction between passive and active use of social media is therefore a key factor in understanding the type of impact it can have.

Person-Dependent

Scientific research has linked the decline in mental well-being among adolescents to the rise of social media use, but there is no clear evidence of causality. The reverse may also be true: lower mental well-being can lead to more problematic use. Several meta-studies suggest that adolescents who are vulnerable offline, for instance due to stress, loneliness, or other factors affecting their mental health, are also more at risk online (Odgers & Jensen, 2020; Vidal et al., 2020).

Moreover, social and contextual factors influence whether social media use leads to positive or negative outcomes. Important variables include attitude and motivation, material access, digital skills, and patterns of use. These factors together determine whether digital engagement supports personal growth and connection, or contributes to stress and imbalance (UNICEF, 2024).

Overall, social media have both positive and negative effects on adolescents. The impact differs across platforms, depending on whether they promote passive or active use. Impact is further shaped by personal, social, and contextual factors. This shows that social media cannot be simply labelled as good or bad, but have a more complex role.

Personal reflection notes

- It seems that the issue may not be screen-time itself, but whether screen experiences are emotionally positive or negative. Then high screen use might be less problematic if online interactions were experienced as supportive rather than distressing.
- Online spaces appear to offer access to like-minded peers that are not always available offline. This raises the thought that some social needs may currently be met more easily online than in offline settings.
- Repeated exposure to idealised self-presentations may make failure feel abnormal. There seems to be little room, online or offline, for young people to learn that failing is a normal part of development.

Which factors influence this impact?

The impact of social media on adolescents can be both positive and negative, sometimes even at the same time. It is therefore not meaningful to label social media as simply good or bad. As Van der Wal et al. (2024, p. 8) state, social media “simultaneously act as both a source of pleasure and distress in adolescents’ daily lives.”

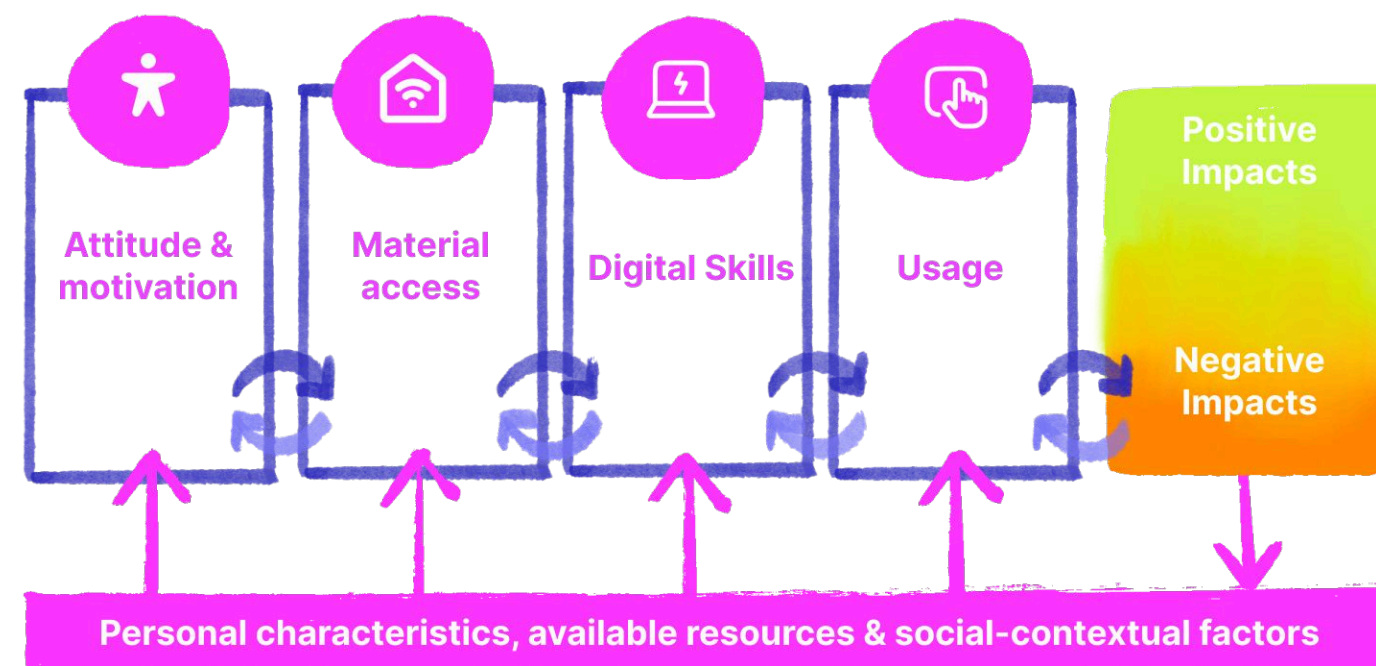
Platform-Dependent

The extent to which social media use has positive or negative consequences strongly depends on the characteristics of the specific platforms. The Healthy Screen Use Guideline (Koning, 2025) distinguishes between two main types of platforms:

1. Social Media Platforms

These platforms typically have a more public character.

- Public exposure: Users create profiles and share messages, photos, and videos with a broad network.
- Algorithmic content: Feeds often consist of short videos or posts that are automatically selected and displayed by algorithms.
- Addictive design features: These platforms contain many persuasive elements such as: endless scrolling, notifications, likes, and powerful algorithms.
- Risks: Because of these design features and the presence of harmful or idealised content, such platforms often have a negative impact on adolescents’ well-being.
- Examples: TikTok, YouTube, Instagram.



(Fig. 6 Contextual Factors and Their Influence on Impact)

1.4 The Approach

What are current and possible approaches to stimulate change?

It is about time

For children and adolescents, being “online” is no longer a separate activity, it is part of everyday life. UNICEF (2024) emphasises that the digital world is an integral part of young people’s living environment. Therefore, it is no longer sufficient to speak about screen time in isolation. What matters is how children move through their own mediated realities. the different “paths” they take within a personal media landscape (Van Deursen, 2024).

In public debate, the conversation about social media usage often reduces to limiting screen time. Yet, research shows that the effects of media are not uniform: outcomes depend on what children do, why, and in which context (Koning & Vossen, 2025). More important than duration is to learn what safe and meaningful behaviour looks like, and to be able to distinguish between activities that are constructive, creative, or risky. For instance, creating digital content can support self-expression and creativity.

The issue is not simply one of “used-up attention,” but rather a loss of control. Philosopher James Williams argues that the main danger of the information economy lies not in attention being exhausted, but in losing the ability to direct one’s own attention (Bruineberg, 2025). Helping adolescents regain agency over their attention is therefore central to healthy digital participation.

Research increasingly calls for a shift in focus: from the effects of “social media use” to individual patterns of use, context, and experience (Van der Wal, Valkenburg & Van Driel, 2024).

With these insights and the understanding that online and offline life are experienced as one, the key question is not how much time adolescents spend online, but how they spend their free time and what they consider meaningful.

Parents & peers

Adolescents do not change their behaviour simply because adults or authorities tell them to. According to Self-Determination Theory (Deci & Ryan, 2000), motivation arises when individuals experience autonomy, competence, and social connectedness.

When these psychological needs are supported, adolescents are more likely to internalise positive values and act on them.

Recent research on media influence shows that this principle also applies to how young people interpret and imitate online behaviour. Sadza et al. (2024) found that adolescents’ perceptions of risky online behaviour depend on how strongly they identify with on-screen characters. Parental mediation and peer mediation both matter, but in different ways. When parents engage in critical conversations about media, this can reduce identification with risky characters and lower perceptions of such behaviour as “normal.” Yet paradoxically, strong parental criticism may also increase the attractiveness of these behaviours.

In contrast, peer discussions, especially when friends themselves express disapproval, have a more direct impact on what adolescents perceive as socially acceptable. In other words: peers shape the norms.

Digital Rights

For most adolescents, their phone and online presence belong to their personal domain. Just like their clothing, friendships, and other forms of self-expression. In this domain, external control is rarely effective and often conflicts with their autonomy and rights.

As UNICEF (2024) notes, under the UN Convention on the Rights of the Child (General Comment No. 25, 2021), children have the right to meaningful digital access. Including the freedom to participate, express themselves, and benefit from online opportunities. Yet some governments, such as in India, Nepal, and the U.S. state of Montana, have banned platforms like TikTok. These measures risk violating rights and excluding the very group they aim to protect.

These examples call for a new approach: not one of restriction or authority, but of empowerment and participation. Change can happen when adolescents themselves take ownership. When they are given the autonomy and social space to explore what healthy, balanced digital life means to them and to inspire one another to live it.

Personal reflection notes

- Efforts to reduce screen time often focus on lowering use, while paying less attention to what young people are encouraged to do with that time instead.

- Meaningful change is more likely to emerge from young people themselves and their peer contexts, rather than through top-down approaches.
- Fostering autonomy and intentionality may be a key leverage point for design interventions targeting adolescents’ social media use.

1.5 Public Insights

What do visitors of Dutch Design Week think?

During Dutch Design Week, I participated in the installation “A Quarter of Your Life” by Scroll Scroll Scroll in collaboration with the City of Amsterdam.

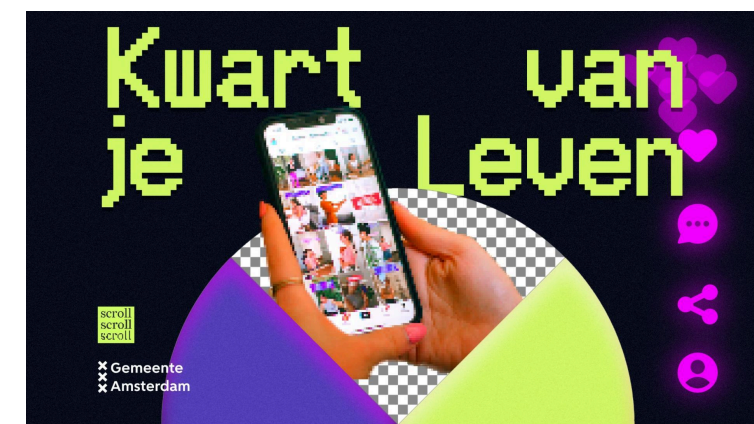
The installation explored the question:

“How can design help reclaim six and a half hours a day from addictive social media?”

Young people spend over a quarter of their day online, around 6.5 hours, and many feel this is too much. The installation presented their perspectives and co-designed ideas for more mindful and intentional digital habits.

I was present for two days, speaking with visitors of all ages about their experiences with social media and phone use. The conversations were diverse, and visitors could also leave cards sharing reflections, parenting tips, or ideas about alternative ways to spend their time.

Although this was not an official research activity within my project (and therefore not HREC-approved), these interactions offered valuable inspiration and a deeper understanding of the topic’s complexity.



(Fig. 7 Banner DDW Stand: *Kwart Van Je Leven*, source: LinkedIn page of Gemeente Amsterdam Innovatie)



(Fig. 8 Overview of answers of visitors of DDW about what they would rather do with their screen-time)

I would rather

To illustrate what visitors said they would rather do with their screen-time see Figure 8.

What is the problem?

Visitors recognised that excessive phone use affects all generations. Children often mentioned their parents' screen habits, while others described how personalised algorithms make it difficult to disconnect. Feelings of pressure to respond quickly and tension in friendships caused by phone-use highlighted the social and emotional dimensions of the issue.

How can we change this?

Suggestions included introducing specific no-screen moments rather than strict time limits, and giving users more control over what they see and for how long. Some reflected that strict monitoring in childhood led to secrecy, whereas greater freedom encouraged openness and balance. Another idea was to automatically switch off Wi-Fi at night to support healthier routines.

These insights illustrate how widely this topic and issue are experienced. The answers represent the views of a specific group of people who chose to engage with the installation, and should therefore be seen as illustrative and inspirational, offering starting points and considerations for future research rather than definitive findings.

Personal reflection notes

- The issue appears to be widely shared and is also recognised by young people themselves, who often express a preference for other activities when time is used more intentionally.
- This aligns with literature on social pressure and suggests that strict rules around social media use may be ineffective or even counterproductive.
- Children often mention their parents' screen use, suggesting that norms around screen behaviour may need to focus more on adults.

1.6 Expert View

What are experts' views on the current situation and needed change?



(Fig. 9 Logo Consortium Thuis en In de Kluis, source: website Radboud universiteit)



(Fig. 10 Image Attached by ConnectLab, source: attached.amsterdam)

Consortium Thuis & in de Kluis

During the research phase of this project, I participated in a consortium meeting of "Thuis & in de Kluis", a project led by Radboud University in collaboration with LAKS, Smartphonevrij Opgroeien, Ouders & Onderwijs, NJI, Trimbos Institute, and the VO-Raad. The project explores, together with adolescents (aged 12–18), parents, and schools, which phone-related measures, both at home and in school, can positively contribute to young people's wellbeing.

I took part in brainstorming sessions with these partners on how such measures might support healthier relationships with digital technology. The discussions showed that there is demand for solutions from all sides and a need for clarity on what actually works. A recurring theme was the gap between the perspectives of adolescents and those of parents, caregivers, and schools. Personally, I noticed that the conversation often framed social media mainly as a source of harm, with little attention to its positive aspects or social value.

ConnectLab

In addition, I spoke with Leonore Snoek from ConnectLab, part of the innovation team at the City of Amsterdam, about their experiences with co-creation and youth engagement on this topic. She noted that young people are often aware that certain phone habits are considered "bad" and may therefore hide their behaviour or give socially desirable answers. There is a clear need for tangible, hands-on approaches, as the issue is large, complex, and rapidly changing. Developing and testing quick interventions can be valuable, and young people tend to respond positively when something concrete and interactive is involved.

These views emphasised the need for clear, practical approaches and showed that creating tangible, testable interventions can help engage young people more effectively.

Personal reflection notes

- There is a clear need to better understand what truly works and what the actual impact is, as current findings and opinions are often mixed or unclear.
- Quickly building and testing ideas, for example by storytelling or prototypes could help generate more concrete insights.
- It is important to keep in mind (especially during the interviews) that children may give socially desirable answers rather than openly sharing their real thoughts or feelings.

1.7 Conclusions

The preliminary research shows that for today's adolescents, online and offline life are inseparable. Social media are not merely tools, but an integral part of how they connect, learn, and express who they are.

This life phase offers significant opportunities for growth and creativity, while simultaneously increasing vulnerability to pressure, comparison, and patterns of overuse.

The findings underline that social media are neither inherently good nor bad. Their impact depends on how they are used, how platforms are designed, and the broader individual and social context they are in.

This complexity calls for a shift in perspective: away from framing social media use as the problem in itself, and toward understanding it as part of adolescents' everyday lives. The insights from this preliminary research have shaped the direction of this project. Rather than focusing primarily on how much time adolescents spend online, I choose to look at how they spend their time overall and what they find valuable within it.

From this perspective, leisure time becomes a more meaningful entry point than isolated social media use. Approaching the topic through free time allows for a more open and non-judgmental exploration of what adolescents seek, enjoy, and value, both online and offline. This approach also resonates with my personal interest as a designer in addressing societal themes in a constructive way and using design to stimulate positive change.

Supporting change in this context therefore calls for empowerment rather than restriction: creating space for adolescents to reflect, share experiences, and take ownership of what a healthy digital life means to them.

These insights form the foundation for the Generative Research (chapter 2), which will further explore adolescents' leisure time: what brings them meaning, how social media fit into their daily lives, and how are online and offline activities combined.

2 Generative Research

Building on the preliminary research, this phase focuses on adolescents' free time. Rather than viewing social media as the problem, it is approached as one of many ways leisure time is spent. The goal is to understand what they value in these moments: what brings them joy, balance, and meaning. A insight on how online and offline activities interact in their daily lives.

Two generative activities were developed to explore these perspectives:

1. In-class session - Collage and letter to their future self

A creative session where adolescents reflect on how they spend their time now, how it used to be, and how they would like it to be in the future. (inspired by the Path of Expression)

2. Individual diary study

A small booklet inspired by the Cultural Probes method (Convivial Toolbox) in which participants record daily activities and feelings. Screen time data are also tracked to provide a realistic view of their digital habits and prepare for follow-up interviews.

Together, these methods invite participants to express their thoughts, emotions, and dreams about their free time.

The collected data will be analysed thematically to uncover patterns, insights, and opportunities that will form the foundation for designing in the next phase.

2.1 Method & theory

Process and reasoning of the generative research sessions

This generative research explores how adolescents spend and experience their free time. The aim is to understand what they do, how these activities make them feel, and what they hope or wish for in moments of free time.

Rather than focusing only on social media use, the research looks broadly at free-time activities, because, as the literature shows, online and offline life are increasingly intertwined for this age group.

The study therefore examines:

- How adolescents fill their free time (both online and offline)
- Which activities feel enjoyable, meaningful, energising
- Which activities feel tiring, unfulfilling, or obligatory
- Which factors shape these experiences (such as autonomy, expectations, routines, school demands, play, or emotional needs)

Although peer influence appears frequently in the literature as an important factor in adolescents' digital and offline lives, it is not explicitly included in this first research stage. This allows the focus to remain on their own experiences of free time and to see whether social factors naturally emerge as important.

The outcomes of this phase will help refine the scope for the design intervention (Phase 2) and highlight opportunity areas that align with adolescents' lived experiences and needs.

Sessions: Methods & Purpose

Two complementary generative research activities were conducted. Each method focuses on a different layer of experience and therefore provides different types of insights:

1) Broad perspectives – In-class session

A creative session at a high school, including collage-making, drawing, writing a letter, and short group discussions.

Inspired by Path of Expression and co-creation with youth.

This session gives a broad view of how an entire class thinks about, remembers, and wishes for their free time.

2) Real-life behavior – Diary study

A small booklet inspired by Cultural Probes, in which participants recorded their daily activities, feelings, and tracked screen-time over a week. Followed by individual interviews.

This method provides in-depth insight into what adolescents actually do, including things they may not recall or mention in group settings.

Together, these two activities combine the breadth of the classroom session with the depth and accuracy of the diary study. This mixed approach produces a more complete picture of how adolescents spend and experience their free time, including aspects that might otherwise remain overlooked.

Finding participants

The generative research involved:

- in-class session: 22 adolescents (12–14 years) from one 2nd-year atheneum class in Haarlem.
- individual diary study: 2 adolescents: a 14-year-old girl and an 11-year-old boy. Utrecht

The sample is smaller and less diverse than originally planned. The class represents a single school context, and although the diary participants span the ends of the age range, they come from similar backgrounds. This limits the breadth of perspectives.

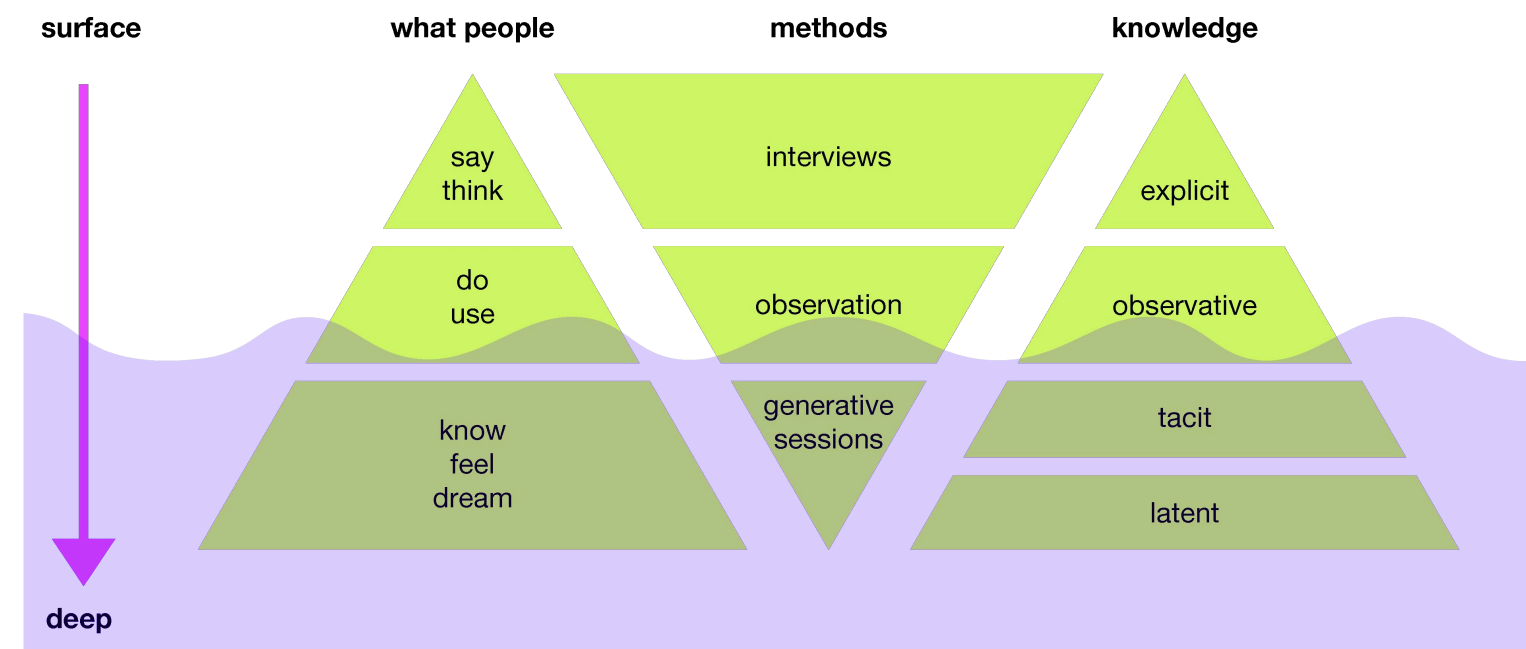
However, based on advice from supervisors and experienced co-designers, focusing on a smaller group was recommended: and ultimately a good choice: even this group already generated a substantial amount of rich data to analyze.

Tacit & Latent Knowledge

To understand the target group's needs, values, and experiences, it is important to access knowledge that lies beneath the surface of what they can easily express. Sanders (2002) distinguishes two relevant types:

- Tacit knowledge: things participants know but cannot easily put into words.
- Latent knowledge: thoughts, feelings, or experiences that participants have not yet articulated or are not fully aware of, but that can emerge through reflective activities.

For adolescents (ages 11–14), this is especially relevant: they may not yet have the language, awareness, or distance to reflect on the impact of their behaviour or to articulate future wishes. To still reach these important insights, methods from Convivial Toolbox were used to help surface both tacit and latent knowledge.

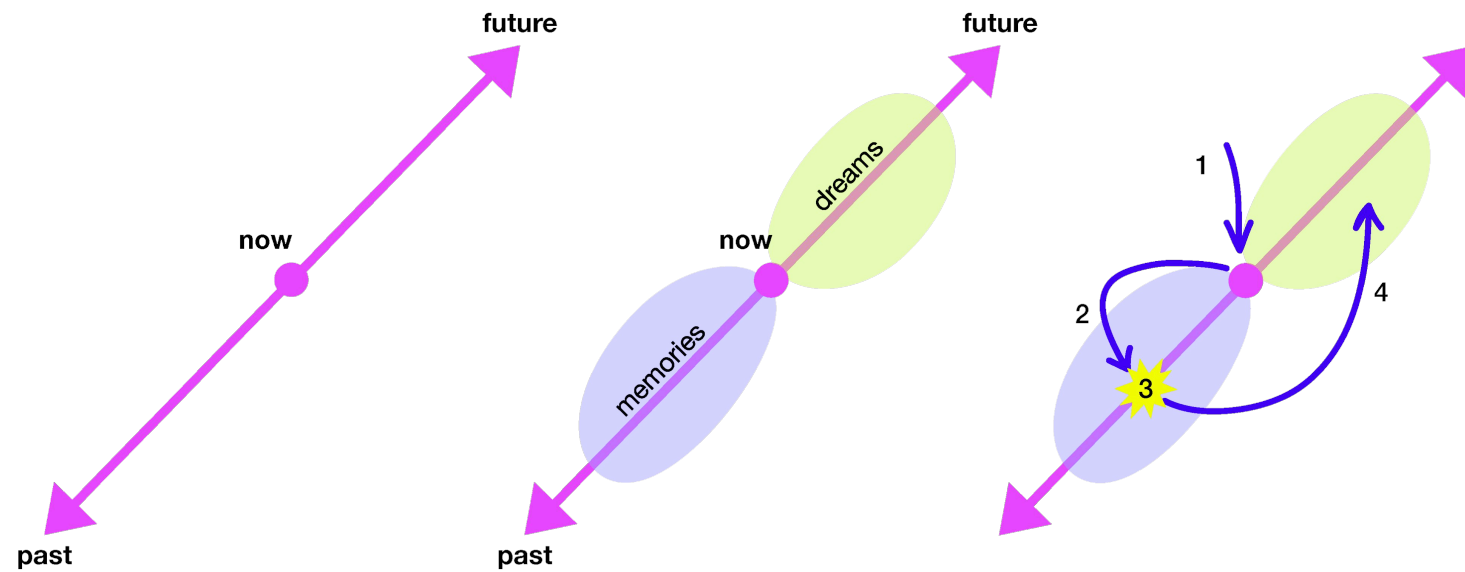


(Fig. 11 The Layers of Knowledge)

Path of Expression

The Path of Expression framework (Convivial Toolbox) states that people can meaningfully think about the future of an experience only after reflecting on the past and present of that experience.

This guided the structure of the in-class session: students explored how they used to spend free time, how they spend it now, and only then moved towards imagining how they would like it to be.



(Fig. 12 Path of Expression)

Cultural Probes

The diary booklet and camera tasks functioned as cultural probes. These allow participants to:

- document real activities and feelings
- observe themselves in context
- make tacit knowledge visible through photos, notes, and small reflections

Cultural probes also act as sensitising material within context-mapping: they prepare participants to reflect more deeply during follow-up interviews.



Making as a Tool

Generative 'make' methods (e.g., collages, visual emotion stickers, and writing a letter to their future self) were used to give participants hands-on ways to express meaning.

By making instead of only talking, participants can express experiences, feelings, and associations that are difficult to verbalise. This helps access both tacit and latent layers of knowledge.



2.2 Generative Research

Session 1

Past, present, and future of free time

Duration: 40 minutes (mentor class)
 Target group: second-year secondary school students
 Facilitation: 3 facilitators (1 per 2 tables)
 Participants: ± 20 students (groups of 3–4)

Purpose of the Session

This context-mapping session invited students to reflect on their free time across three timeframes: past, present, and future. Through playful, visual, and generative activities, the session encouraged them to explore their experiences, emotions, and wishes regarding free time.

Session Setup

Each table worked together to create two collages: one representing their free time in the past (around ages 8-10) and one representing their free time now. A wide range of words, images, stickers, and drawing materials was provided to support expression.

In addition, each student created a personal future card: a short letter or message to their future self describing how they would like their free time to look.

Facilitators guided the process by asking questions, noting observations, and encouraging participation without steering the content.

Main questions

- The session focusses on the questions:
- how do young people experience their free time?
 - what energises or drains them?
 - what do they value or miss?
 - (How do digital habits play a role in this?)

This avoids defining social media as “the problem” in advance. It may also reveal whether certain digital behaviours are symptoms of deeper needs, coping strategies, or meaningful parts of their free time. At the same time, it opens space to identify potential alternatives or additions to current activities.

Expected Outputs

- 6 group collages: free time in the past
- 6 group collages: free time now
- ± 20 personal future cards (letters/tips to their future selves)
- Quotes, photos, and facilitator observations
- Combined insights into how young people view and experience their free time

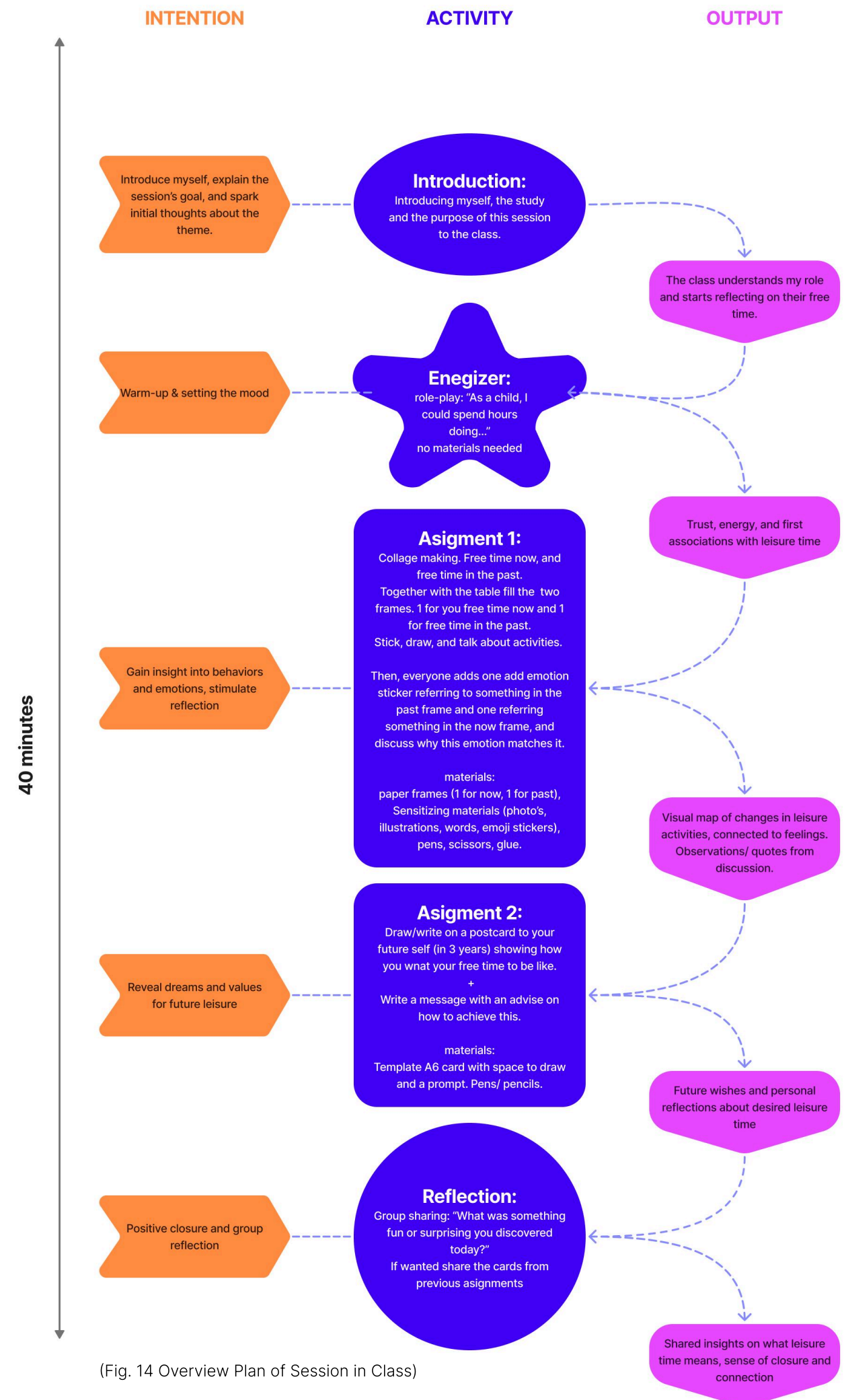
Materials Provided

The sensitising materials (photos, words, icons, emoji stickers) were therefore intentionally balanced between online and offline themes, keeping the digital dimension present without dominating the discussion.



(Fig. 13 Set-up Classroom and Template Letter)

Contextmap sessionplan - Free time



(Fig. 14 Overview Plan of Session in Class)

2.3 Generative Research

Session 2

Individual diary study on free time

Duration: approx. 1 week (30 min introduction + 7 days diary + 30–60 min interview)
 Target group: adolescents (ages 11–14)
 Facilitation: 1 researcher (introduction & interviews)
 Participants: 2 individual participants

Purpose of the Study

This diary study aims to gain a realistic and layered understanding of how adolescents actually spend their free time (both online and offline) and how they feel during these moments. Through self-documentation and follow-up interviews, participants reflect on their own routines, phone use, emotions, and small everyday choices.

Study Setup

Each participant received a diary booklet containing prompts for several days, asking them to record activities, moments of rest, emotions, and screen-time habits. They were encouraged to use photos, taken with the Polaroid camera to capture meaningful moments or environments. After the diary period, each participant took part in a 30–60 minute interview, in which the diary entries served as sensitising material. These interviews allowed them to elaborate on what they wrote, clarify feelings, and discuss patterns they noticed.

I (as the researcher) support the process by explaining the toolkit, answering questions, and guiding the interviews while allowing participants' own interpretations and experiences to take the lead.

Main Questions

- The study explores:
- How do young adolescents actually spend their free time?
 - What activities feel enjoyable, meaningful, or energising?
 - Which moments feel tiring, stressful, or unfulfilling?
 - How do digital habits fit into these daily routines?

By focusing on lived experience rather than assumptions, the study avoids framing phone use as "the problem." Instead, it helps reveal whether digital behaviours express underlying needs, routines, coping strategies, or simply preferred ways of spending time.

Materials Provided

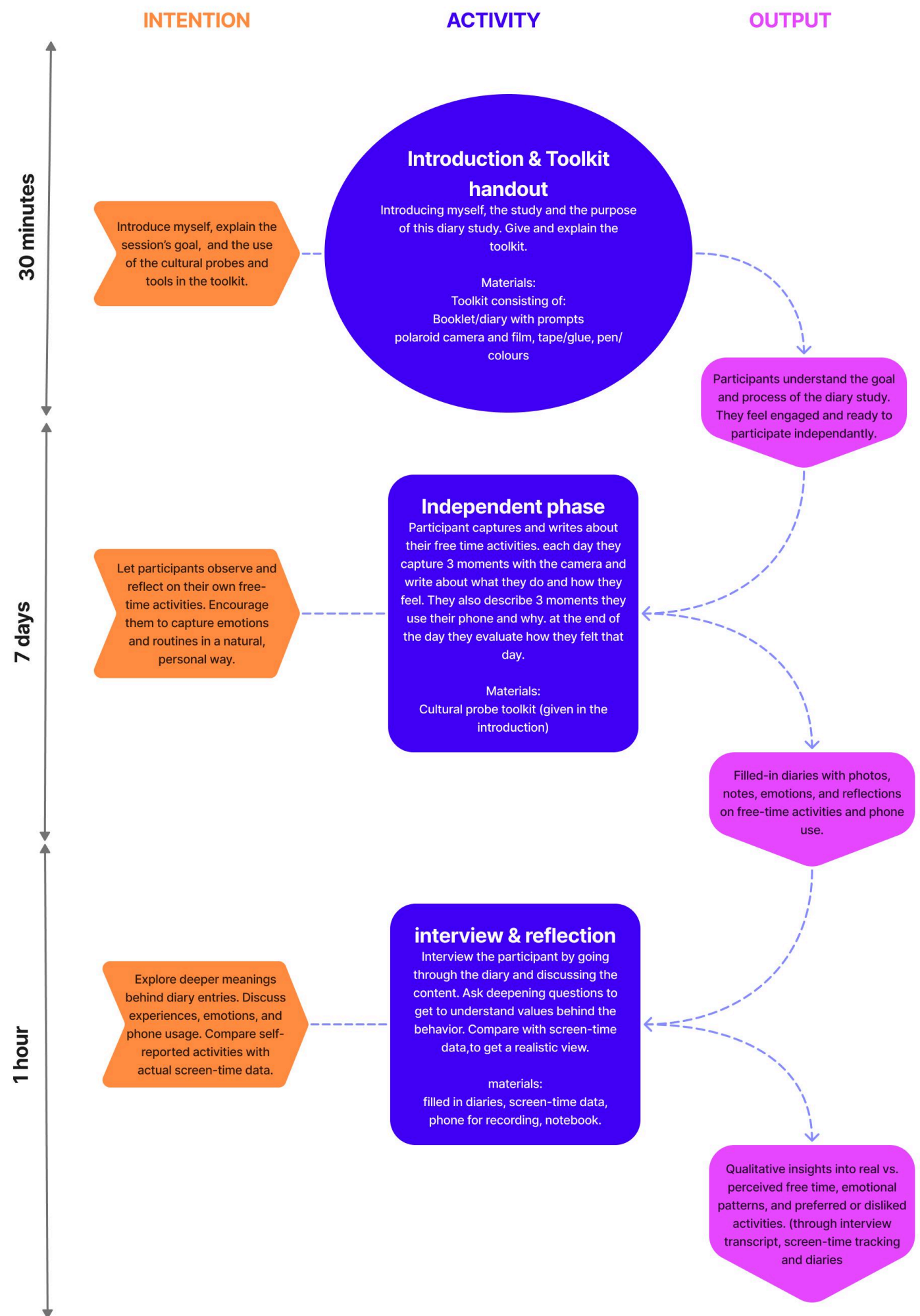
- Diary booklet with daily prompts
- Polaroid camera or smartphone
- Pens, markers, glue, tape
- Personal phone (for screen-time tracking)

Expected Outputs

- 2 Individual diaries with photos, notes, and emotional reflections
- 2 Interview transcripts
- 2 Overview of each participant's tracked screen-time



(Fig. 15 Cultural Probe Materials Diary Study)



(Fig. 16 Overview Plan of session Diary Study)

2.4 Data Analysis

Organising data into codes

The data from both generative sessions and the literature study were analysed using a qualitative, iterative approach. The dataset contained a mix of visual material, written reflections, scientific findings and conversational data. The method used to be able to combine and compare all of them in the analysis is thematic coding. Making sure all the data is still traceable to its origin and making it more easy to overview.

Familiarisation

All materials were reviewed multiple times to gain an initial understanding of recurring patterns in how adolescents spend and experience their free time.

This included:

- 6 Collages of free time in the past
- 6 Collages of free time now
- ±20 "letters to future self"
- Notes, observations, and short quotes from group discussions
- 2 personal diaries with photos and emotional reflections
- 2 in-depth interview transcripts
- Screen-time overviews for each interviewee

Also the literature was included in the analysis.

- Insights from literature study

During this stage, first impressions were noted, focusing on emotions, motivations, routines, tensions, and emerging values.

Thematic Coding

The materials were analysed using open coding. Short codes were used to capture meaningful elements related to experiences, emotions, and wishes concerning free time and social media use. All materials were organised into code cards. Each card consisted of:

- A quote: a participant's direct words, a direct statement from the literature review, or direct data derived from visual materials (e.g. collages).
- A descriptive title: a brief summary indicating the main focus of the quote.

All cards were colour-coded to indicate the data source from which they originated. (for all the codes see Appendix C)

Strong social sensitivity

"During this period, sensitivity to social feedback, sensation-seeking, and the desire for novelty and risk-taking all increase."
(Dahl et al., 2024)

FoMo stimulating problematic behaviour

FoMO and peer pressure were strong predictors of more intense and problematic social media use among adolescents. (de Bruijn, 2021)...

motivations for social media usage

De belangrijkste redenen voor gebruik zijn contacten onderhouden, entertainment, expressie en informatie. (Van der Wal et al., 2024; Livingstone et al., 2011; Robb, 2017)

schermtijd instagram confronterend

Ja, ik weet van mezelf wel dat ik veel op Instagram zit. Maar als ik dan zie drie kwartier, dan denk ik wel van oeh

face-timen voordat ouders gaan slapen

altijd, als je naar bed moet, dan ga ik altijd facetimen. Dat is eigenlijk vooral in de avond als mijn ouders alleen gaan slapen.

Toneel spelen

"Ik wil toneelspele om mijn droom te bereiken" (brief aan toekomstige zelf 9)

chaos & speelsheid

op basis van beelden en woorden op de collages van vroeger (As 1. collages):
Chaos (benoemd als leuke chaos)
Zonder plan
Avontuur
Winnen

minder op scherm

"minder op een scherm zitten" (brief aan toekomstige zelf 10, 15, 14,)

Meer plannen

"Beter plannen. Weekplanning maken" (brief aan toekomstige zelf 10 & 1)

Druk & Overweldiging

Boodschap: vroeger w chaos luchtig en speel

Op basis van beelden en woorden op collage van nu (As 1. collages):
Drukte
Stress
Vermoeiend
Denken (overmatig)
Tijd verliezen
Boodschap: nu overheerst mentale belasting en overweldiging.

(Fig. 17 Examples of Coding of Different Data)

Clustering process

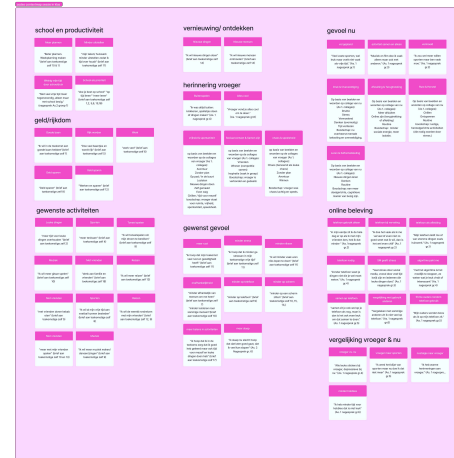
All codes were then grouped into coherent clusters. With the research questions centred around free time and social media use, two rounds of clustering were conducted.

(See all codes in appendix C and the clustering in appendix D)

Codes diary studies



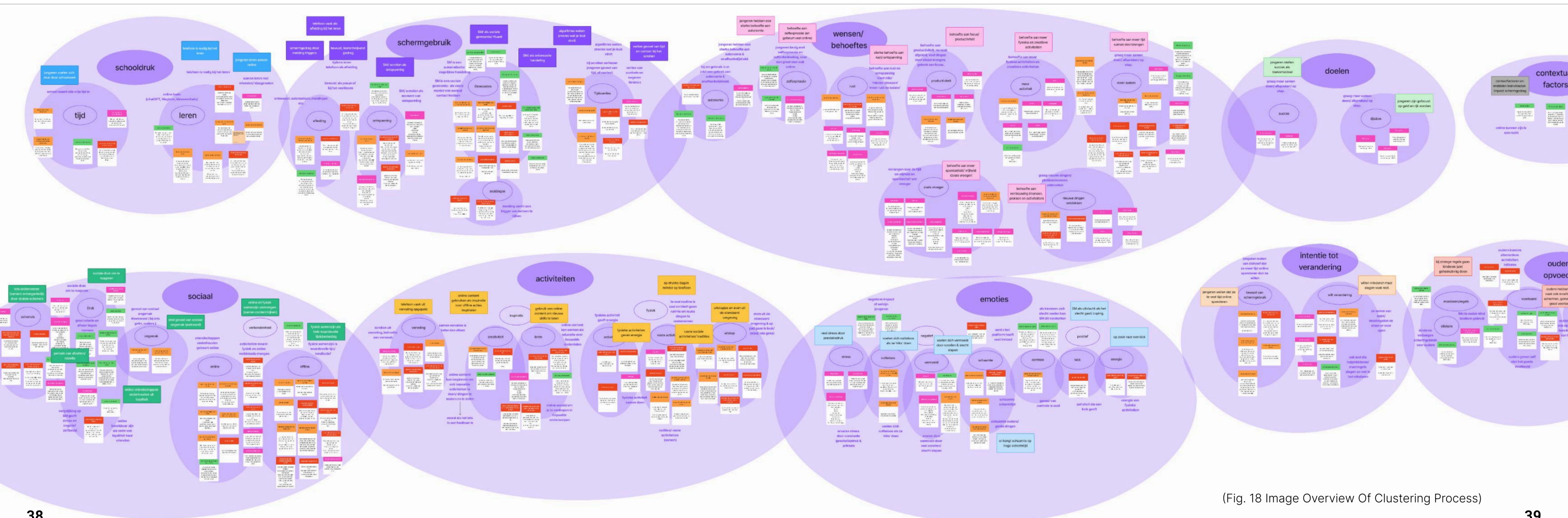
Codes session with class



Codes literature



187 codes
↓
to 47 clusters
↓
to 20 clusters



(Fig. 18 Image Overview Of Clustering Process)

Clusters

After the extensive clustering process (Appendix D), twenty distinct clusters were found.

It was important that each cluster provided a clear sense of direction or meaning to the underlying phenomenon.

All clusters are presented here with a title, a short description, and an accompanying drawing.

Free time disappears because of tasks.
The feeling that school, homework, and obligations take up almost all time.



The future with high expectations
The future is seen as something that requires hard work; high expectations are set.



The desire for active, meaningful free time
Time to exercise, create, discover, and be together.



Drive for connectedness
The feeling of togetherness is essential, both offline and online.



Need for rest, balance, and recovery
A desire for less pressure, more space, and relaxation.



Nostalgic for the freedom and playfulness of the past
'The past' represents adventure, lightness, spontaneity, and being outdoors.



Overwhelmed by the present
The present feels mentally heavy, chaotic, exhausting.



Boredom feels useless
Not playful boredom, but filling the emptiness with scrolling.



The phone as an escape
Digital numbing against stress, boredom, and obligations.



The phone as a necessity
Indispensable for school, learning, information, navigation, and communication.



Stuck in time loss
Scrolling happens automatically; time slips away.



Always being 'on'
Being constantly reachable is the social norm.



Parents as Paradoxical Role Models
Contradictory rules are set that parents or caregivers do not follow themselves.



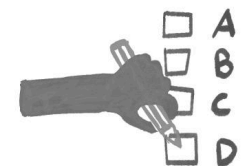
Enjoying going out
Getting out of the usual environment and doing something gives energy.



From inspiration to action
Content that encourages making, learning, and doing.



Making your own choices
Young people want to set their own boundaries, experience autonomy, and regain focus.



Physical movement gives energy
The body benefits from physical activity.



There's an app for everything
Apps shape routines and ways of communicating.



Rules create resistance or secrecy
Regulation often works against transparency and creates a negative judgment.



Vulnerability behind the screen
Stress, risks, and social comparison.



2.5 Finding

Relations

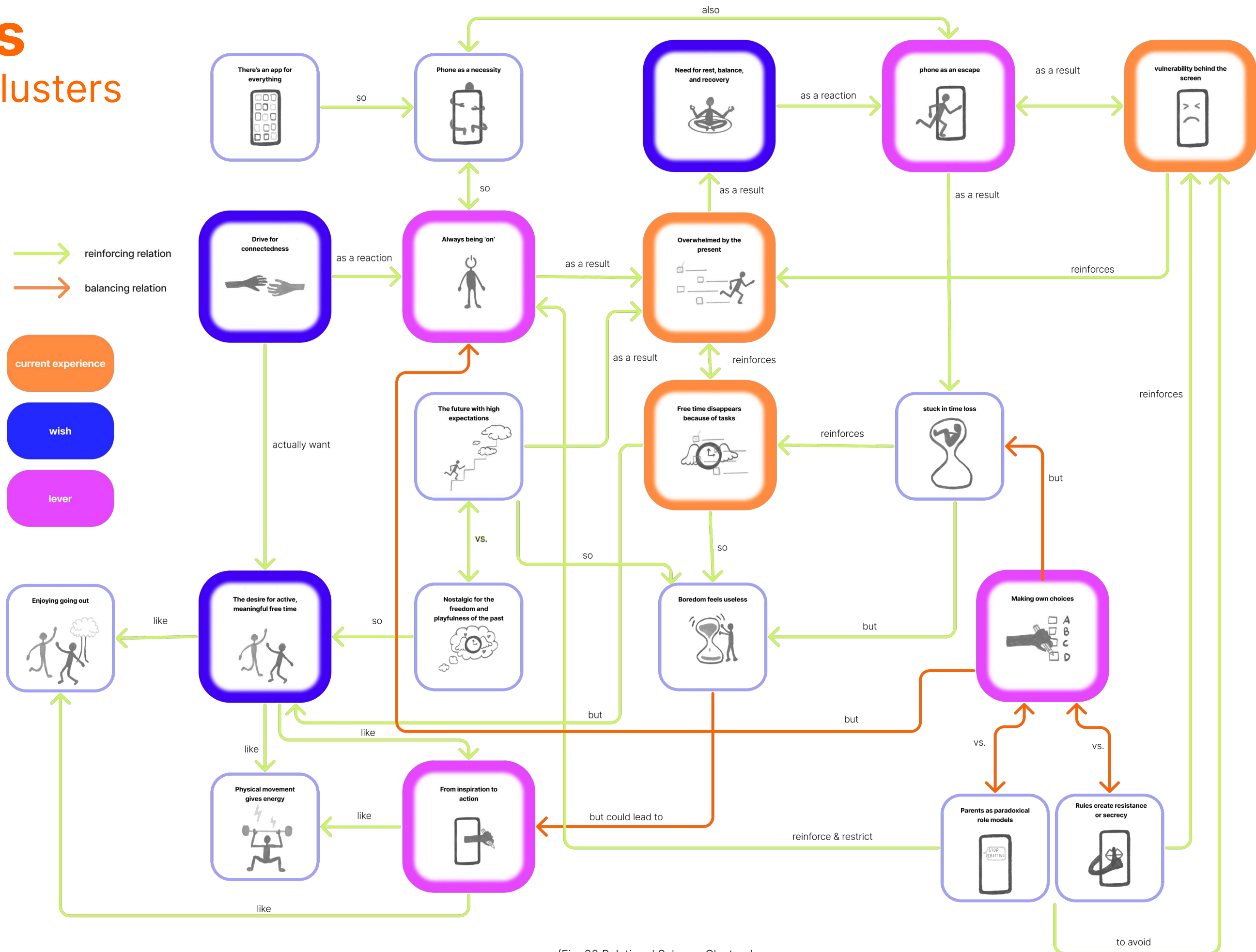
How do the clusters interact?

This scheme was developed to identify meaningful themes for design directions, such as tensions, contradictions, and complementary clusters. It is inspired by a causal loop diagram but is used more loosely, since not all relationships form closed loops.

Causal loop diagrams are often used to visualise complexity, understand system dynamics, and identify points where small interventions can create significant change (Lannon & Lannon, 2016).

In this project, the approach supports sense-making and design exploration. Using elements of the causal loop notation helps clarify connections between clusters and reveal potential leverage points.

Green arrows show reinforcing relationships, where growth in one cluster strengthens another. Orange arrows show balancing relationships, where an increase in one cluster corresponds with a decrease in another. Orange clusters represent adolescents' dominant current experiences. Blue clusters reflect their main wishes and motivations. Pink clusters indicate key levers: clusters with the greatest potential to shift experiences or fulfil wishes. Each lever connects to experiences and/or wishes and has at least four links to other clusters.

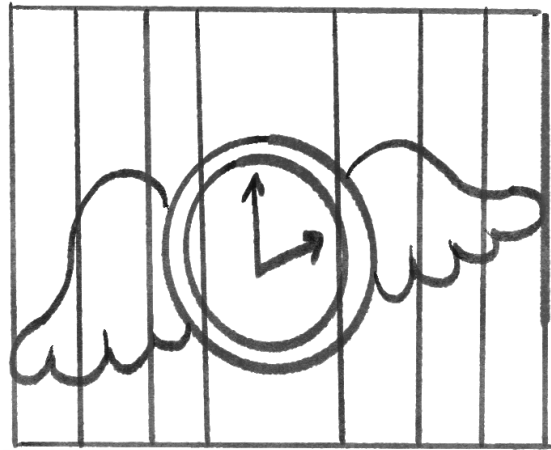


(Fig. 20 Relational Scheme Clusters)

2.6 Themes

Explaining themes arising from the cluster-relations

The themes all came from interesting relations or tensions found through the relational scheme. For each theme's origin in this relational scheme see appendix E



Free time does not feel free.

Adolescents often feel they do not truly have free time because their days are dominated by school-related tasks and the ongoing pressure. These tasks seem to take up the entire day, partly because digital distractions such as social media make it difficult to fully focus, causing work to stretch out and feel endless.

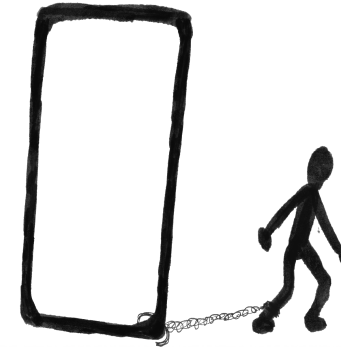
As a result, time that could be free feels mentally occupied. Adolescents miss the spontaneity of earlier childhood, when free time meant playing, being active, and socializing freely. While they still want meaningful free time, it is hard to act on this desire because responsibilities appear to fill all available time, leaving little room for anything else.



Always connected, but less together.

Adolescents have a strong desire for connection with their friends, both online and offline. This has created a norm of constant online availability, where quick replies and maintaining things like Snapchat-streaks are expected.

While this keeps them continuously connected, it can feel pressured and shallow. What they truly miss is qualitytime together, such as meeting up, talking, playing, and sharing moments that feel more meaningful and real.



Need for autonomy, but apps steer the behaviour.

Adolescents have a strong need for autonomy. They want to make their own choices, set boundaries, and feel in control of their time.

However, their free-time behaviour is often steered by social media platforms designed to capture attention and encourage endless scrolling, leading to a loss of time and control.

In addition, the social norm of always being online and available influences how they act and respond, further limiting their sense of autonomy.

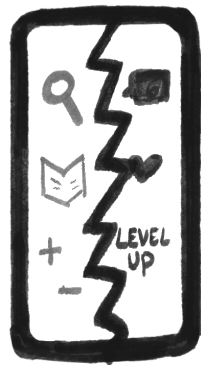


Digital relaxation does not relax.

When adolescents feel overwhelmed or overstimulated, they often turn to their phones and social media in search of rest and escape.

While scrolling can feel calming in the moment, it often leaves them feeling worse due to social comparison, negative content, or spending more time than intended.

Instead of restoring energy, this form of digital relaxation can feel empty and draining. As a result, they may feel even more overwhelmed and seek their phones again for relief, creating a cycle where digital relaxation fails to truly relax.



The necessary tools are also the distraction.

Adolescents feel that their phone is essential in daily life. Many tasks rely on it: schoolwork, schedules, class chats, family communication, navigation, and taking photos all happen through apps and digital functions. Because of this, being without a phone feels unrealistic.

At the same time, the same device is a major source of distraction. Entertainment apps like social media constantly compete for attention, often pulling them away through notifications, curiosity or just habits.

As a result, the tool they need to function also makes it harder to focus and be present.

Online inspiration does not always lead to offline action.

Adolescents are often exposed to inspiring content on social media that encourages creativity, learning, or trying new activities.

While this content can spark motivation and ideas, it rarely turns into action. Instead of doing something themselves, they often remain stuck in scrolling.

Boredom is quickly filled with digital content and comes to feel useless, leaving little space for it to turn into curiosity, initiative, or real-world activity.



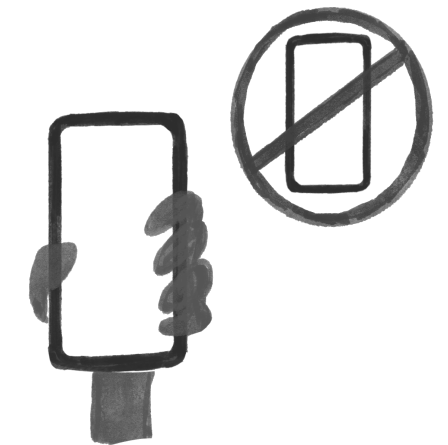
Peers shape the norms that they suffer under themselves.

Adolescents feel a strong need for connectedness and belonging, making peer influence especially powerful at this age.

Being constantly available online has become a shared social norm, reinforced by the fact that everyone owns and relies on a phone for daily life.

To feel included and part of the group, adolescents comply with these expectations and help maintain them for one another. At the same time, this constant availability creates pressure and can feel overwhelming.

As a result, peers collectively sustain norms that they also experience as stressful and limiting.



Rules provoke resistance.

To limit the negative effects of social media use, many adolescents are given rules about their online behaviour, often by parents or schools.

However, these rules can feel contradictory when adults use social media themselves or expect adolescents to stay available online. This perceived inconsistency makes the rules feel unfair or hypocritical. Strict control can also reduce openness, creating fear of judgment and leading to secrecy rather than healthy conversations.

Because adolescents strongly value autonomy and the ability to set their own boundaries, externally imposed rules often provoke resistance instead of encouraging responsible use.

Reflection

This chapter presented the full generative research process and the analysis of its data, resulting in eight main themes.

The process was extensive due to the broad nature of the topic and the qualitative character of the data, which included drawings, collages, interviews, and literature. To create structure and overview, the data was coded (Appendix C) and clustered multiple times, as the volume of data was large. The relational scheme in 2.5 provides an overview of these insights and can be referred to throughout the design project to indicate which part of the context is being explored or addressed.

It is important to note that this overview is simplified and schematic. The broad context is complex and too wide to be fully captured within this research. It does not present a complete or definitive picture. However, the generative methods, clusters, relational scheme, and themes provide a clear view of how the target group experiences this context.

These clusters and scheme highlight key patterns and therefore offer a strong and relevant basis for developing design directions.

2.7 Conclusions

The data from the preliminary research, the generative session in class and diary studies has been analysed through multiple clustering sessions.

The found clusters were put together into a relational scheme to identify how they interact and where levers are. With these insights 8 themes were formed:

- Free time does not feel free
- Digital relaxation does not relax
- Always connected but less together
- Need for autonomy but apps steer behaviour
- The necessary tool are also the distraction
- Online inspiration does not always lead to offline action
- Peers shape the norms that they suffer under themselves
- Rules provoke resistance

These themes are used as a practical starting point for defining and developing design directions.

3

Design Directions

Based on the themes identified in the previous chapter, design directions were formulated by examining meaningful tensions, contradictions, and gaps between or within the themes. These elements serve as fruitful starting points for design, as they reveal opportunities for intervention.

In addition, the levers identified within the relational scheme were taken into account. These levers indicate points where change can have a significant impact on the system as a whole and, consequently, on the behaviour. Each design direction therefore includes at least one lever.

The design directions are explained in this chapter. Each direction is accompanied by explanatory text, illustrating the themes from which it derived and clarifying where it intervenes within the relational scheme.

To reconnect the directions to the underlying insights, relevant quotes from the collected data are included.

The design directions are:

- From Digital Distraction to Real Relaxation
- From Steered Behaviour to Self-Direction
- From Inspiration to Action
- Shaping The New Norm

These design directions form the starting point for brainstorming, ideation, and concept development in the next phase of the project.

3.1 Design Directions

From Digital Distraction to Real Relaxation



Context

Adolescents reach for their phones to unwind, but the constant flow of content keeps their minds alert instead of letting them rest. Scrolling feels effortless, yet it fills free time with noise, speed and comparison. What should be restorative becomes draining, leaving them overstimulated and under-rested.

Design opportunity

Design experiences that help adolescents move out of passive distraction loops and into genuine mental recovery, so free time can feel recharging when they need it.

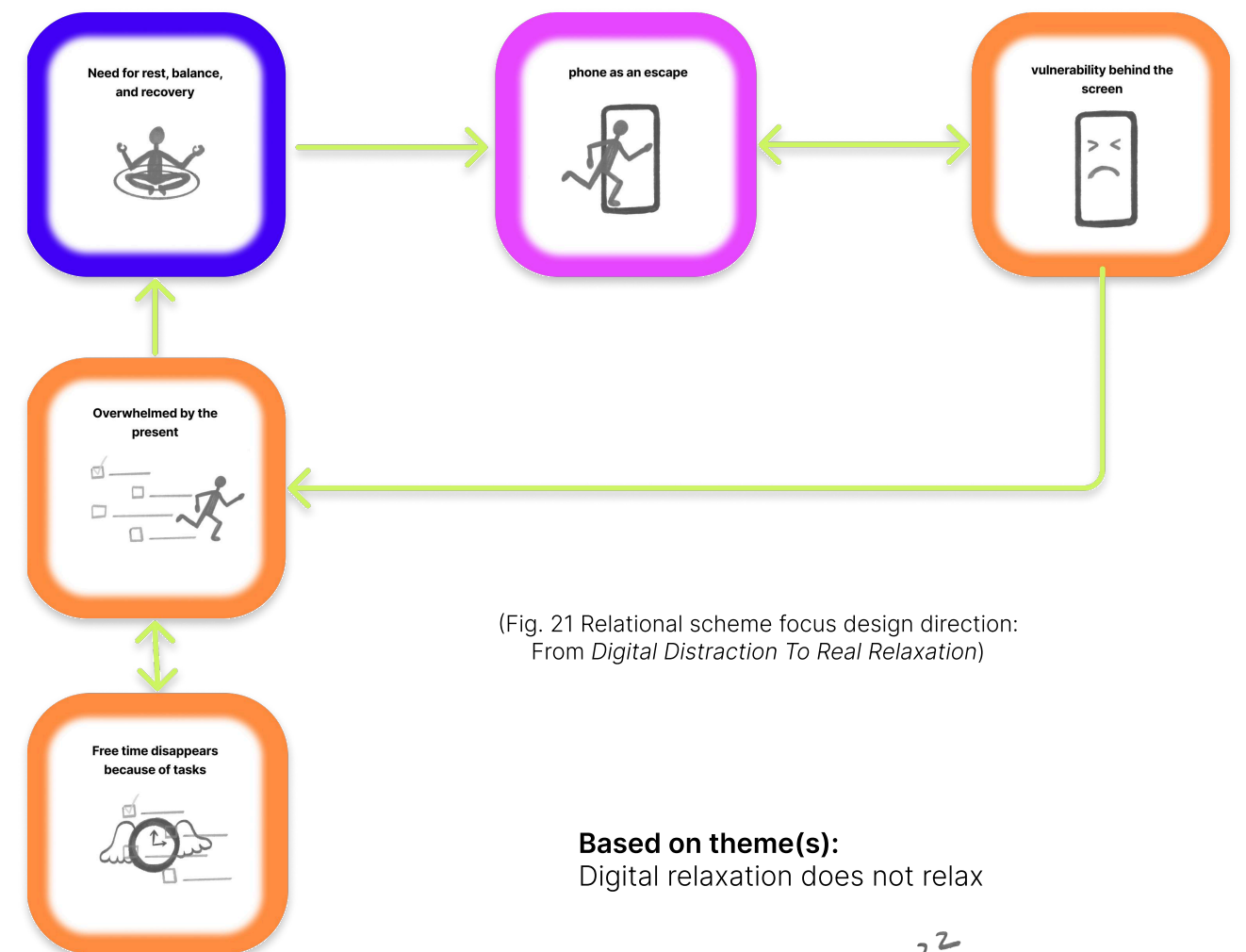
Supporting quotes:

Collages NOW: Busyness, Stress, Exhausting, Losing time, Shutting off. (As.1 collages – present)

Late-night social media use disrupts sleep, leading to fatigue and lower cognitive functioning (Cain & Gradisar, 2010)

*“After scrolling for a long time, I just feel tired and kind of useless ... It doesn’t give me any energy.”
(Diary study - Interview 1)*

Relational scheme focus:



(Fig. 21 Relational scheme focus design direction: From Digital Distraction To Real Relaxation)

Based on theme(s):

Digital relaxation does not relax



From Steered Behaviour to Self-Direction



Context

Adolescents want to make their own decisions, but apps and algorithms increasingly set their rhythm, capture their attention and steer their choices. External screen-time rules often provoke resistance rather than supporting autonomy.

Design opportunity

Leverage adolescents need for autonomy to help them take ownership of their digital behaviour. Design solutions that reveal influence or return control and support self-chosen, intentional online habits.

Supporting quotes:

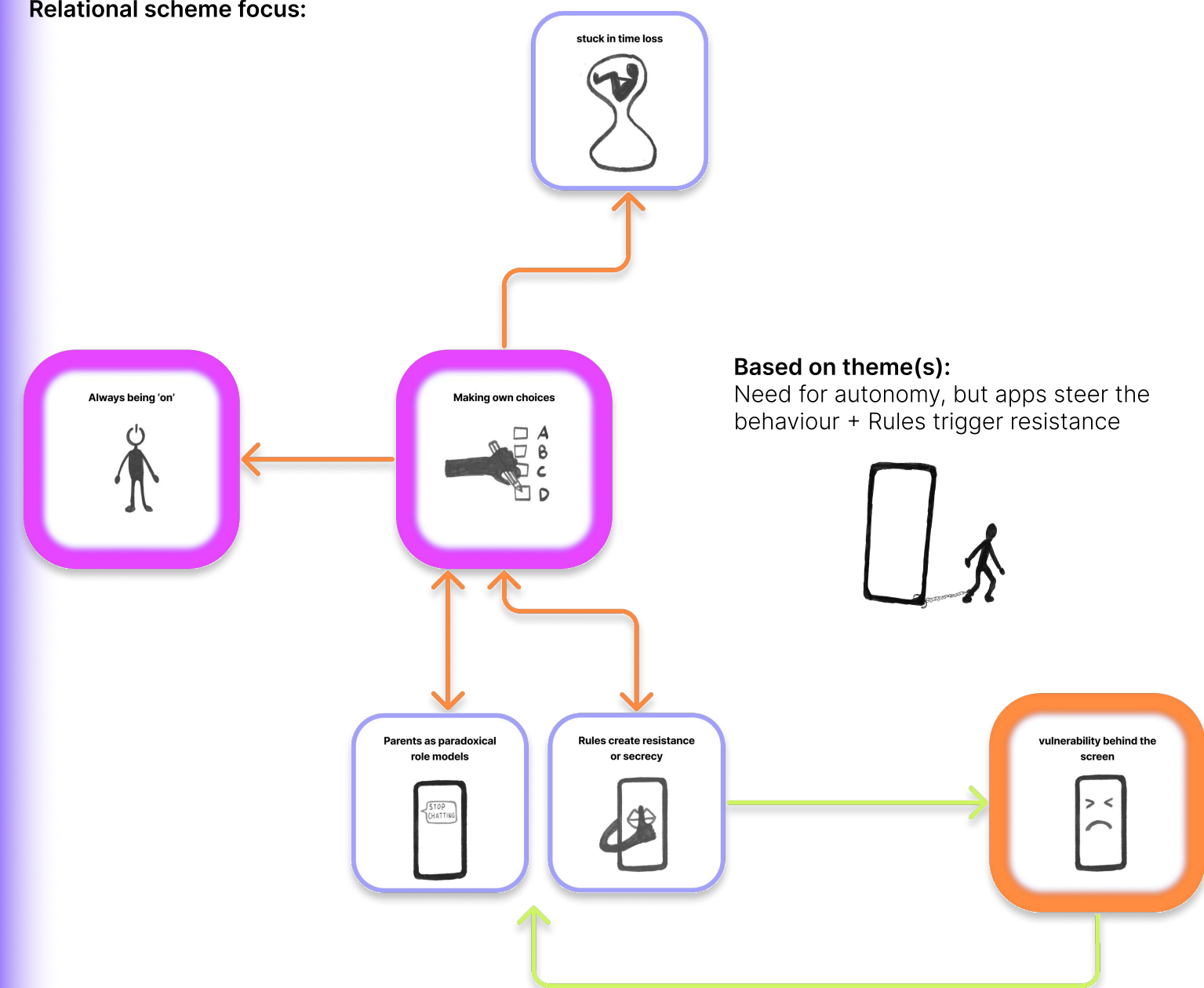
“The algorithm knows what you like, so it’s hard to stop.”
(As.1 follow-up conversation group 4)

According to Self-Determination Theory, motivation arises when individuals experience autonomy, competence, and social connectedness. (Deci & Ryan, 2000)

“Notifications as triggers (Mostly from YouTube/Snapchat).”

(Diary study - Interview 2)

Relational scheme focus:



(Fig. 22 Relational scheme focus design direction: From Steered Behaviour to Self-Direction)

From Inspiration to Action



Context

Adolescents encounter countless inspiring ideas and activities online. Instead of acting on these sparks, they often continue scrolling, and the motivation fades. This widens the gap between what excites them digitally and what they actually do offline, leaving free time feeling passive instead of fulfilling.

Design opportunity

Design accessible ways for adolescents to turn digital inspiration into real doing, so acting on ideas becomes more common.

Supporting quotes:

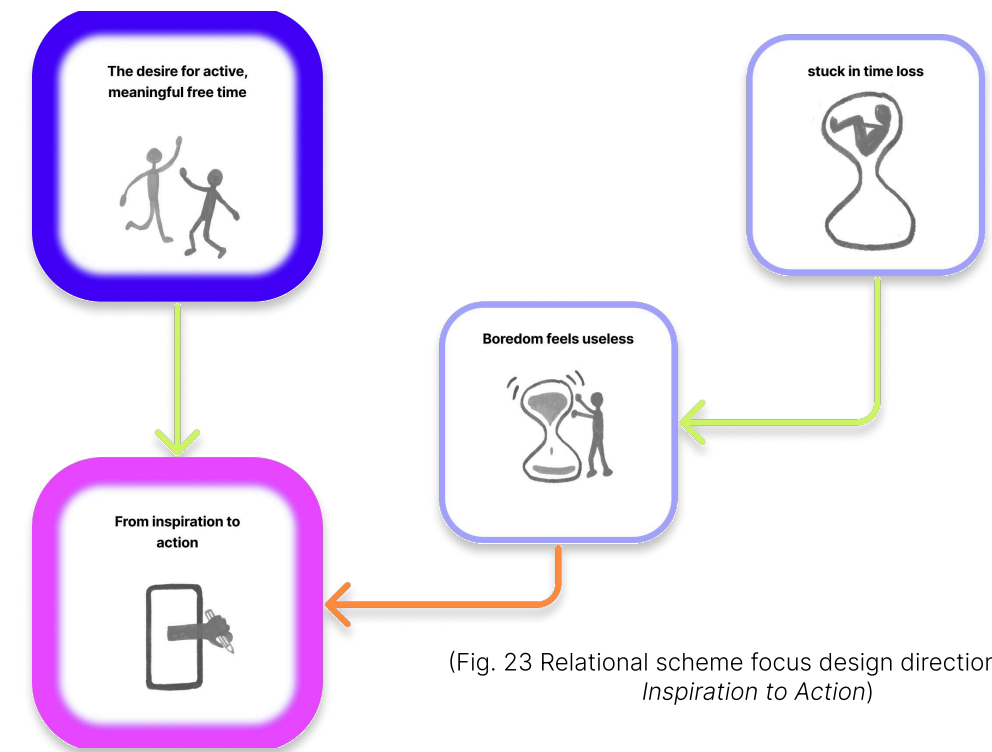
“Oh, I’m going to try that too.” (after a video)
(Diary study - Interview 2)

Heavy users spend less time on other developmental activities.

(Kirschner & Karpinski, 2010)

“I use my phone when I’m bored or don’t know what I want.”
(As.1 follow-up conversation group 2)

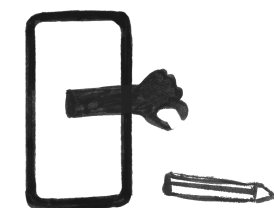
Relational scheme focus:



(Fig. 23 Relational scheme focus design direction: From Inspiration to Action)

Based on theme(s):

Online inspiration does not always lead to offline action



Shaping the New Norm



Context

Peers create the social norms adolescents feel pressured to follow, such as constant online availability. They don't always want to respond immediately, yet they do and expect the same from others, reinforcing a cycle few actually want.

Design opportunity

Support adolescents in reshaping these norms and building a culture where being offline is accepted, respected and chosen with intention.

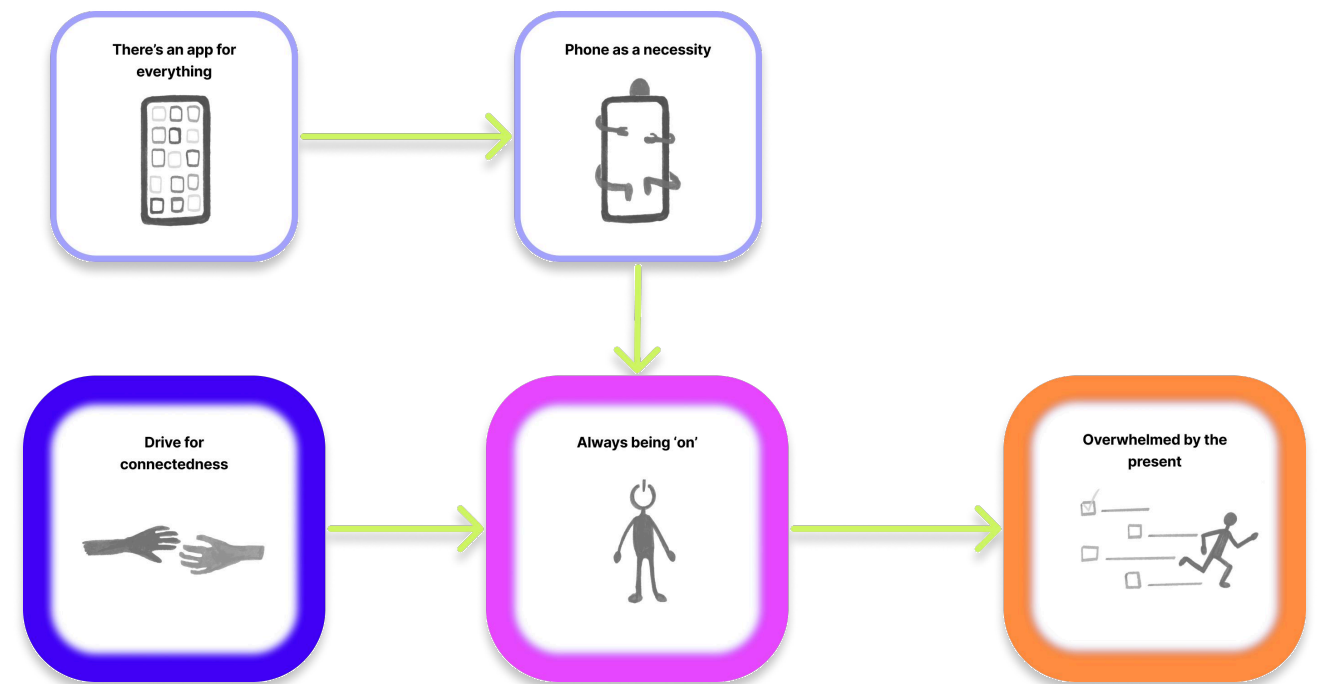
Supporting quotes:

"I lost a 200-day streak, and I got into a fight about it." (Diary study - Interview 1)

FoMO and peer pressure were strong predictors of more intense and problematic social media use among adolescents. (de Bruijn, 2021)

"Without a phone you don't know things you're supposed to know." (As.1 follow-up conversation group 4)

Relational scheme focus:



(Fig. 24 Relational scheme focus design direction: *Shaping the New Norm*)

Based on theme(s):

Peers shape the norms that they suffer under themselves
+ Always connected yet less together



Reflection

Two themes that emerged from the research, “Free time does not feel free” and “The necessary tools are also the distraction,” are not translated into design directions.

Instead, they still function as underlying conditions that run through all directions. “Free time does not feel free” captures how adolescents experience and perceive their time, while “The necessary tools are also the distraction” highlights a recurring tension in the digital tools they rely on daily.

These themes serve as inspiration and as critical reference points when addressing each design direction, as they are closely connected to them.

3.2 Conclusions

In this chapter, the design directions were formed based on the themes identified at the end of the research analysis (Chapter 2.6).

Based on the full set of themes, the following four design directions were defined:

- From digital distraction to real relaxation
- From steered behaviour to self-direction
- From inspiration to action
- Shaping the new norm

The two themes not mentioned in a design direction can function as a general inspiration or reference.

In the next phase, the development phase (from chapter 4), these design directions will act as guiding principles for the design process, supporting exploration and the development of the different concepts.

4 Brainstorm & Ideation

Based on the established design directions, this chapter is the beginning of the development phase. In this phase, potential solutions and interventions are explored in response to the initial design brief:

Design an intervention that enables adolescents aged 11–14 to inspire one another to be more conscious of their social media use and to spend more time engaging in offline activities.

To address this brief, the context is explored through the different design directions. Broad brainstorming is used to identify promising approaches. Ideas that explore different directions are developed, selected, and in some cases combined. Together, these ideas form a pool of possibilities that contribute to the concept development presented in the following chapter.

First, eleven concepts are selected and evaluated using a Harris profile based on the main criteria of the design brief. From this evaluation, five concepts are chosen for further development. These concepts are explored in more detail and tested from the perspective of the target group through three interviews, as well as against my personal criteria as a designer.

This process leads to the selection of one final concept, which will be further developed during the co-creation session in the next chapter.

4.1 Brainstorm

Generating idea's around design directions

Around each design direction, I conducted focused brainstorming sessions. I explored specific aspects of each direction by formulating 'How might we' questions, such as: How might users experience autonomy? How might they take a moment of rest? How might an activity be initiated? How might peers influence one another?

These questions generated a wide range of ideas, diving into smaller parts of the problem or attacking multiple aspects. In addition, I continuously revisited the research data to draw inspiration from specific insights and participant quotes.

The ideas were then reviewed, sometimes combined, and refined.

Finally, the most relevant concepts were selected based on how well they fit the design problem and context.

4.2 Selecting Ideas

Selection from the idea's of the brainstorm & ideation

By comparing and combining the brainstormed ideas, eleven promising concept ideas were formed. These concepts explore different design directions, and in some cases overlap across multiple directions. What they have in common is that each concept has the potential to influence a key leverage point within the broader relational system and, therefore, to contribute to behavioural change within the target group.

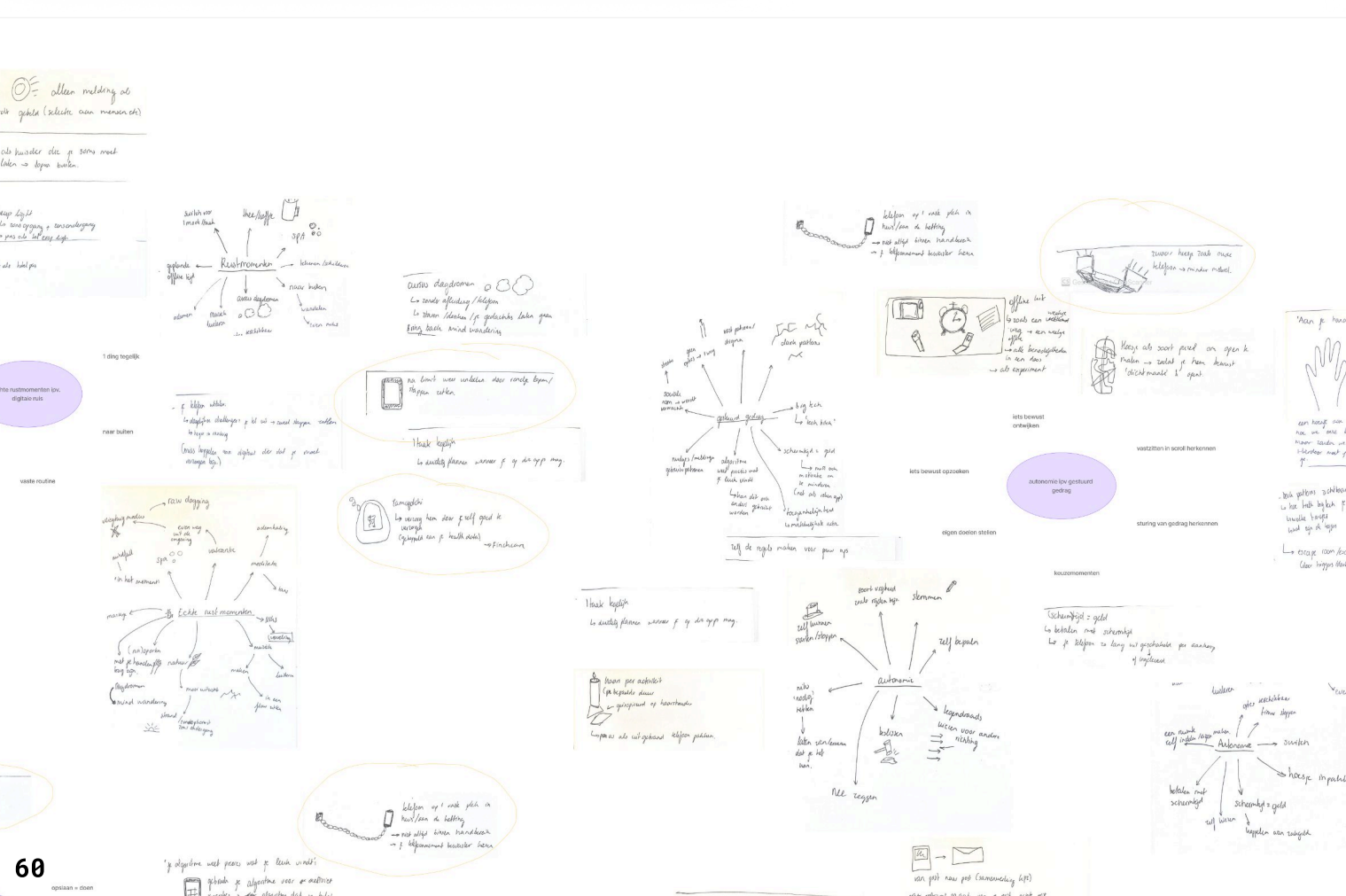
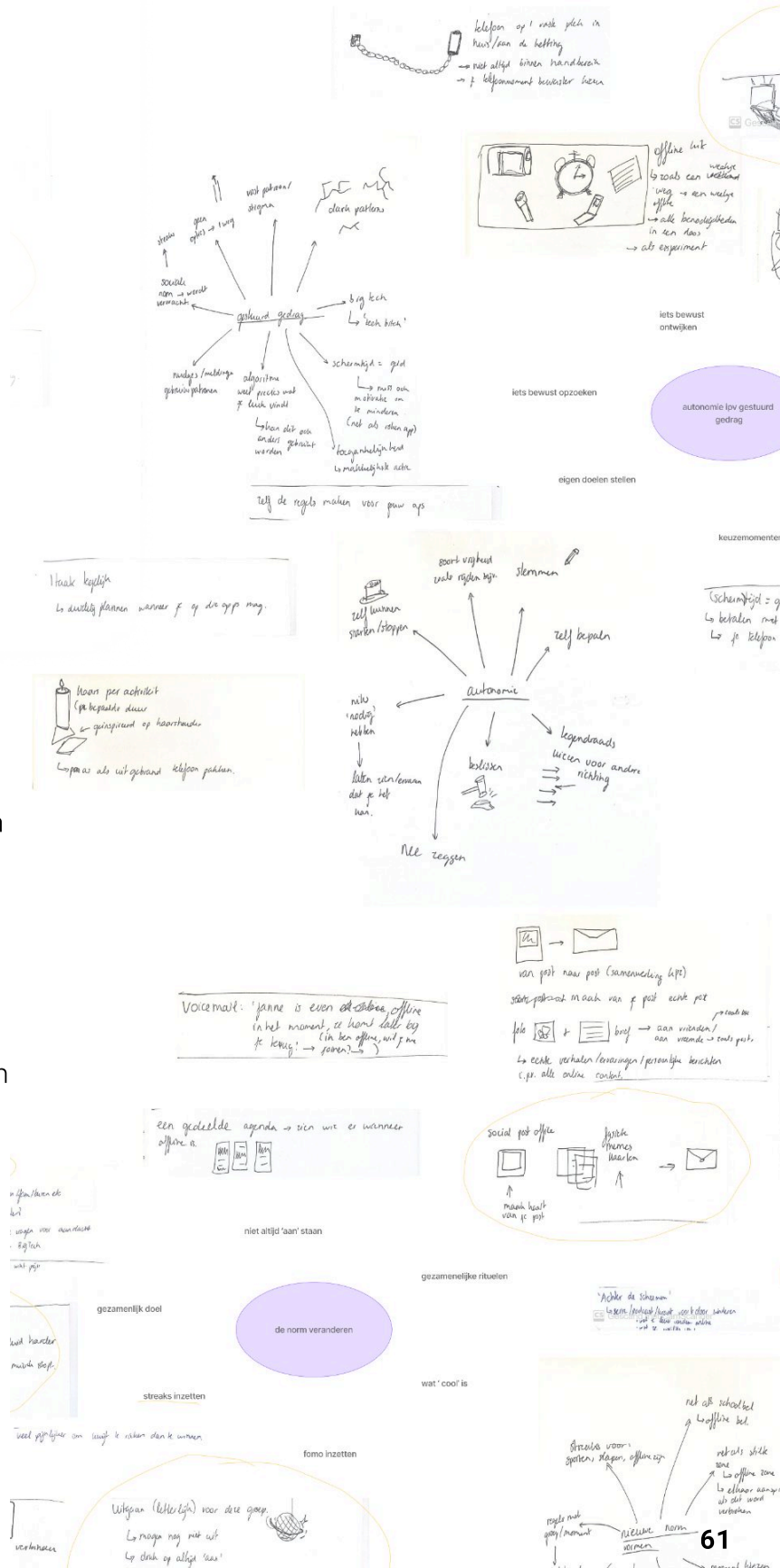
To compare the concepts, I used a Harris Profile. In this case the tool was applied as a decision-support mechanism rather than as a strict assessment against hard requirements. Because the concepts addressed the design brief in different ways, direct comparison turned out to be challenging. For this reason, I returned to the original design brief as a common point of reference.

Design an intervention that enables adolescents aged 11-14 to inspire one another to be more conscious of their social media use and to spend more time engaging in offline activities.

From this brief, a set of overarching evaluation criteria was made. These criteria were broad enough for all concepts to be assessed against in a comparable way:

- Helps foster more conscious social media use
- Encourages offline alternatives
- Inspires peers
- Fits into the everyday lives of adolescents (11-14)
- Can be used independently (without supervision or guidance)

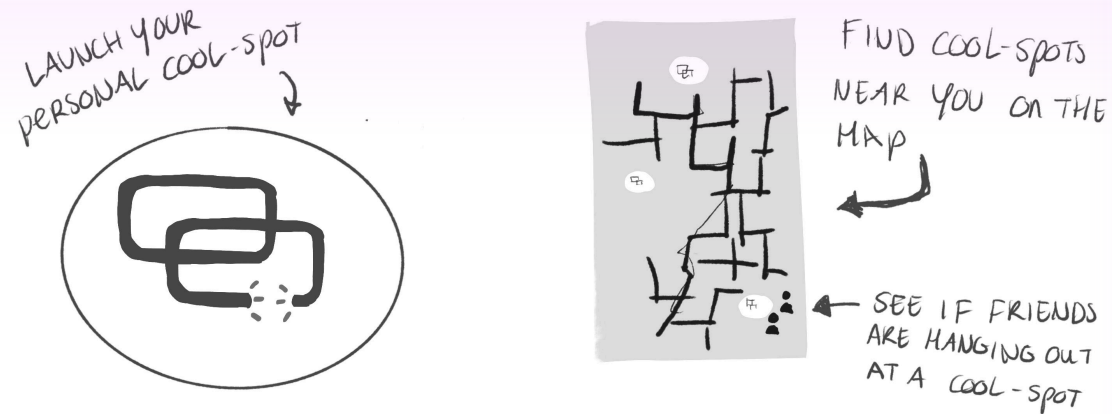
Based on this evaluation process (see Appendix F), five concept ideas received the most positive overall scores. These concepts were then selected for further development and exploration.



4.3 Five ideas

Selected ideas explained

Cool-Spot



(Fig. 25 Concept Sketch Cool-Spot)

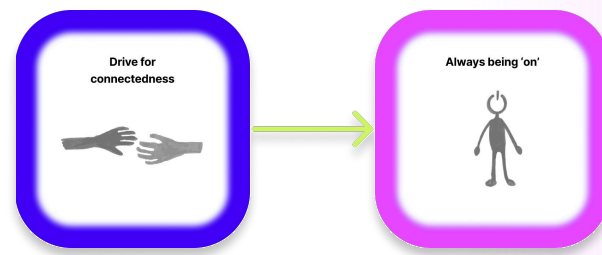
Design Direction: **Shaping The New Norm**

FoMO and peer pressure were strong predictors of more intense and problematic social media use among adolescents. (de Bruijn, 2021)

"Getting together is the most fun thing to do." (Interview 2)

There is a strong drive for connectedness. Many adolescents actually want to spend more time together in person, but instead they stay connected online. Being constantly available has become the norm.

This concept responds to that by creating offline spaces where people can be together without the distractions and temptations of social media. The idea is inspired by a personal hotspot. Normally, a hotspot connects devices so everyone can go online. This concept reverses that logic.

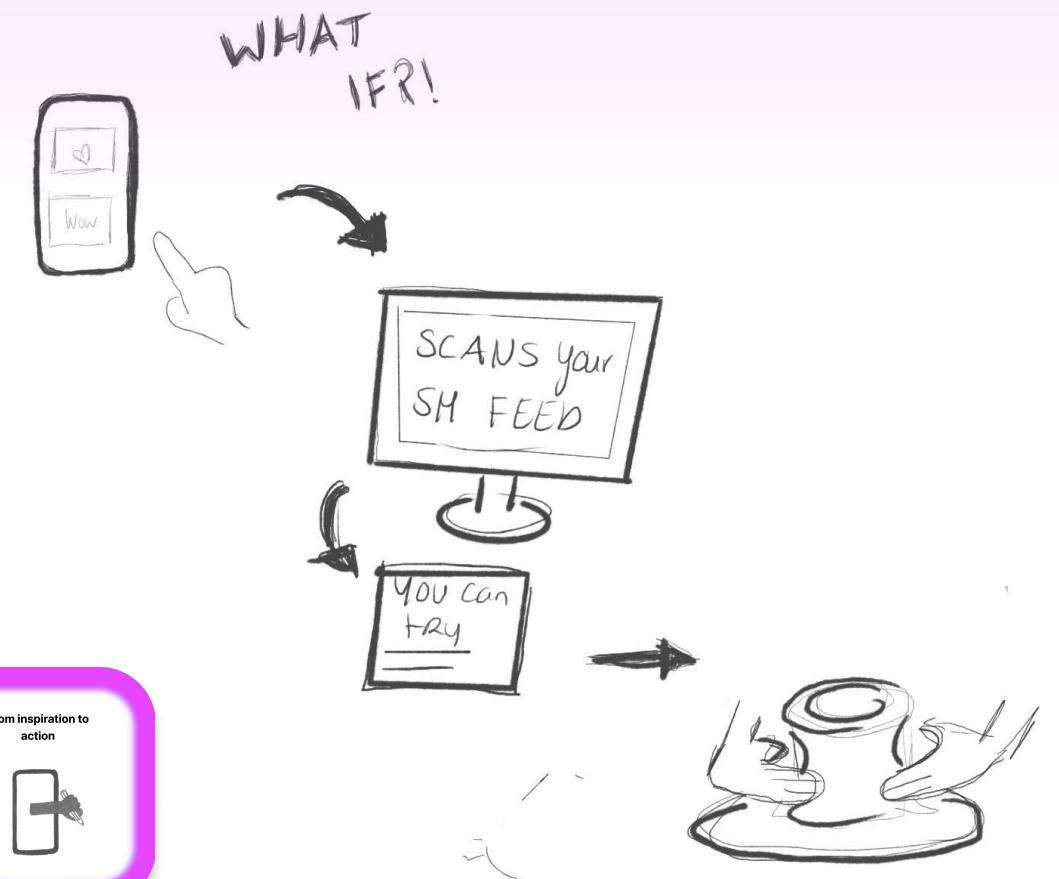


(Fig. 26 Concept Cool-Spot Essential Clusters)

It introduces a cool-spot: when you connect, social media is blocked and everyone stays offline together. You can think of it as a shared flight mode, designed to be offline as a group rather than alone.

To make Cool-Spots easy to find and join, there is a map feature. Inspired by the Snapchat map familiar to this target-group, it shows where Cool-Spots are active and which ones your friends have joined. This makes joining an offline moment simple, visible, and social without requiring constant online interaction.

Algo



(Fig. 28 Concept Sketch Algo)

Design Direction: **From Inspiration to Action**

"The algorithm knows what you like, so it's hard to stop." (As.1 follow-up conversation group 4)

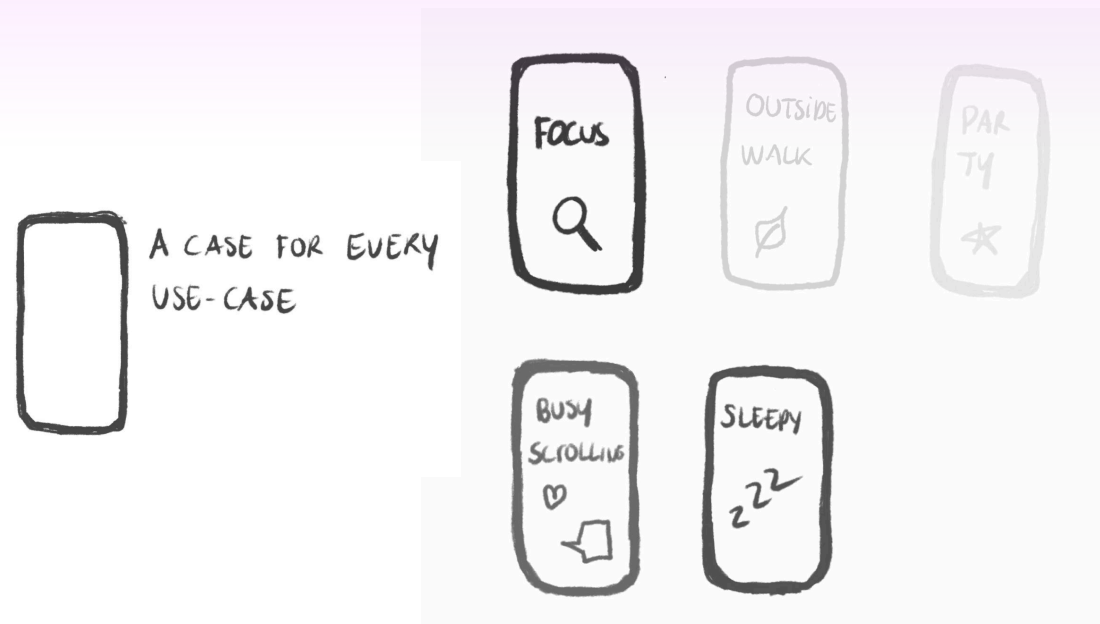
The main reasons social media is so addictive is because algorithms knows exactly what you like. They learn from what we watch, save, and interact with.

What if we use this same algorithm but for free time activities?

Algo looks at your social media feed and suggests offline activities based on your interests. Things you might enjoy doing in your free time, instead of continuing to scroll.

The idea is to turn online inspiration into real-world action. Rather than consuming content endlessly, Algo helps you use what already catches your attention to make free time more active, meaningful, and intentional.

Any case



(Fig. 29 Concept Sketch Any Case)



(Fig. 30 Concept Any Case Essential Clusters)

Design Direction: **From Steered Behaviour to Self-Direction**

"Right now, activities blend into one another, which makes it feel like I'm studying all the time, even when I'm actually not doing anything." (Interview 1, diary study)

The smartphone is deeply embedded in everyday life, serving many purposes such as socialising, schoolwork, entertainment, and staying in touch with family.

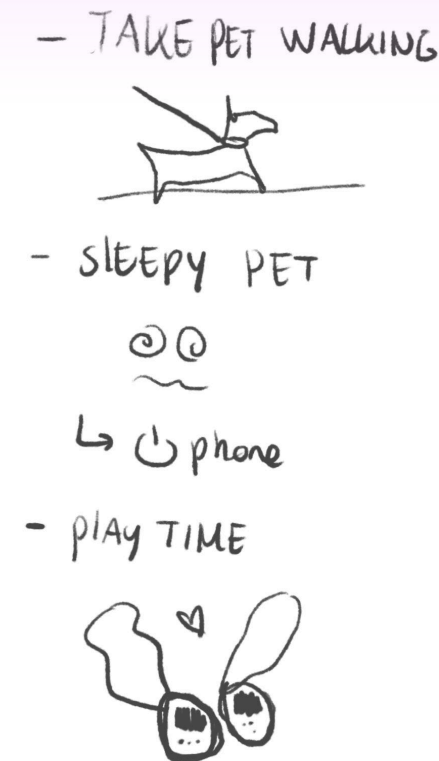
Adolescents often experience that their free time is disappearing, increasingly filled with tasks and obligations. They feel that constantly mixing these activities on one device leads to a lack of focus and intention. They do not feel control or autonomy over their own time any more.

To use time and attention more consciously, it helps to separate these activities more clearly.

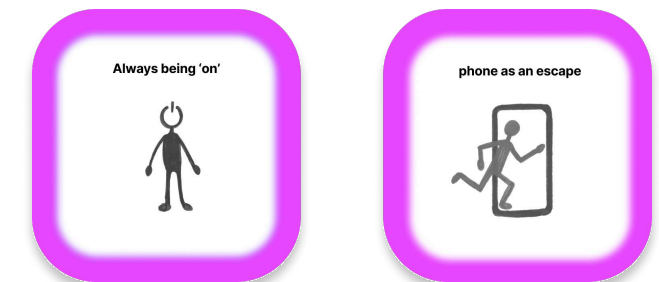
Inspired by clothing and how we dress for different occasions, this concept treats the phone as something you "dress" for a specific moment. A collection of phone cases each activates a distinct mode, such as a chill mode with only entertainment apps or a focus mode with only productive apps.

By physically switching cases, users make a deliberate choice about what they need in that moment, reducing unnecessary distractions. Designed as fashion items, the cases can spread organically among adolescents, making intentional phone use visible, shareable, and culturally relevant.

Tamagotchi



(Fig. 31 Concept Sketch Tamagotchi)



(Fig. 32 Concept Tamagotchi Essential Clusters)

Design Direction: **Digital distraction to real relaxation**

"In the weekend I'm exhausted and end up scrolling." (Interview 1)

"I use my phone when I'm bored or don't know what I want." (As.1 follow-up discussion, group 2)

Adolescents often reach for their phone when they need rest. They scroll to soothe boredom, but also to find a moment of relaxation. Apparently, in moments like these it is difficult to truly take care of yourself, and the urge for easy entertainment tends to win.

What if self-care could happen in a playful way instead?

This concept uses a kind of Tamagotchi, the well-known digital pet from the 1990s. The user takes care of the creature, but in doing so indirectly takes care of themselves. Insights from the generative sessions showed that it is often easier to give care or advice to someone else than to apply it to yourself.

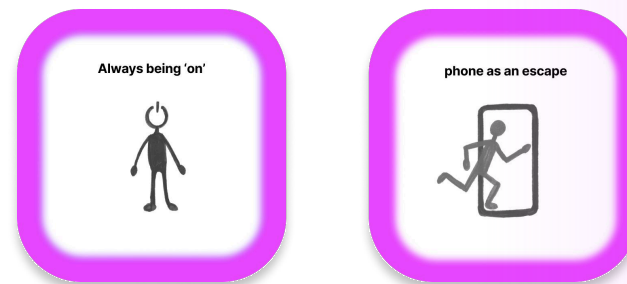
The creature is connected to your phone and can track certain behaviours. It needs to be taken for walks (by taking steps), sometimes it needs to sleep (phone off), and at other times it wants to play together with others (being physically near friends).

In this way, the focus is not directly on the user's own behaviour. Instead, the concept supports healthier habits through a playful and social approach.

Finding Dino



(Fig. 33 Concept Sketch Finding Dino)



(Fig. 34 Concept Finding Dino Essential Clusters)

Design Direction: **Digital distraction to real relaxation**

*"Nostalgia for the spontaneity and playfulness of the past.
Being outside more / being more active."
(Collage, context mapping session 1)*

Adolescents often reach for their phone when they need rest or just when they are bored. That ends up being draining instead of restorative. What does give them energy is going outside/ being active.

Also being offline is not seen as an option for them in daily life.

But what if they could see being offline and outside as this adventurous and fun activity?

Finding Dino is a scavenger hunt designed to encourage going outside without online distractions.

On the street you find Dino stickers, or Dino markers shown on the in-app map. The game starts the moment you open the app. Other social apps, maps, and distractions are blocked. You have to read the map "old-school". There is no turn-by-turn navigation and the map does not follow your movement.

When you find a Dino, you scan it. You receive a fun fact about the place you're in, plus a reward in points.

You can compete or collaborate with friends through shared scoreboards, challenges, and progress tracking.

Validating concept ideas through storytelling

The aim of these concepts was to clarify their core idea, intended use, and underlying working principles, rather than to define them in a definitive or final form. This approach supported both my own understanding of the concepts and the preparation for testing them with the target group.

To explore how the concepts would be perceived and experienced by adolescents, a target audience evaluation was conducted. Each concept was translated into a use-case story (see Appendix H.2) that illustrated how it could function in practice and fit into everyday life. Presenting the concepts in this illustrative way enabled participants to assess whether the ideas felt relevant, understandable, and workable for them.

Participants shared their opinions through a set of guiding questions (see Appendix H.1). These are some insights per concept:

ALGO

Valued: ALGO is valued because it helps turn inspiration into action and breaks passive scrolling behaviour. Its simplicity and directness are especially appreciated.

Points of attention: The concept only works when activities are truly low-threshold and require little preparation.

"Scrolling feels empty afterward; making something or going somewhere does not." (P2)

"It has to be easy: not too far away and with few materials." (P1)

Cool-Spot

Valued: Cool-Spot is seen as a way to encourage offline social interaction, which is experienced as more fun and active than online contact.

Points of attention: spontaneously meeting without prior contact feels uncomfortable; social predictability remains important.

"Being together in real life is actually more fun." (P1)

"I do want to meet up, but I sometimes forget to ask." (P2)

Any Case

Valued: Any Case aligns well with the need for calm and self-regulation. Young people appreciate that it helps them gain overview and control over their time.

Points of attention: Overly strict or fixed restrictions are perceived negatively; flexibility and personal choice are essential. Needs to be easy to use.

"Control is knowing what is going to happen with my time." (P1)

"It's nice if you can use it in different situations." (P3)

Tamagotchi

Valued: The Tamagotchi concept motivates through responsibility and maintaining a streak.

Points of attention: If the concept demands too much attention or commitment, it can cause stress instead of motivation.

"I don't do it for learning, but for the streak." (P1)

"It shouldn't require too much, otherwise it just causes stress." (P3)

Finding Dino

Valued: Finding Dino motivates young people to go outside by adding a playful goal, especially when it connects to their local environment.

Points of attention: When energy levels are low or the experience becomes repetitive, motivation decreases.

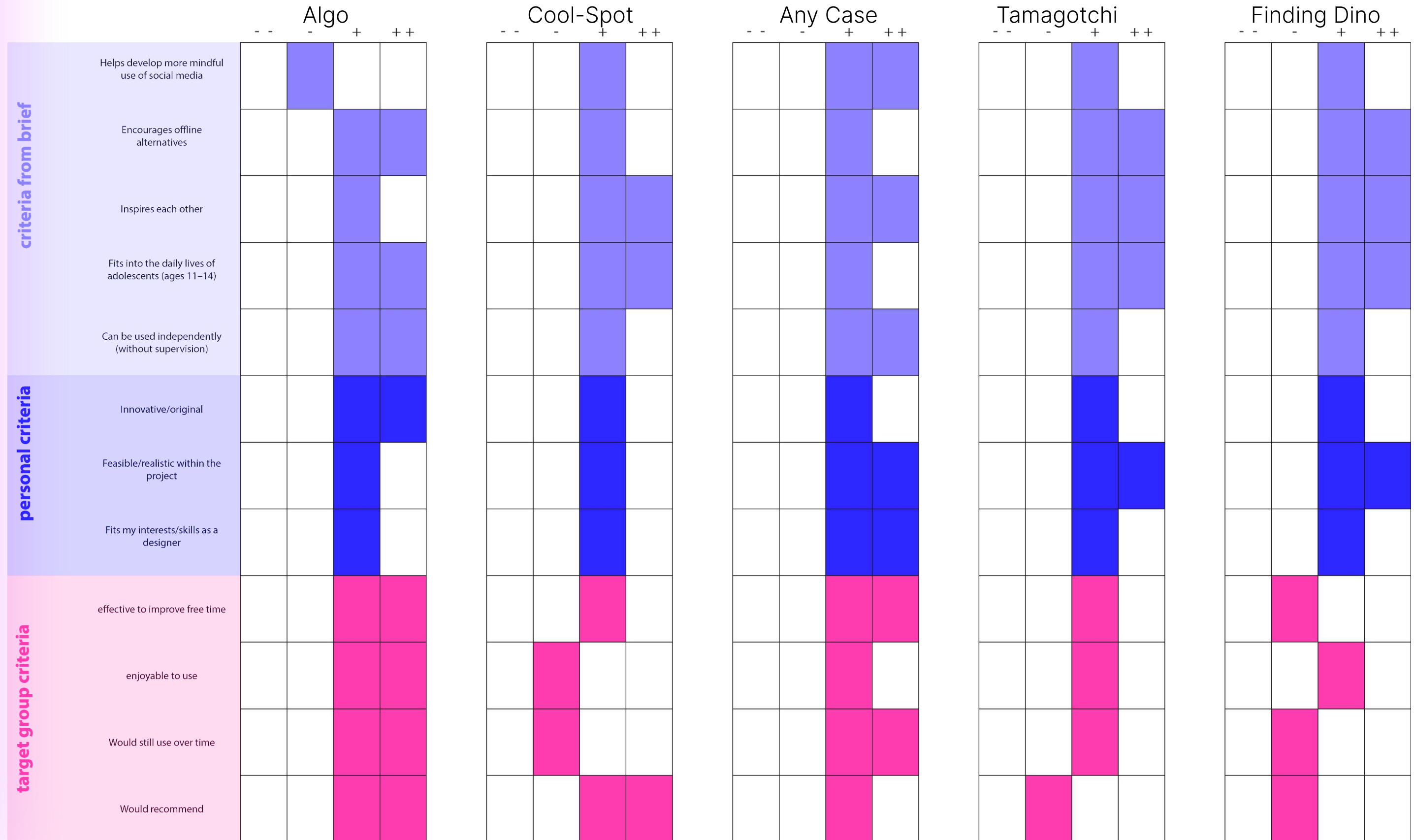
"It helps to go outside more often because you have a goal." (P1)

"I probably wouldn't do it if I'm tired." (P3)

4.4 Concept Evaluation

Harris profiles

(Fig. 35 Harris Profiles Concept Evaluation)



The Harris profiles used earlier in the idea selection phase were revisited and further expanded to validate the concept ideas. In addition, a set of complementary evaluation criteria was introduced to support a more grounded and reflective selection process.

These criteria were included to ensure that the selected concept would not only align with the scope and objectives of the project, but also resonate with my personal interests, skills, and design ambitions.

- Innovative and original
- Feasible and realistic within the scope of the project
- Aligned with my interests, skills, and goals as a designer

The following criteria were evaluated by the target-group during the concept validation interviews:

- Effective in improving free time use
- Enjoyable to use (for concept attractiveness and engagement)
- Likely to be used over time (supporting sustainable behavioural impact)
- Likely to be recommended to peers (as peer influence was identified in the literature study as a key factor within the target group)

This structured evaluation approach supported the selection of a concept to further develop, refine, and elaborate in the next phase of the project.

4.5 Final Choice

Choice rationale

Although the Harris Profiles did not result in a single decisive winner, both the ALGO and Any Case concepts demonstrated strong potential, each receiving an equal number of positive evaluations. A final decision regarding which concept to further develop in the next phases was therefore made by revisiting the original data collected through the questionnaire and the concept validation interviews.

As shown in Appendix H.3, ALGO initially emerged as the preferred concept from the participants' perspective. It scored highest on enjoyment of use and likelihood of being recommended to a friend. However, it performed less strongly on one of the project's core criteria: supporting more mindful use of social media. While ALGO does address this goal indirectly by encouraging users to transform inspiration gained from social media into offline action rather than passive scrolling, it may also unintentionally stimulate increased social media use.

To assess whether the project's primary goals aligned with the interests of the target group, the questionnaire data were reviewed in more detail. Participants evaluated several design goals based on the recognisability of the problem statements and the perceived impact each goal could have on improving their free time (see Appendix G). The results clearly indicated that feeling in control of one's screen-time was considered the most important factor.

Due to this clear outcome, this design goal was weighted more heavily in the final decision-making process. Consequently, the concept that addressed this issue most directly was selected for further development: Any Case.

That said, the interviews also revealed that Any Case scored lower on 'enjoyable to use' and 'likely to be recommended to a friend' compared to some of the other concepts. These findings highlight important opportunities for further exploration and refinement in following design phases.

Additionally, the interviews emphasised the importance of ensuring that the concept remains flexible and personal, as these qualities are essential for increasing user acceptance and engagement.

4.6 Persona's

Who is this design for?

The target group of adolescents aged 11–14 is quite broad. To create a more focused and specific direction, several personas were selected as key points of focus. The generative research revealed different types of personas within this target group. This section highlights the main personas and identifies which of them the further development of the concept Any Case will focus on.

The main focus group for the design of this concept will be persona's like Yara and Daniel.

(Fig. 36 Persona Selection Focus Group)



Lena

age: 11

1st year secondary school
Hobbies: drawing and skating

"I don't use my phone a lot, am not (very) present on social media. I prefer doing other things."

Not particularly interested in phones or social media and therefore at low risk of overuse. Often wonders why others spend so much time on it and can find that a little frustrating or distancing. Prefers spending time on other activities instead.



Tommy

age: 13

2nd year secondary school
Hobbies: gaming with friends

"I don't feel like I use my phone too much, I have a high screen-time but I think that is fine."

Often spends long periods on the phone, scrolling through content, gaming, or using apps. Does not perceive this as problematic and feels the enjoyment outweighs any downsides. As a result, does not feel a need to change these habits. May feel annoyed when others frame phone use as an issue or try to set limits, and does not fully understand the need for restrictions.



Yara

age: 14

2nd year secondary school
Hobbies: dancing, chilling with friends

"I feel like I need my phone for daily activities but at the same time it can distract me."

Sees her phone as essential for schoolwork, communication, and social media, and could not do without it. At the same time, she experiences it as distracting and often finds herself stuck scrolling. Would like to reduce her screen time but does not know how.



Daniel

age: 12

1st year secondary school
Hobbies: sports, chilling with friends

"The I use my phone out of boredom, actually would like to do something else. I often use my phone without even noticing it."

When bored, relaxing, or tired, he tends to automatically reach for his phone out of habit or for easy entertainment. He often spends more time on it than planned and is left feeling just as tired, wishing he had done something more energizing.

Reflection

Looking at the chosen concept, Any Case, and the design direction it originated from, “From Steered Behaviour to Self-Direction,” several observations can be made.

This design direction clearly guided the development of the concept and is still present within Any Case. The ability to choose the case is a central element, as it gives users the freedom to decide how they want to spend their time and helps them regain a sense of self-direction.

However, when reviewing all the themes and clusters from the data, it becomes clear that the concept also strongly relates to two themes that are not represented in the original design direction: “Free time does not feel free” and “The necessary tools are also the distraction.”

These themes are important to Any Case. The concept uses the necessary tools while limiting distractions, with the goal of making free time feel free again, or at least more conscious and intentional.

Given the broad and complex nature of this problem, and the many related factors within the context (which the scheme in 2.5 attempts to simplify), it is understandable that the design process and outcome do not follow a single, linear path.

For this reason, these themes should not be left out. Therefore I bring them back into the narrative, as they are an essential part of understanding Any Case.

4.7 Conclusion

After brainstorming based on the four design directions, eleven concept ideas were evaluated, leading to the selection of five for further exploration.

Based on interviews with the target group, personal design criteria, and how well each concept fits the brief, Any Case was chosen as the concept to continue with.

The evaluation showed that the concept needs to be flexible for different use cases, feel personal, and be attractive to use. These aspects will be explored further in the co-creation sessions.

5

Co-creating the Concept

In this chapter, the Any Case concept is further explored through a co-creation session with a secondary school class, the same group that took part in the generative research.

The session focuses on exploring possible use cases and understanding the needs and wishes of the target group through two creative activities.

It also examines the attractiveness of the concept by identifying which elements make participants want to use it and which do not.

The results of the session are analysed and summarised into key findings. These findings are then used to guide further development and to choose a direction for the final concept design.

5.1 Co-Creation Plan

Process and reasoning of the co-creation session

Duration: 40 minutes (mentor class)
 Target group: second-year secondary school students
 Facilitation: 3 facilitators (1 per 2 tables)
 Participants: ± 20 students (groups of 3–4)

Purpose of the Session

This co-creation session invites students to reflect on their phone use during free time and explore how a phone accessory can support a greater sense of control. Through playful, visual, and generative activities, students share everyday experiences, identify moments of distraction or support, and express wishes for how their phone can better fit their needs. The session informs the development of the Any Case concept by revealing relevant use-case scenarios, desired and undesired functions, and factors that influence attractiveness of use.

Main Questions

- The session focused on the following questions:
- In which situations do adolescents use their phone?
 - When does the phone feel supportive, and when does it become distracting?
 - What phone functions are experienced as helpful or unhelpful in different situations?
 - What makes a concept attractive or unattractive to use?

Methodological Rationale

The session design was based on principles from the Convivial Toolbox, using participatory, generative, playful, visual, and reflective methods suited to working with children and adolescents. The methods that inspired the main assignments come from : Examples of co-creative activities (Vegt and Gielen).

The timeline method helps ground the discussion in everyday experiences.

The hero–villain method enables students to explore best- and worst-case scenarios in a concrete and imaginative way, lowering the threshold for expressing preferences, frustrations, and values.

Together, these methods make abstract themes such as control, distraction, and usability tangible and support both reflection and creative ideation.

The session follows a structured flow with a short introduction, an energiser, two main assignments, and a group reflection. The energiser creates a playful atmosphere and lets participants physically experience distraction.

Each table then works on the two assignments. In the timeline mapping activity, students visualise their day and mark moments when their phone feels supportive or distracting.

In the hero–villain ideation activity, they select one moment from the timeline and design two contrasting phone accessories: a villain that exaggerates distraction and a hero that supports the activity.

Students use phone templates and craft materials to visualise their ideas, with exaggeration and playful thinking encouraged.

Facilitators support the process by asking open questions, encouraging reflection, and observing without steering the outcomes.

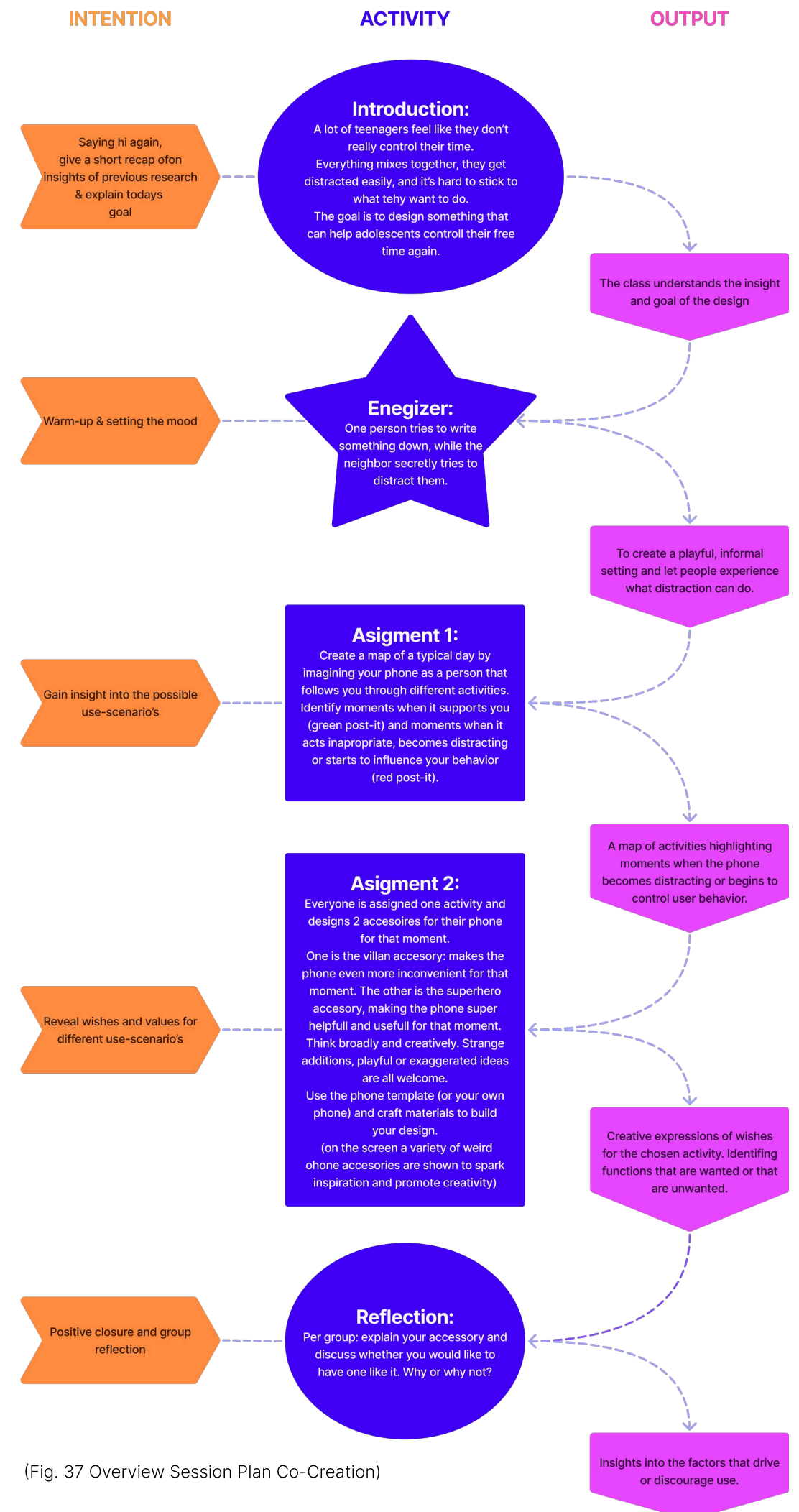
Materials Provided

- Each table receives a daily phone timeline
- Green and red post-its
- Markers/ pens
- 2 phone templates each (or the option to trace their own)
- Craft materials
- Visual examples of playful and exaggerated accessories (on screen)

Expected Outputs

- Visual timelines highlighting supportive and distracting phone moments per group
- Designed hero and villain phone accessories per person
- Students explanations and reflections
- Quotes, photos, and facilitator observations
- Insights into use-case scenarios, desired and undesired functions, and factors influencing attractiveness and acceptance

40 minutes



(Fig. 37 Overview Session Plan Co-Creation)

5.2 Co-Creation Insights

Created materials and take-aways for concept development

During the first exercise, the creation of the timeline showed which moments were mentioned most as activities of the phone. During the second part of this exercise the activities were linked to helpful and distracting actions of the phone. These together identified the most suited use scenario's to interfere.

The main findings from this session are presented across three categories: activities, helpful functions, and unhelpful functions. These categories reflect the overall outcomes of the session. A more detailed overview of the specific activities, their associated helpful and unhelpful functions, and the ideas and reflections that emerged can be found in Appendix I.

Activities

Daily routines such as waking up, eating, studying, and commuting are moments in which the phone is frequently used to structure the day and support practical tasks. Entertainment activities, including listening to music, watching films, and gaming, are typically intentional and linked to relaxation. In contrast, in-between moments such as waiting, being on the toilet, or standing in line trigger more automatic and habitual phone use, often without a clear goal.

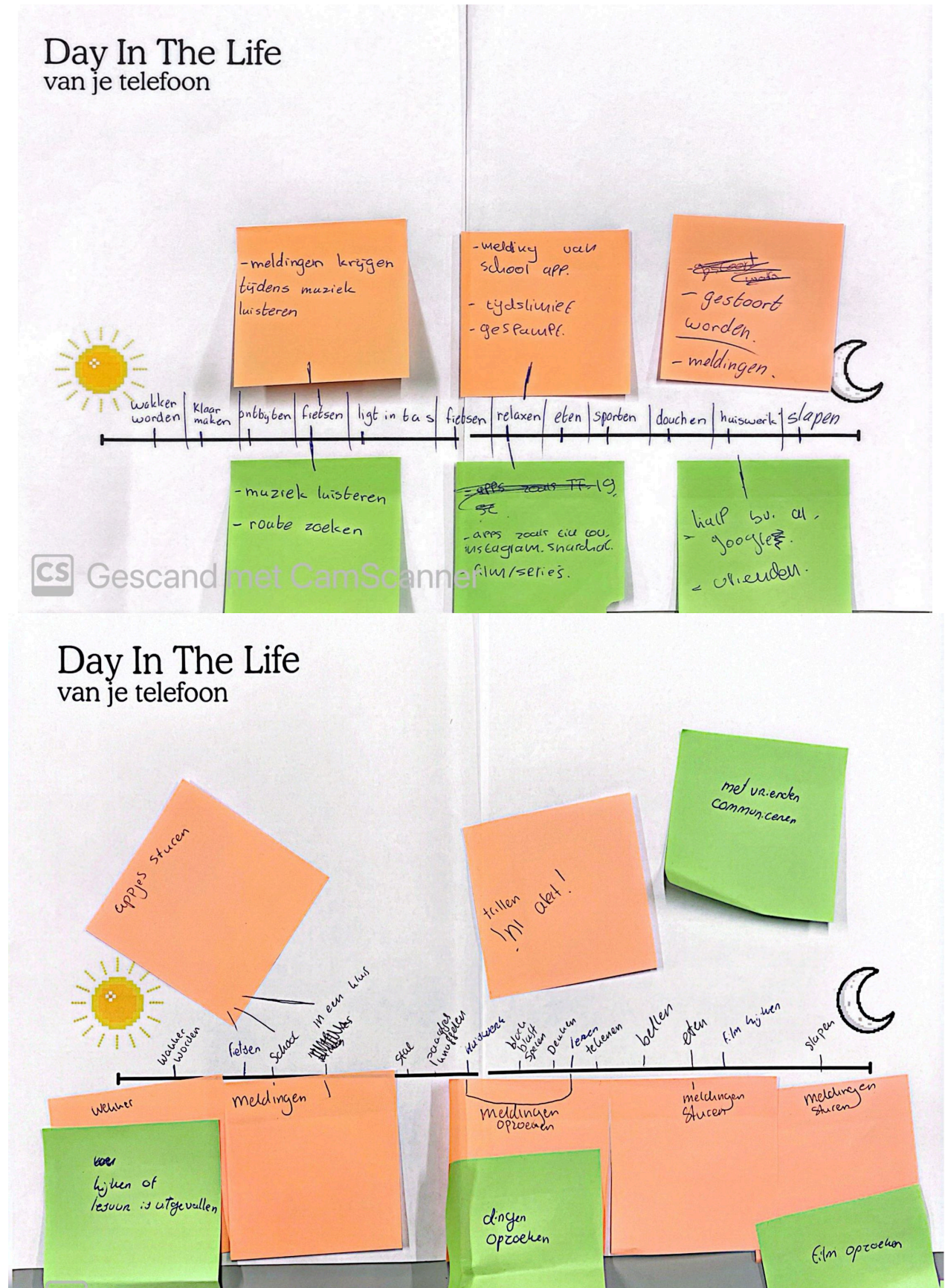
Helpful

Across these contexts, the phone is valued for enabling quick access to information, supporting learning and planning, maintaining focus through tools such as music or navigation, and providing entertainment and relaxation. When used intentionally and with a clear purpose, the phone is experienced as efficient and supportive.

Unhelpful

Problems arise when phone use becomes fragmented or automatic. Unwanted notifications frequently interrupt ongoing activities, particularly during learning, commuting, and entertainment. Multitasking across apps leads to reduced focus, while prolonged use results in a loss of time awareness. These unhelpful patterns often occur without conscious intention. This shows a disconnect between user goals and actual phone behaviour.

The students each selected one of the activities they wrote down on their timeline. This, along with the associated desired and undesired features served as guidance and inspiration for the creative activity.



(Fig. 39 Examples of two Day-In-A-Life Timelines)

Creative outings

The creative findings focus strongly on managing attention. Instead of adding features, many ideas remove them. Social media disappear during focus moments, while school apps only appear in free time. An anti-messaging button becomes a simple way to silence digital noise.

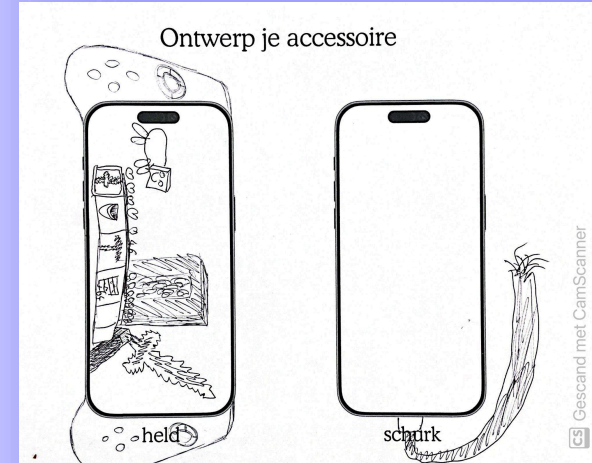
Alongside this is a wish for technical efficiency: more storage, faster WiFi, extra RAM, and good antivirus protection. The ideal phone works smoothly and almost fades into the background. Interestingly, its opposites are also explored. A frozen screen, a cracked display, or even viruses are sometimes seen as useful signals. If the phone stops working, you are forced to stop too.

Ideas about physical form play a big role. Compact phones feel better to carry, while large, clumsy ones quickly become annoying. Some concepts exaggerate this on purpose: an absurdly big phone or a slippery surface make it unattractive. At the same time, practical additions appear, such as bike mounts or carabiner cases for climbing.

Other ideas turn playful or absurd. A phone that comes when you call it, or runs away when the alarm goes off. A phone that claims class is cancelled so you can sleep longer. An invisible blanket that hides the device completely. Or notifications so loud and theatrical that distraction becomes ridiculous.

Finally, phone cases become tools for certain behaviour or specific moments. A case too big to fall into the toilet, a plate to place your phone on during meals, an wristband for shopping lists, or a game-controller case that allows only gaming.

Together, these ideas frame the phone as a behaviour-shaping object rather than just a smart device. Sometimes by helping with an activity, and sometimes by being limiting.



Attractiveness to use

One of the clearest insights was how strongly users felt connected to their own creations. Almost everyone indicated they would prefer using their own "hero" phone case, and even when asked to choose from the group, most still selected their own design. This suggests that when adolescents create something themselves, they feel more ownership and are more likely to actually use it.

Participants also described the phone case primarily as protection and functionality, but emphasised that it still needs to look good. Practical usefulness alone is not enough; aesthetic appeal plays an important role in whether something feels worth using.

In addition, there was strong interest in smart add-ons and features. While blocking or removing functions can be helpful, a factor influencing use was whether the concept offered an improvement. Examples included louder music, more sleep, or better focus during gaming. Switching cases would only be considered if it resulted in a noticeable benefit.

Notifications were widely recognised as a major source of distraction. Many wanted to mute them, but also acknowledged that some notifications are important in certain contexts, making a permanent mute unrealistic. This is why the idea of a temporary mode was especially appealing. Although some students already use time limits, they admitted these are often easy to bypass. A temporary, situation-based mode felt more acceptable and something they could choose to use.

Implementation of Insights

The findings can be implemented by designing for common phone-use scenarios: daily routines such as waking up, school, and being on the move; for entertainment like gaming, watching series, and listening to music; and for short in-between moments such as waiting or being on the toilet.

Each scenario comes with its own useful and unwanted functions, which can guide design decisions. The creative outcomes showed not only desired features, but also irritating ones. These unwanted elements can also be used intentionally to limit overuse and encourage more mindful phone interaction.

Attractiveness to use is strongly linked to personalisation and ownership. When users can design something themselves and choose its functions, appearance, and settings, they feel more connected and are more likely to use it. Also it needs to feel beneficial rather than just limiting.

From this, three implementation directions emerge:

1. Scenario-based

Develop simple, appealing cases or accessories inspired by the ideas but fitted for everyday life. Different tools, tailored to specific use scenarios.

2. Creative & customisable

Design a product that activates phone modes while also allowing users to creatively personalise how it looks & how their phone behaves.

3. Speculative prototypes

Use the more extreme concepts to create provocative prototypes that spark discussion about phone and social media use, distraction, and daily habits. It can show the wish to do activities more intentionally again, all using adolescents' perspectives.

Each of these implementation approaches is further developed and explored through brainstorming and the visualisation of several concepts (see Appendix J).

After reflecting on their alignment with the brief and my goals as a designer and discussing these ideas with Scroll Scroll Scroll, Option 2 (Creative & customisable) was selected as the implementation direction to pursue.

Option 1 (Scenario-based) was considered suitable for specific activities or contexts; however, developing a separate product for each scenario seems excessive and unrealistic.

Option 3 (Speculative prototypes) was valued for its ability to raise awareness and stimulate reflection, but it functions more effectively as part of a broader campaign or strategy. It primarily addresses an industry or public audience rather than the adolescents themselves, and therefore does not directly resolve the core challenge of the brief.

Option 2 (Creative & customisable) focuses on the development of a single, creative, and customisable product. This approach offers the greatest potential, as it can adapt to the needs of the target group, integrate into their daily lives, and remain flexible across different contexts and styles. Additionally, it allows for future extension through a digital platform, resulting in one coherent concept that addresses multiple aspects of the context.

This concept will be further developed, diving deeper into insights from previous sessions and research, and exploring possibilities.

(Fig. 39 Examples of four Hero-Villain Accessory Designs)

Reflection

The co-creation session was approached as a design studio, which proved beneficial for stimulating creative thinking and generating rich design outcomes. Participants expressed their preferences, with a strong emphasis on creativity and customisation (they chose their own creation over others). Based on this insight, Any Case is further developed with a focus on creative customisation.

At the same time, it is important to remain aware that this direction could be shaped or influenced by the creative setup of the session. It is important to ensure that the concept stays accessible and easy to use, also for adolescents who are less interested to engage in creative activities.

5.3 Conclusions

This section explored through a co-creation session with the target group how phone use shifts between helpful and distracting across everyday scenarios. Activities such as waking up, traveling, studying, entertainment, and in-between moments were described. The analysis showed that distraction is strongly context-dependent and often driven by notifications, automatic habits, and a lack of awareness of time.

The creative outcomes reframed the phone as a behaviour-shaping object rather than a neutral tool. Instead of adding features, many ideas focused on removing, filtering, or exaggerating functions to encourage more intentional use. Both digital modes and physical form played a role in shaping behaviour, from minimal interfaces to deliberately restrictive designs.

A key insight was that effectiveness depends on attractiveness and ownership. Participants were more willing to engage with concepts that clearly showed a benefit instead of only limitation and with designs they had created themselves.

For this reason, customisation was integrated into the core of the concept, making it more engaging and fun to use. But, with the note that it should still be easy and accessible to do so.

This approach, and its further development, is explored in the next phase.

6

Final Concept: MOOD

This chapter further develops the concept 'Any-Case' with the implementation of customisation. The design is developed with guidance from the gathered insights in the co-creation session and in earlier (generative) research.

First, the final concept, MOOD, is introduced.

Next, the design choices behind the concept are described and explained.

Finally, the concept is translated into a first physical and digital prototype, which will be used for testing.

6.1 Final Concept

MOOD

A customisable phone case that helps adolescents take control of their time and attention.



By selecting a physical MOODpin and placing it in the upper hole of the case, the phone reads the NFC of the pin and activates the settings that support the MOOD.

Only keeping the apps that are needed for what the user wants to do, while limiting unnecessary distractions.



Their chosen MOOD becomes visible both online and offline, allowing friends to see and share each others MOOD. This way an individual intention is reinforced by this social element.

That is how MOOD allows adolescents to consciously decide how they spend their time, instead of letting their phone decide for them.

6.2 Design Choices

Functions and choices explained

In this chapter, the final concept MOOD is presented. The concept evolved from the earlier idea Any Case and integrates insights from the co-creation sessions, as well as the findings that highlighted the importance of customisation.

This chapter explains the design choices made throughout the development of MOOD with insights from the research and co-creation sessions.

Ease of Use

Ease of use emerged as a key requirement during the interviews and concept evaluation sessions. Participants indicated that the product must be simple and effortless to use. Frequently attaching and removing a phone case was seen as impractical, as it could create too much friction and ultimately discourage use.

For this reason, the decision was made not to rely on multiple interchangeable cases. Instead, one fixed phone case was designed, combined with detachable pins that symbolise and activate different modes fast and easy through NFC scanning. This approach maintains a physical interaction, while removing the effort of repeatedly taking a full case on and off.



Personal Expression

Customisation was also identified as a fun and important element during the co-creation sessions. Many young people enjoy shaping their own accessories, using them as a way to express creativity and personal identity. This insight aligns with findings from literature, which show that adolescents have a strong need for self-expression, often expressed today through social media (Van der Wal, Valkenburg & Van Driel, 2024). In this context, personalisation through the phone case can offer a form of physical self-expression.

However, creating a fully customised design can be too demanding or outside the interests of part of the target-group. To keep the concept accessible and appealing to a broad audience and not only creatively inclined adolescents the customisation process also needed to be simple. This further supported the use of pins: by offering a range of pins, users can still make personal choices that fit their style, without engaging in an intensive or complex creation process.



Autonomous instead of restrictive:

One key insight from the co-creation sessions, which also aligns with existing literature, is that adolescents want to make their own choices. According to Self-Determination Theory, motivation arises when individuals experience autonomy, competence, and social connectedness (Deci & Ryan, 2000). Autonomy therefore needs to be at the core of this product.

Rather than positioning the concept as restrictive by blocking certain functions or apps MOOD focuses on enabling intentional choices. The starting point is not what users are not allowed to do, but what they want to do and what they need for that. Users create their own MOODs by answering these questions on the MOOD platform and consciously choose when to activate them. This reinforces a sense of control instead of limitation.



Offline and online

Both the literature and the generative research show that online and offline worlds are deeply intertwined for adolescents. Being "online" is no longer a separate activity, but an integrated part of everyday life (UNICEF, 2024). To reflect this reality, MOOD is designed as both a physical product and an online platform.

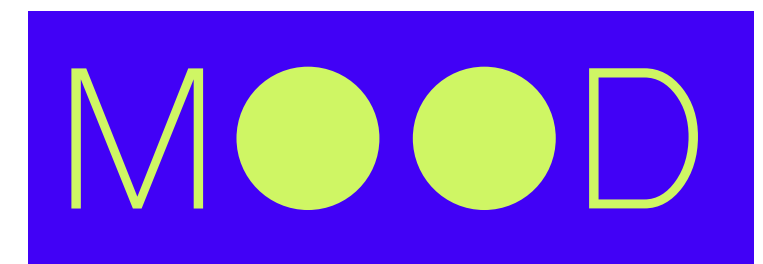
The social element

Self-Determination Theory also highlights social connectedness as a key driver of motivation (Deci & Ryan, 2000). MOOD therefore makes intentions visible both physically and digitally. By sharing your MOOD with peers, users receive social acknowledgement and support, which can increase motivation compared to keeping these intentions private. This shared visibility turns individual behaviour into a collective and socially supported experience.



Make it a brand:

Because MOOD is an accessory and aesthetics proved important in the co-creation sessions, branding is a key part of the concept. The product needs to match the style and interests of the target group and feel like something they want to use and be seen with. MOOD has therefore to be positioned as a brand that is cool, bold, and fun. See the brand positioning on the next page.



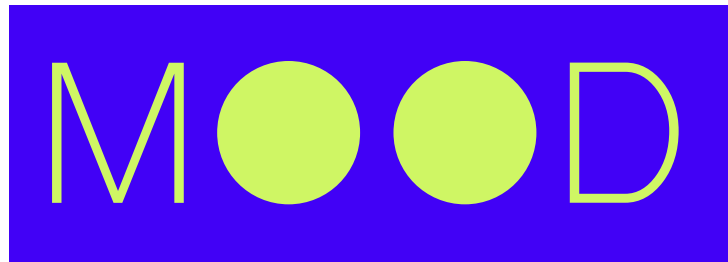
6.3 The Brand MOOD

Positioning MOOD as a brand

Looks

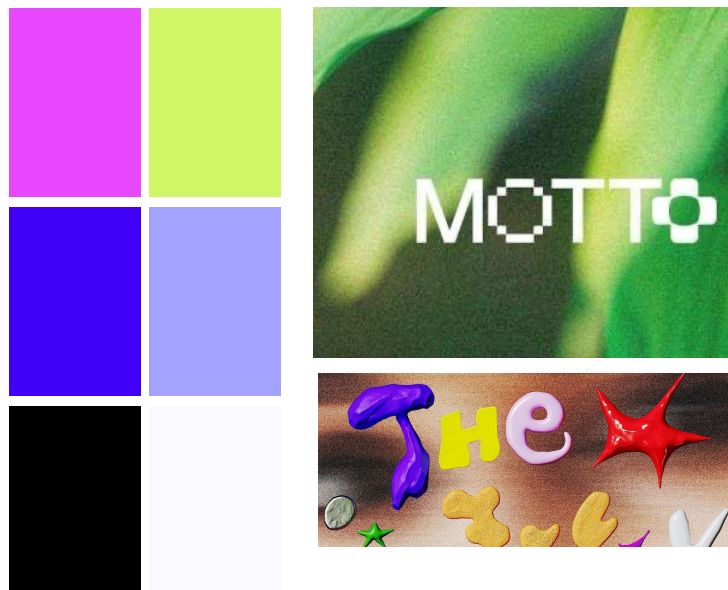
Logo & Visual Language

The MOOD logo is inspired by the circular forms of the physical phone case. These circles translate directly into the two O's in MOOD and return across the brand's visual look. The circle functions as a core design element, appearing in graphic details, and in product features (the holes in the case)



Visual Style

MOOD combines real-life visuals with a digital twist. Photography and textures inspired by everyday life are paired with sleek digital elements such as clean icons, bright colours, pixelated texts. This reflects the brand's position between analogue and digital, online and offline.



Imagery

The brand imagery focuses on doing, not posing. Images show adolescents engaged in activities, moments, and lifestyles. MOODpins can be placed playfully over images, mixing textures, colours, and shapes in a bold, expressive way. The overall look is young, confident, and playful. (see full mood-board in the appendix K)



Function

The functions of the product also match with the brand's core Philosophy. MOOD is not about limits, rules, or restrictions. It does not tell users what not to do. Instead, it focusses on what adolescents want to do. It is about choice, agency, and intentional living. This is reflected in both the product and app design:

Using MOOD is about choosing:

- You choose the place of MOODpins
- You choose when to activate the MOODpins
- You choose the look that fits your style
- You choose what you want to do
- You choose what you need to do so

When creating a mood in the app, the only questions are about what you want and what you need.



Collaboration

MOOD allows for a wide variety of pin collections in different styles, colours, and themes. Pins can evolve with trends, seasons, and cultural moments.

The brand is well-suited for collaborations with brands, movies, games, and cultural icons within youth culture.

For example:

- A LEGO edition
- A Stranger Things edition
- A collaboration with Nike

Collaborations keep MOOD culturally relevant while allowing users to further personalise their experience.



6.4 Relational Scheme Impact

To illustrate how and where this intervention intervenes in the context explored through preliminary research and context mapping, the relational scheme from Chapter 2.5 has been adapted to highlight the areas of impact.

For the complete relational scheme with all clusters, see Appendix L

Changing the current experiences:

- Overwhelmed by the present
By creating clearer boundaries and consciously choosing what to give attention to during each activity, the present moment can feel more manageable and less overwhelming. "This way my free time would feel less stressed" (P3, concept evaluation interviews)
- Free time disappears because of tasks
By blocking distractions and using only the necessary tools, tasks can be done with more focus and efficiency. This leaves more time that truly feels like free time.

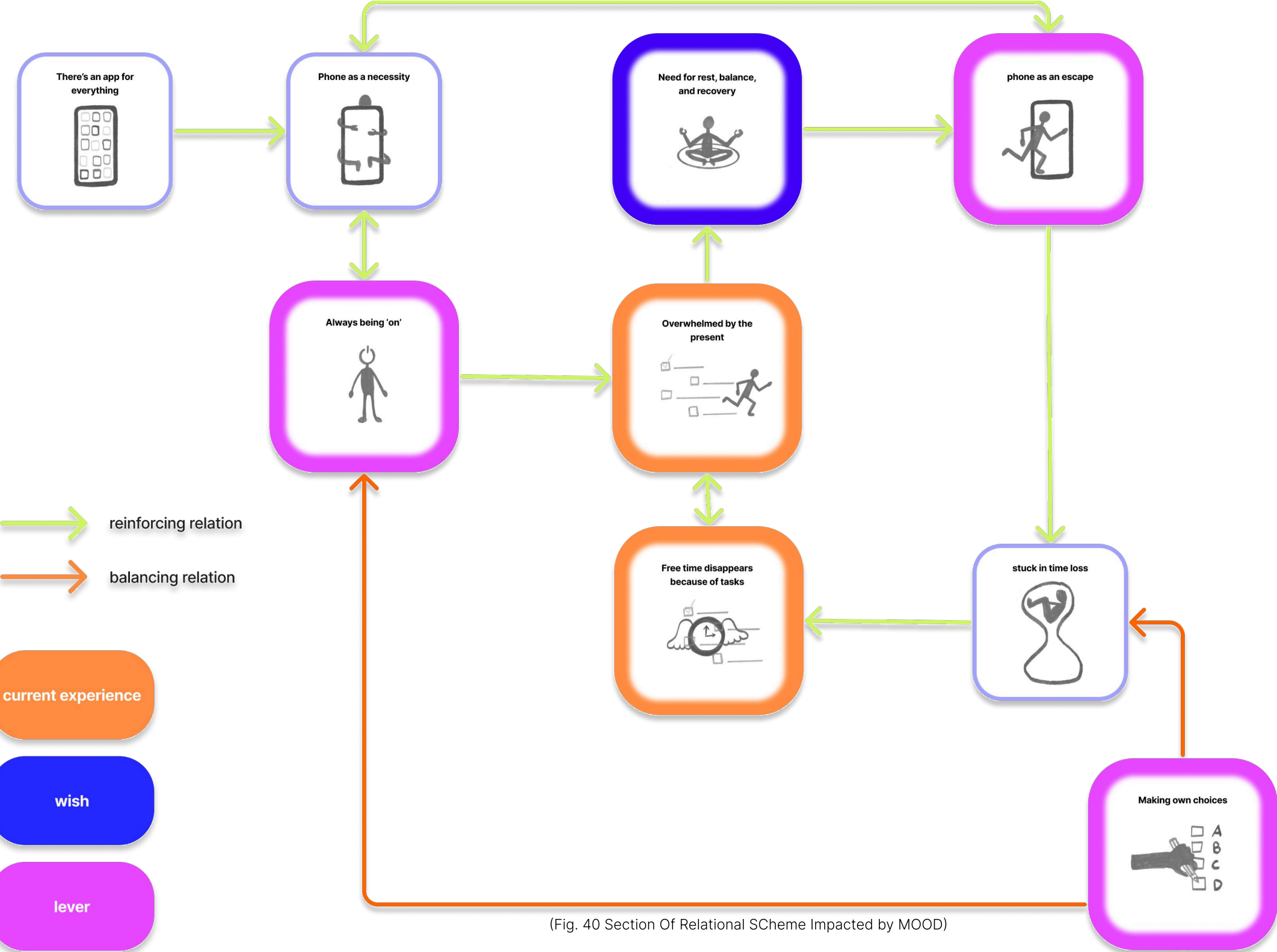
Helping fulfilling wishes:

- Need for rest, balance, and recovery
By making time use more conscious and reducing distractions, MOOD helps create more rest and balance throughout the day. This can lower the need for recovery. When recovery is needed, MOOD can also support intentional recovery moments without distractions, such as watching a movie, going for a walk with only music etc.

Using levers:

- Making own choices
MOOD allows adolescents to decide for themselves how they want to spend their time. Instead of fixed restrictions, it supports self-made choices and conscious control over phone use. Personalisation, such as choosing the look and feel of the app, strengthens this sense of ownership.
- Always being "on"
Blocking certain apps reduces the constant flow of messages that cause distraction and pressure to reply immediately. Seeing each other's MOOD, both physically and digitally, helps normalise being unavailable.

- Phone as an escape
Phones are often used automatically as an escape or form of passive entertainment. MOOD adds a moment of awareness before this happens, encouraging users to pause and consciously decide whether they want to use their phone to escape or do something else.



(Fig. 40 Section Of Relational SCHEME Impacted by MOOD)

Other wishes and needs that could be addressed:

(from the whole relational scheme in Appendix L)

- Drive for connectedness
- Desire for active, meaningful free time

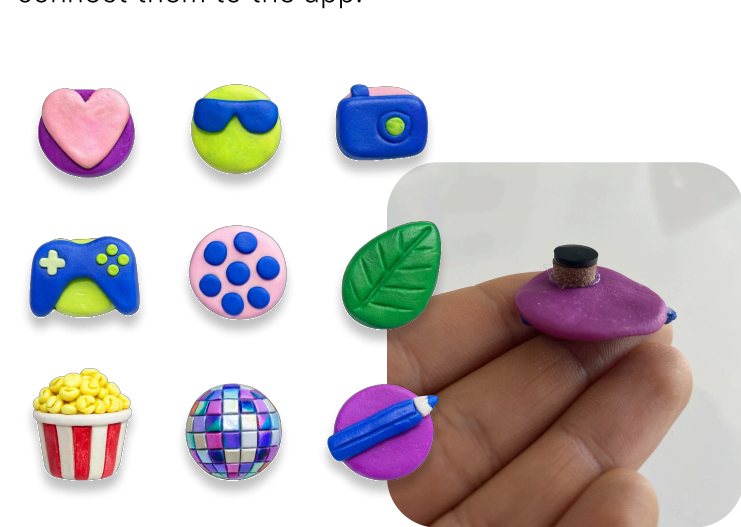
A possible additional function or side effect of MOOD is that it allows users to see who is in a MOOD to do something. For example, a "bored" MOOD or an "open to chill" MOOD. This can lower the barrier to reaching out and encourage spontaneous, real-life or shared activities. In this way, MOOD can support both the need for connectedness and the desire to spend free time in a more active and meaningful way.

6.5.1 Prototype

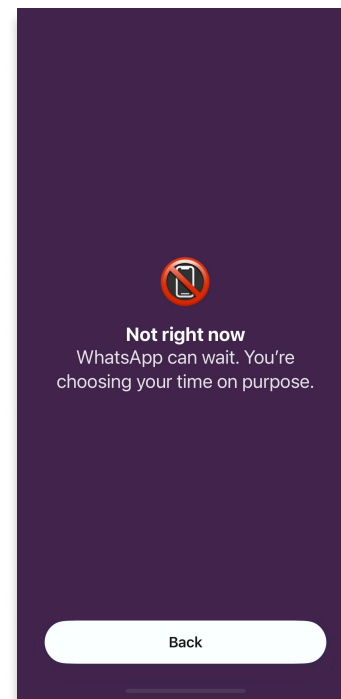
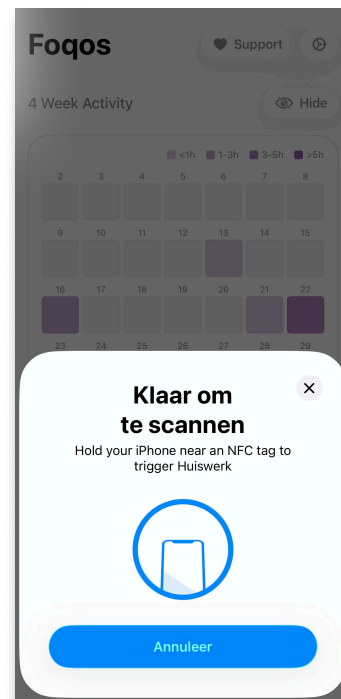
The product

For the first prototype I worked with a phone-case and laser-cut the holes out of it. Making sure that the NFC's would fit exactly and also that the top one could be read by the NFC-reader.

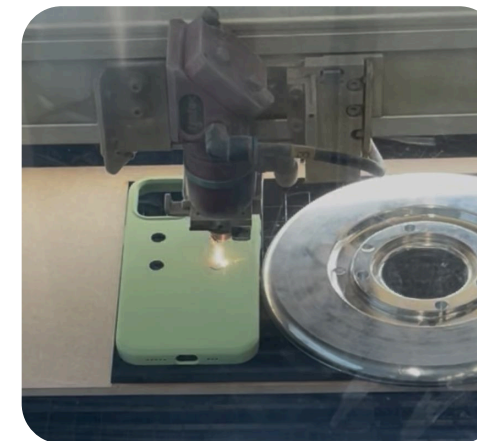
For the first pins I used some clay to model them. The looks of the pins were inspired by different activities. I secured them with glue to an NFC and an extra layer of leather, to be able to fit them in the case and connect them to the app.



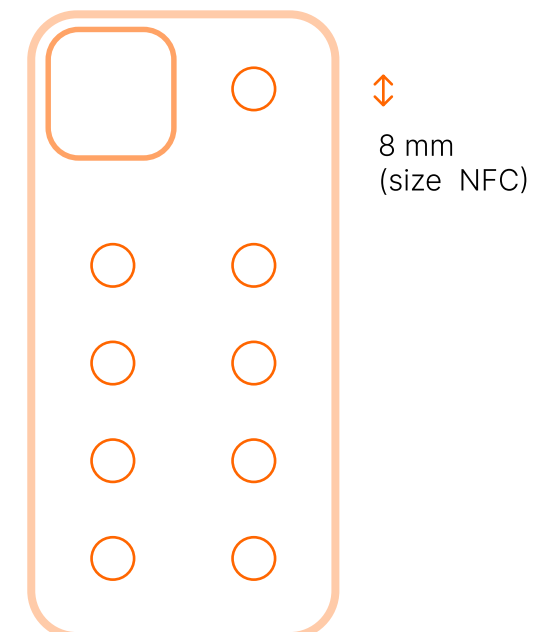
The app I use for testing the function of creating specific modes and blocking apps is Foqos. Foqos is an app with open source code. This way this code can be used and altered and also work as an inspiration of what the MOOD app, when fully developed, would do. But for now just to test the action of activating a MOOD with a MOODpin and a physical NFC I used the current app of Foqos.



For the case, I laser-cut holes into a standard silicone phone case so the MOODpins could fit through. Silicone is not typically considered a material suitable for laser cutting, as the results can vary depending on the thickness and type of silicone used. However, after testing several different silicone cases, the method worked successfully across all of them.



To design the holes in the phone case, their placement and size had to precisely match the NFC tags and be spaced correctly so the NFC reader could detect only the intended one. The top pin is aligned with the phone's NFC reader, allowing the tag to be read when the pin is placed. The exact location of the NFC reader varies by phone model, but it is most commonly located near the top right of the device.



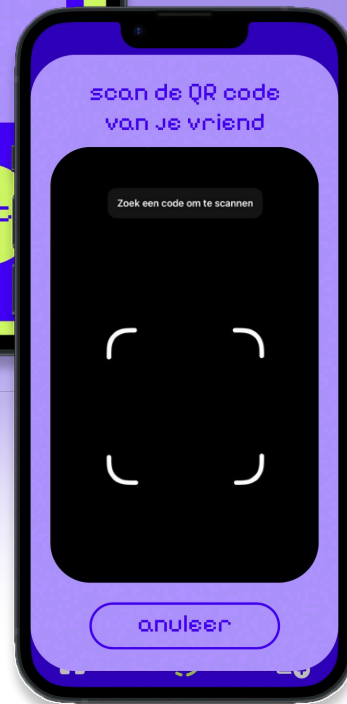
6.5.2 Prototype

The app

Make a profile

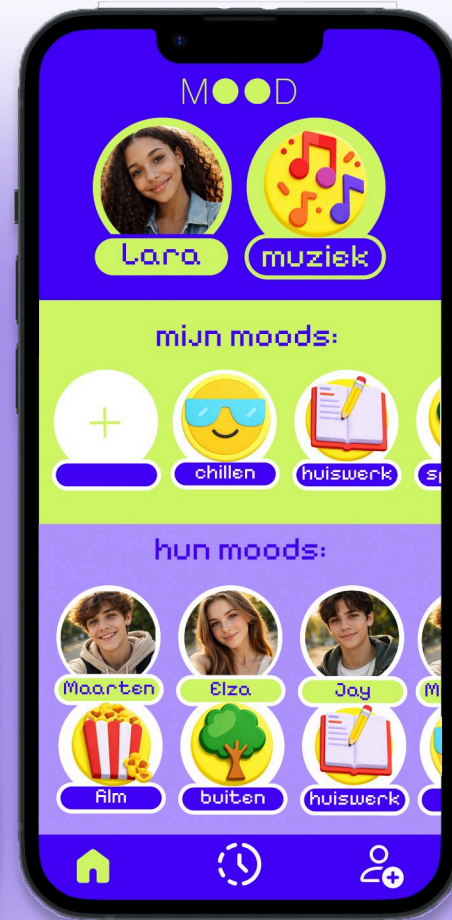
- enter your name
- make a profile picture
- add your friends by scanning a QR-code

Loading page



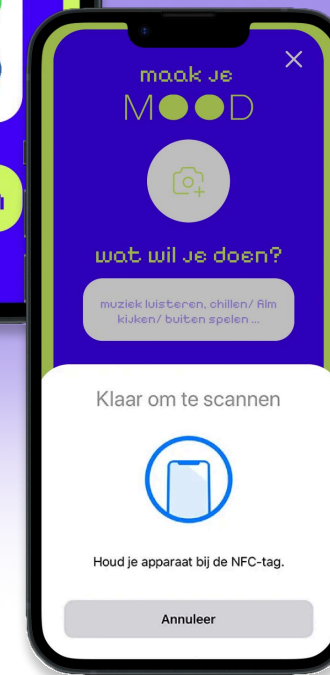
Home-screen

- see your profile and current MOOD on the top
- see your other MOODs
- see the current MOODs of your friends



Make your MOOD

- make your MOOD
- enter what you want to do
- select what you need
- scan your selected MOODpin by putting it in the top part of the case. (scans NFC)



See your MOOD overview

- see your MOOD overview to see all the activities and moods tracked



Reflection

This concept does not consist of a single product. It is a combination of a physical product, an app, and a brand built around them. The pins used with the phone case can also be seen as separate products, allowing for different styles and visual expressions.

The aim of the current prototype is to establish the foundation of this system. This includes the phone case, the app, a selection of pins, and the brand identity and meaning, while demonstrating how these elements work together.

Although branding may seem less aligned with a traditional DFI focus and closer to SPD, it is considered essential for this concept. The brand helps ensure the concept resonates with the target group and is perceived as part of their lifestyle and personal expression. For this reason, branding is explored as part of the concept.

6.6 Conclusions

The final concept, MOOD, is now established. Key design choices, such as ease of use, personal expression, an autonomous rather than restrictive approach, the combination of digital and physical elements, and the brand image, are all informed by the insights gained throughout the research phase.

To enable testing of the concept, a first physical prototype (a phone case and pins with NFC) and a digital prototype (the app flow in Figma) have been developed. In addition, an initial brand style has been created.

These elements will be tested and evaluated in the next chapter.

7

Testing Prototypes

The testing process begins with pilot tests to evaluate the usability of the physical product and participants' initial understanding of the product and app prototype. Based on this feedback, improvements are made before testing with the target-group.

The main tests focus on evaluating the phone case, the app, and the MOOD brand. Both the product and the app are assessed in terms of usability and their potential impact. Brand perception is explored by presenting example campaign visuals and discussing how participants describe the brand and whether they feel attracted by it.

Each participant receives four working MOODpins and a prototype phone case to test in their daily lives for three days. The app's functionality is simulated using a Figma prototype, allowing participants to give feedback on the flow, functions and overall interaction

7.1 Pilot Tests

Pre-testing the first prototypes

Physical product:

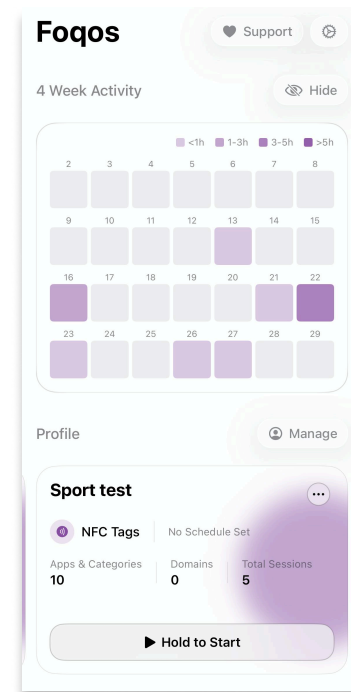
The scanning of the NFC did not always work as smoothly as intended. Through testing I discovered that it is best to place the hole a bit more upwards.

Alteration:

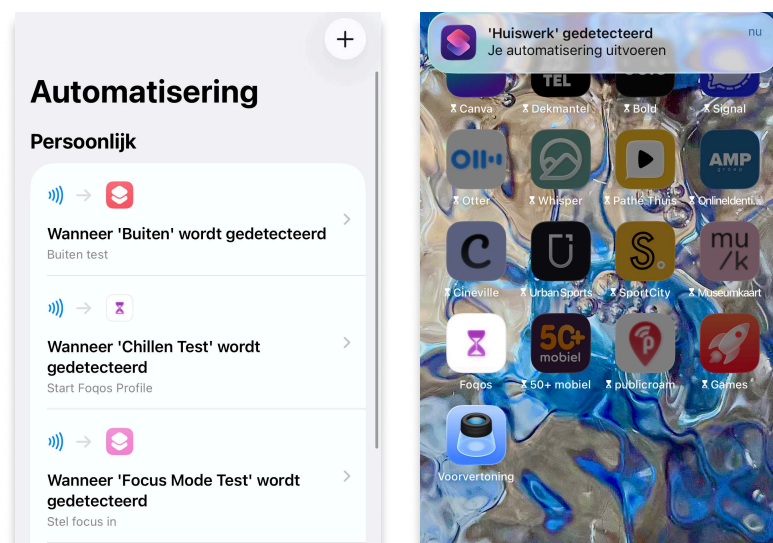


(since the cut came afterwards, it is not placed in line now on this prototype)

Because the Foqos app is used for now for blocking the apps related to a MOODpin, the use-flow now starts with opening the app which eliminates the effect of putting a MOODpin in and directly activating a MOOD. Also to stop a MOOD you need to scan the pin and use the Foqos app.



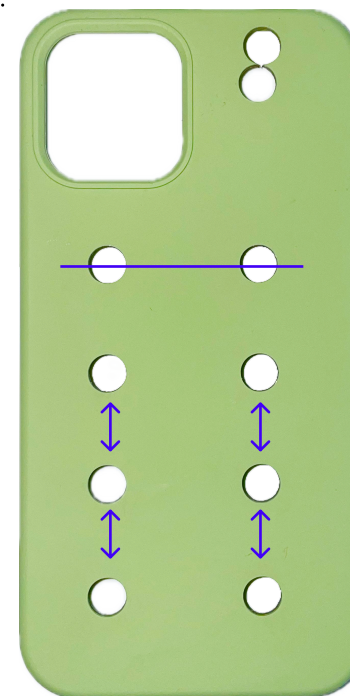
Alteration: see if this can be fixed by using shortcuts so when scanning the mood is directly activated without the need to open the app.



The pins are still slightly wobbly and not very strong, but they function well enough for a prototype. To prevent them from sticking out too much at the top of the case, the design could be adjusted by raising the centre of the pins slightly.

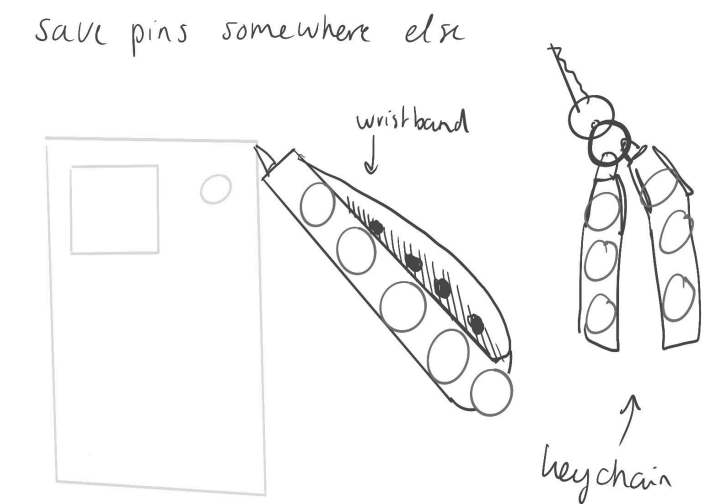


Overall, the case with pins works well. However, reducing the number of holes (by two) could make the design feel less busy while still allowing users to hold the case comfortably by placing their fingers between the pins. It then allows 7 pins which is also perceived as enough MOODpins to carry around most of the time.



The 3D pins were described as fun and appealing, especially because they are visually "loud." However, at the same time their shape can make it difficult to put the phone case into a pocket.

This issue needs to be further explored. Possible alternatives can be considered. Like making the pins smoother so they can slide more easily when placing the phone in a pocket, or storing the pins separately from the case, for example in a wristband or keychain.



For the test it can be good to have some more (example) styles of pins. So the users can see the options and feel more like personalising the case.

7.1 Pilot Tests

Pre-testing the first prototypes

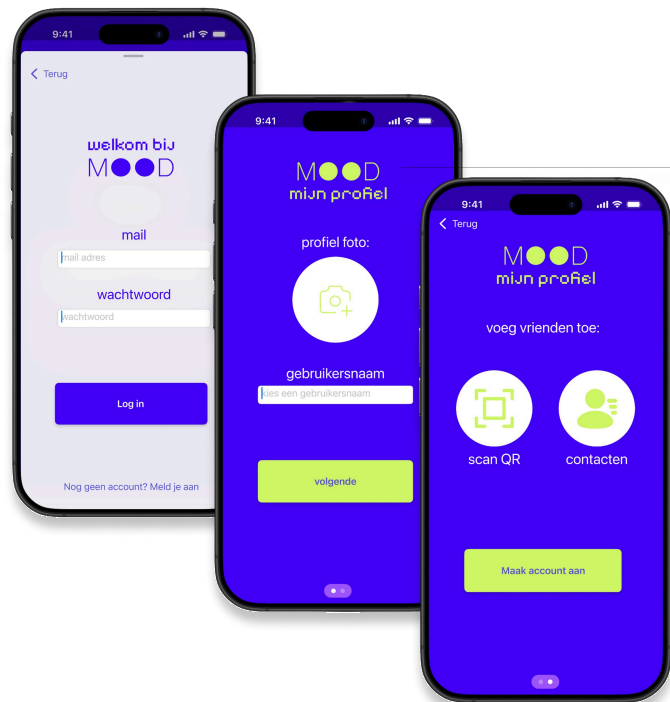
The App:

To test the flow of the app feedback was asked from Scroll Scroll Scroll as well as from fellow students:

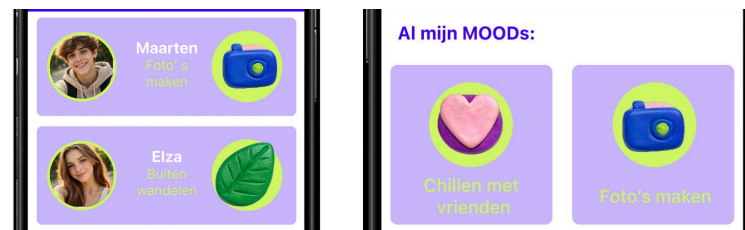
These were the feedback points:

Scroll Scroll Scroll:

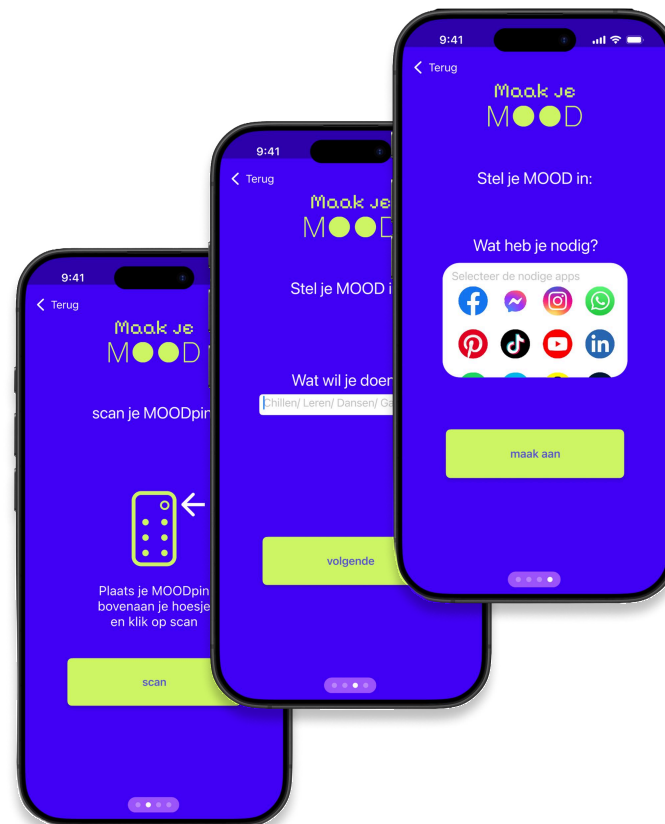
Try to limit each screen to one main function. For example, use separate screens for logging in or creating an account, setting up a profile, and other key actions. This can improve clarity and focus.



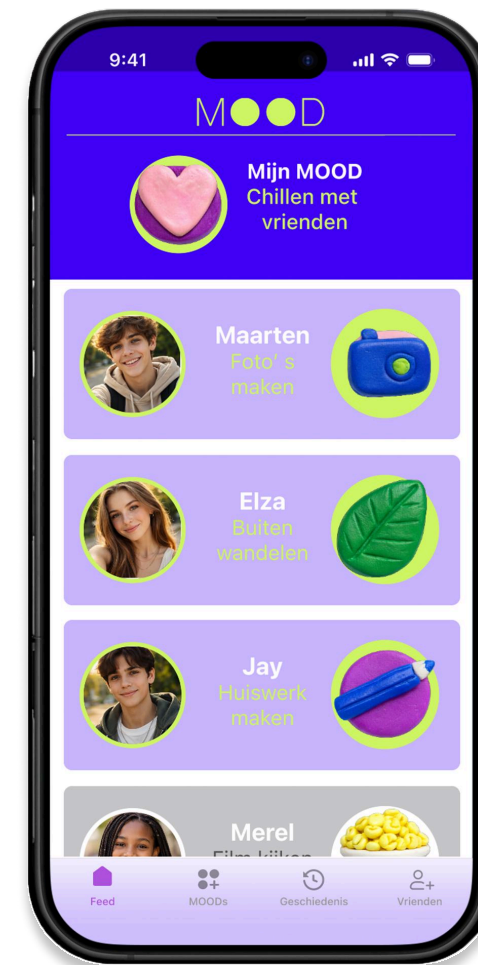
- Rework the avatar and MOOD patterns so they function as one clear and consistent system.



- Turn setting a MOOD into a step-by-step process, with one decision per screen.



- Simplify the home screen by focusing it more on a feed of friends' MOODs, and make setting your own MOOD less prominent



Students feedback

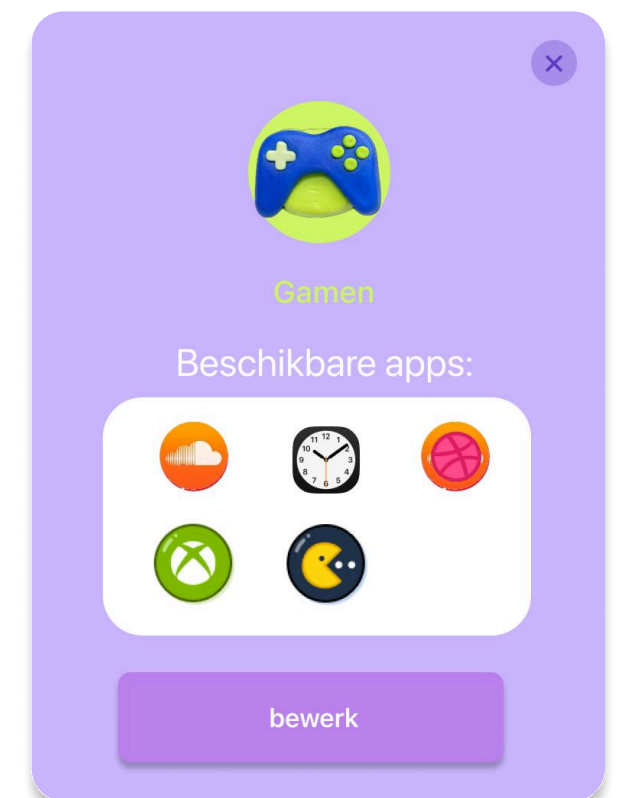
- Integrate how to use the phone-case/ pins somewhere in the app



- Include the option to add friends from contacts
- If friends want to add you they should be able to scan your profile QR as well



- Make it possible to alter existing MOODs for when you want to change something.



7.2 Test Preparation

Testing the prototype with target-group

Pilot testing

Before testing with the target group, pilot tests were conducted to evaluate the usability of the physical product and the initial understanding of the app prototype. Feedback from these sessions was implemented before continuing with the main tests.

1. Research Objective

The objective of this user test is to evaluate both the behavioural impact and the experiential quality of the MOOD prototype among adolescents over a three-day period.

The primary aim is to investigate whether the concept:

- Increases perceived control over time and attention
- Encourages more conscious use of social media
- Improves the quality of participants' leisure time
- Enables peer inspiration
- Suited for Independent use
- Fits into adolescents' everyday life
- Stimulates engagement in offline activities

In addition to these behavioural outcomes, the study also seeks insight into the usability of the physical product and accompanying app prototype, as well as participants' perceptions of the MOOD brand identity. While these aspects are secondary to the behavioural impact, they provide important direction for further design refinement.

Research approach

The study follows a mixed-methods approach combining:

- A three-day in-context usage test
- Logged behavioural data (MOOD activation and duration)
- A post-test interview
- A usability walkthrough of the app prototype
- Brand perception evaluation

This approach allows for both quantitative insights (usage duration and frequency) and qualitative reflections (user experience and perceived behavioural change).

Participants

The target group consists of at three adolescents.

P1: girl 14

P2: boy 11

P3: girl 12

Preparation

Prior to the test period, participants complete an online form providing:

- Their phone model
- Four selected activities they associate with distinct "MOODs"

Based on this input, a personalised prototype is prepared for each participant consisting of:

- A custom phone case compatible with their device
- Four MOODpins linked to their selected activities
- A Figma-based app prototype
- A functional app-blocking system operating through Foqos

(See appendix M for the creation process of these personal prototypes for the user-test)

Technical Implementation

The app-blocking function is technically executed through Foqos, but this application remains invisible to participants. It is removed from the home screen to prevent influencing their experience. From the user's perspective, MOODs are activated solely by inserting a MOODpin into the phone case.

In the final product, switching MOODpins would automatically replace the previous MOOD. However, due to technical limitations of Foqos, this is not possible in the current prototype. Therefore, an additional "Switch MOODpin" is used to remove all restrictions before activating a new MOOD.

This extra step slightly alters the intended interaction flow and is taken into account during evaluation and analysis.



7.3 Test Plan

Testing the prototype with target-group

First use

At the start of the test participants get their personal prototype (case + MOODpins that they could choose from). They also got to explore the Figma prototype of the MOOD app. Their first use is observed and reactions noted focussed on first impressions, clarity and usability.

Test procedure

Participants use the MOOD prototype in their daily environment for three consecutive days. They are instructed to integrate it naturally into their routines and activate moods whenever relevant. No minimum usage is required, as the goal is to observe organic behaviour rather than imposed interaction.

During the test period, data is collected on which MOODs are activated, how often they are used, and how long they remain active. This data provides insight into usage patterns and supports the post-test interview by linking subjective experiences to actual behaviour.

Post-Test Evaluation

After the three-day test period, participants take part in a semi-structured interview that evaluates behavioural impact, usability, and brand perception.

Behavioural impact

First, participants reflect on the behavioural influence of the prototype. Using Likert-scale statements followed by open-ended questions, they assess whether the product:

- Increases perceived control over time and attention
- Encourages more conscious use of social media
- Improves the quality of participants' leisure time
- Enables peer inspiration
- Stimulates engagement in offline activities

Participants describe when the concept was effective or ineffective, whether it led to behavioural changes, and whether they would use it long term.

Their responses are compared with the logged usage data, and they are asked to reflect on any similarities or differences between their perception and actual use.

Usability

The usability of both the physical product and the app prototype is also evaluated during the post-test interview, following the three-day usage period.

For the physical product, participants reflect on whether the functioning of the phone case was clear and felt intuitive. They are also asked what they would improve or retain in the design.

The app was first explored during the initial use experience and then also interacted with it through pop-up moments during the 3 day test.

In the post-test evaluation participants reflected on the overall experience, commenting on the different features.

Brand perception

Finally, participants evaluate the MOOD brand. They are first asked to describe how they imagine a brand around this product. Afterwards, they review a set of visuals and reflect on whether it matches their vision and whether they would feel attracted to it. They are also asked to consider how they would promote this brand to other adolescents. This input supports further refinement of the brand's visual identity and positioning.

Expected outcome

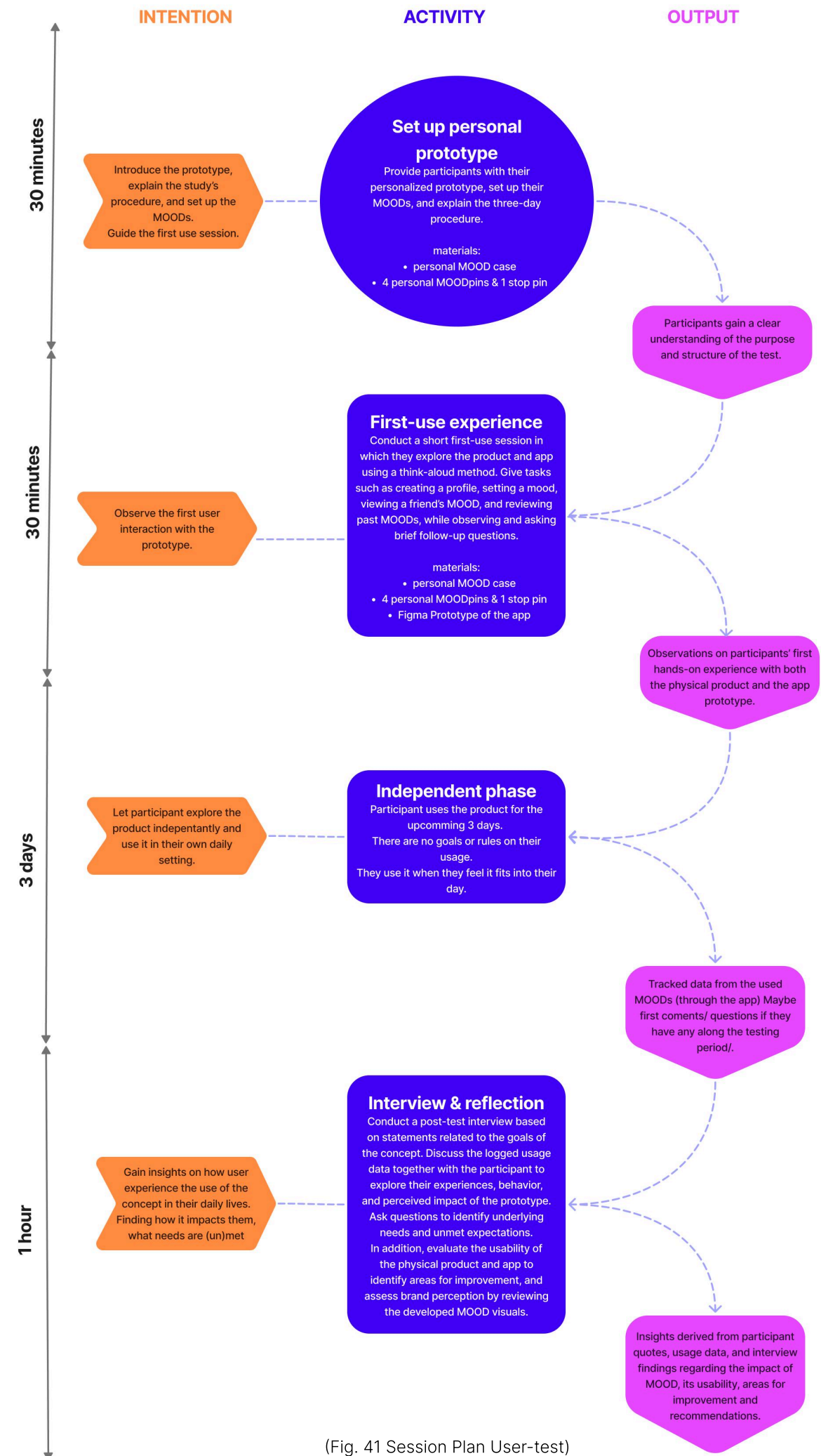
The study is expected to generate both quantitative and qualitative data to support evaluation of the MOOD concept.

The collected material will include:

- Observations and quotes of first interaction
- Logged behavioural data from tracked MOOD activations (frequency and duration)
- Audio recordings of post-test interviews, including transcriptions
- Anonymised photographs documenting first-time product use

Through these materials the study is expected to provide insights for both the impact of the concept and the usability of the product and the app prototype.

It will also generate insights into brand perception and appeal.



(Fig. 41 Session Plan User-test)

7.4 First-Use

Results from first use with target-group

First-use

To gather initial reactions, the first-use moment was observed and followed by short interviews. The focus was on participants' first impressions of the prototype, as well as its clarity and usability.

Below are the key findings for both the physical product and the app. These early insights already highlight valuable opportunities for improvement.

Physical Product (Case & Mood Pins)

The physical product generated immediate positive reactions. Participants described it as "fun" and visually appealing. The pins were especially appreciated and intuitively understood. One participant immediately used the extra band to store additional pins.

Users felt the product "would fit into my life" and "could help with focusing," recognising the situations it addresses. Importantly, MOODpins were not seen as literal representations of activities. Instead, participants interpreted them creatively. As one user explained, "Astronaut could mean watching a movie, because you're in another world." This flexibility was experienced as a strength.

Clear individual differences emerged. P1 was enthusiastic and said she "would really like to use it." P3 immediately showed it to her friends, highlighting its social appeal. P2 preferred simplicity: he liked the pins mainly as a phone accessory and expressed the need for one strong focus mode that blocks distractions while studying.

App

The app flow was described as clear and easy to follow. However, selecting MOODs during setup was sometimes challenging, as participants were unsure which apps to choose, suggesting the need for example or default options. The "Own MOOD" status was not immediately visible and could be made more prominent.

The sharing feature was considered enjoyable within a small, self-selected group, and if it can be turned off. Participants liked seeing what others are doing, as it could encourage spontaneous interaction or mutual understanding.

Users also appreciated reviewing past moods. One participant suggested adding light planning functionality, allowing users to schedule moods in advance.

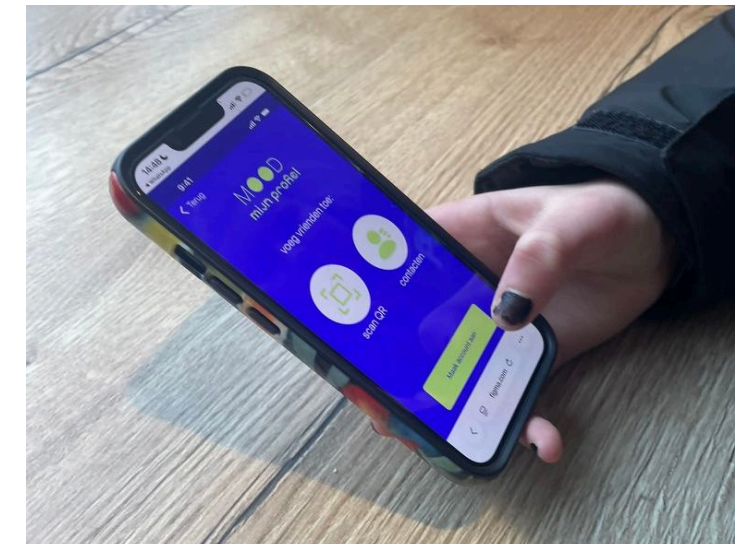
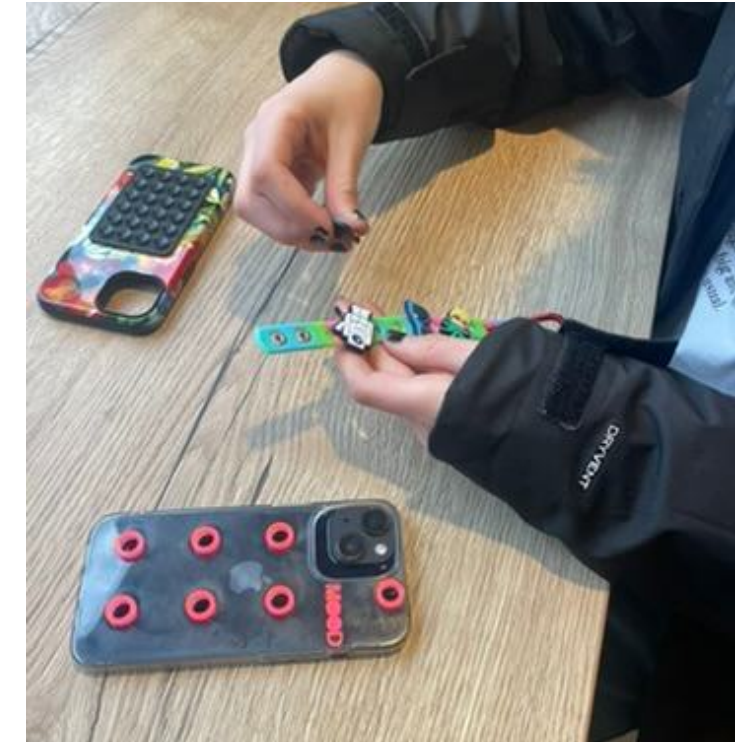
Key Insights

Strengths

- Strong first impression: playful, appealing design with intuitive physical interaction.
- Clear app flow and overall understandability.
- Concept feels relevant and supportive of focus.
- Creative freedom in interpreting MOODpins is valued.
- Social sharing is appreciated when limited and optional.

Improvements:

- Provide example or default MOODs to support selection during setup.
- Make the "Own MOOD" feature more visible.
- Explore light planning functionality (e.g. scheduling moods).



7.5 Test Results

From testing with target-group

Data Analysis

The analysis combined logged usage data, interview responses, and observations over the three-day test period. Patterns in frequency, duration, and preferred MOODs were examined.

By comparing behavioural data with participant reflections, both usability aspects and behavioural impact were assessed.

Behavioural impact

To evaluate the behavioural impact of the final concept, participants were asked to rate three statements both before and after the three-day test period. Each statement was scored on a five-point Likert-scale ranging from 0 (completely disagree) to 5 (completely agree).

This pre-post comparison was designed to assess whether the concept supports adolescents in gaining greater control over their time and attention, engaging with social media more consciously, and ultimately enhancing the quality of their free time.

The strongest improvement was seen in conscious social media use (Figure 42), increasing from an average of 2-3 before the test to 5 after using MOOD. Before the intervention, behaviour was described as automatic:

"When I pick up my phone, I basically go to social media automatically." (P1)

After using MOOD, participants explained that blocking access increased awareness:

"It helps because you can't access the app or get notifications." (P2)

Perceived control over time and attention also increased significantly. As one participant shared pre-test:

"Sometimes you suddenly spend three or four hours on your phone without even realising it." (P3)

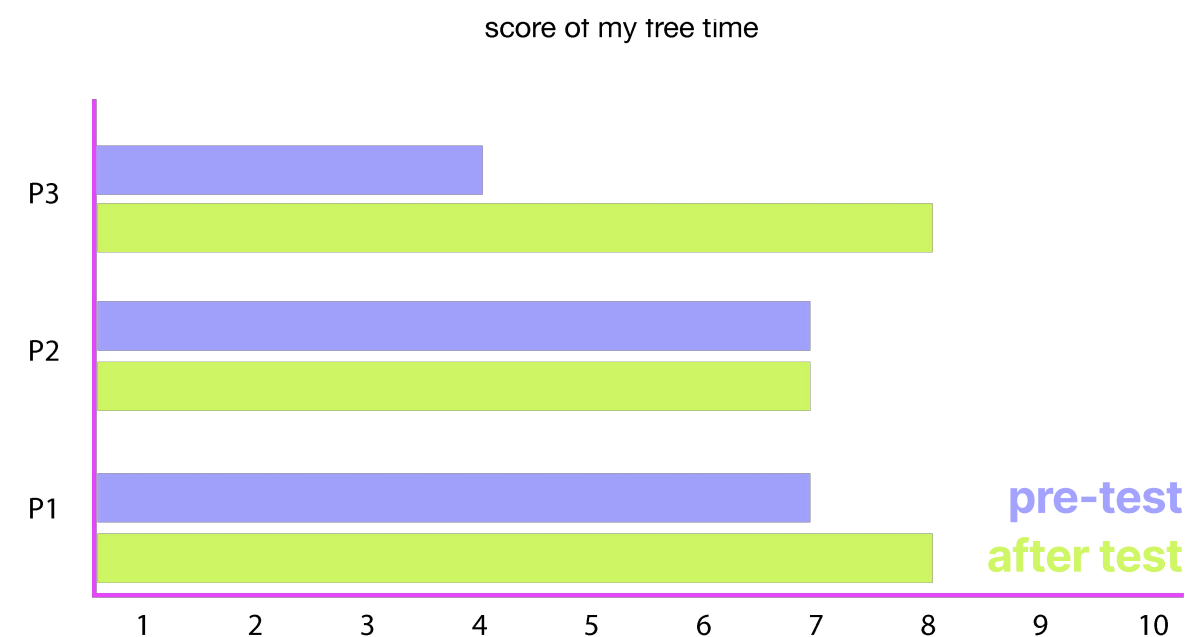
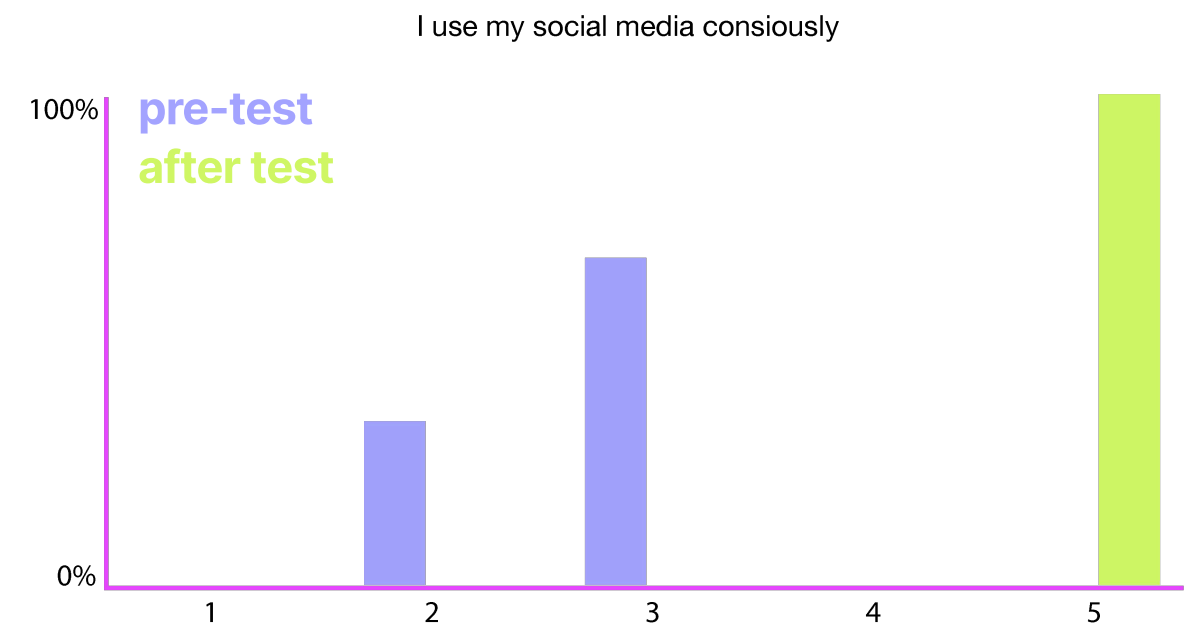
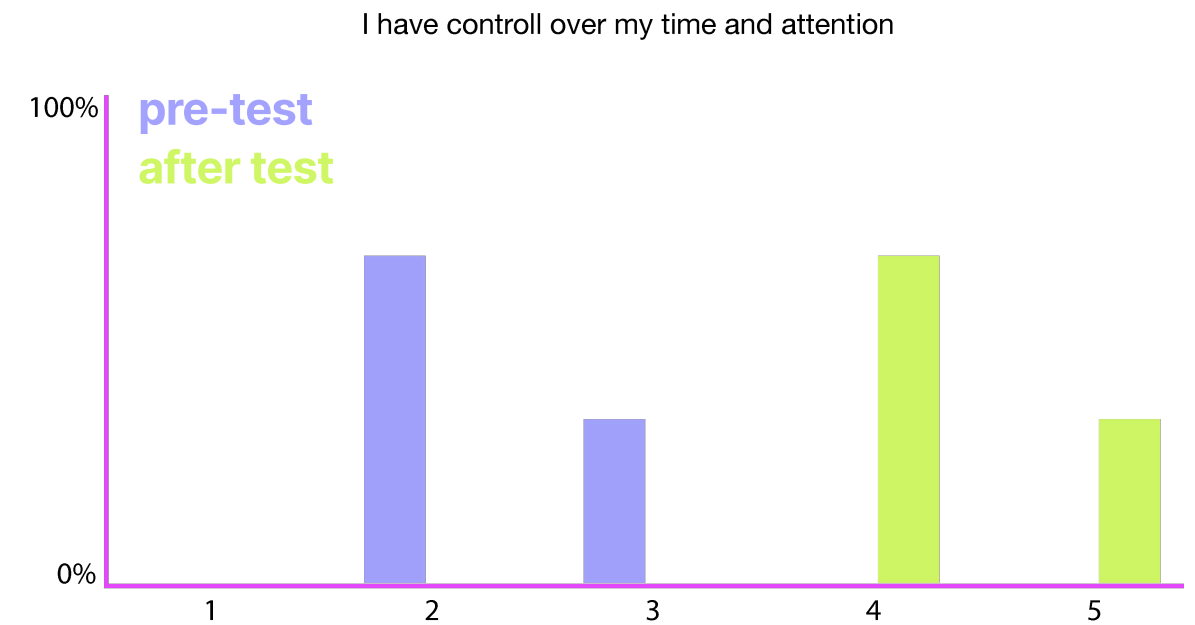
After using the concept:

"With this, I would be able to choose better and concentrate better on what I'm doing." (P1)

Two participants also reported an improved quality of free time (Figure 42). Better focus helped them finish tasks and created more space for enjoyable activities:

"I actually want to play guitar or read... but then I think: I'll just finish watching this video." (P3)
 "When you finish things with focus, it feels like you have more free time." (P1)

Overall, the results suggest that MOOD reduces automatic scrolling, increases awareness, and strengthens adolescents' sense of control over their time and attention.



(Fig. 42 Ratings of User-test Evaluations)

Concept qualities

Several qualities linked to the design brief were evaluated (see Appendix N for detailed overview).

Fit within daily life

The product was generally seen as fitting well into daily routines. Participants already use phone cases and found it easy to switch to this one. The keychain was considered practical, though not ideal in every situation. Since the pins are loose elements, they could get lost. Therefore, an alternative option or solution is needed for this situation.

Improvements include a more secure pin attachment and more personalisation options. P2 and P3 felt the design did not fully match their style and suggested different colours or custom elements.

Independent use

The product was easy to understand and required no extra explanation. However, activation was sometimes forgotten or motivation was low.

“I just need to find some motivation for it.”

Reminders were seen as helpful:

“When I get those kinds of notifications, I think: maybe I should stop for a moment.” (P3)

The extra ‘Switch MOODpin’ step of the prototype also made it easier to leave the system on inactive.

Inspires others

The concept was rated highly for its social impact. It can spark conversations and encourage others to reflect on their behaviour.

“If you use it around your friends, you’ll talk about it, and they might think: hey, I want that too.” (P2)

Seeing each other’s activities was also motivating:

“If I see someone else studying, I think: oh yeah, I should study too.” (P1)

Encourages offline activities

This effect was partly supported. Participants felt it could help them choose offline activities more consciously, but not automatically.

“Maybe a little... but not necessarily.” (P2)

Reminders or suggestions for alternative activities could strengthen this effect.

Tracked use

The activation time of each MOOD was tracked and discussed during the post-test evaluation, providing valuable insight into actual usage behaviour.

Although the initial evaluations were very positive, the tracked use was slightly lower than expected. Nevertheless, it remains a significant that participants deliberately chose to activate MOOD to block certain apps during their day.

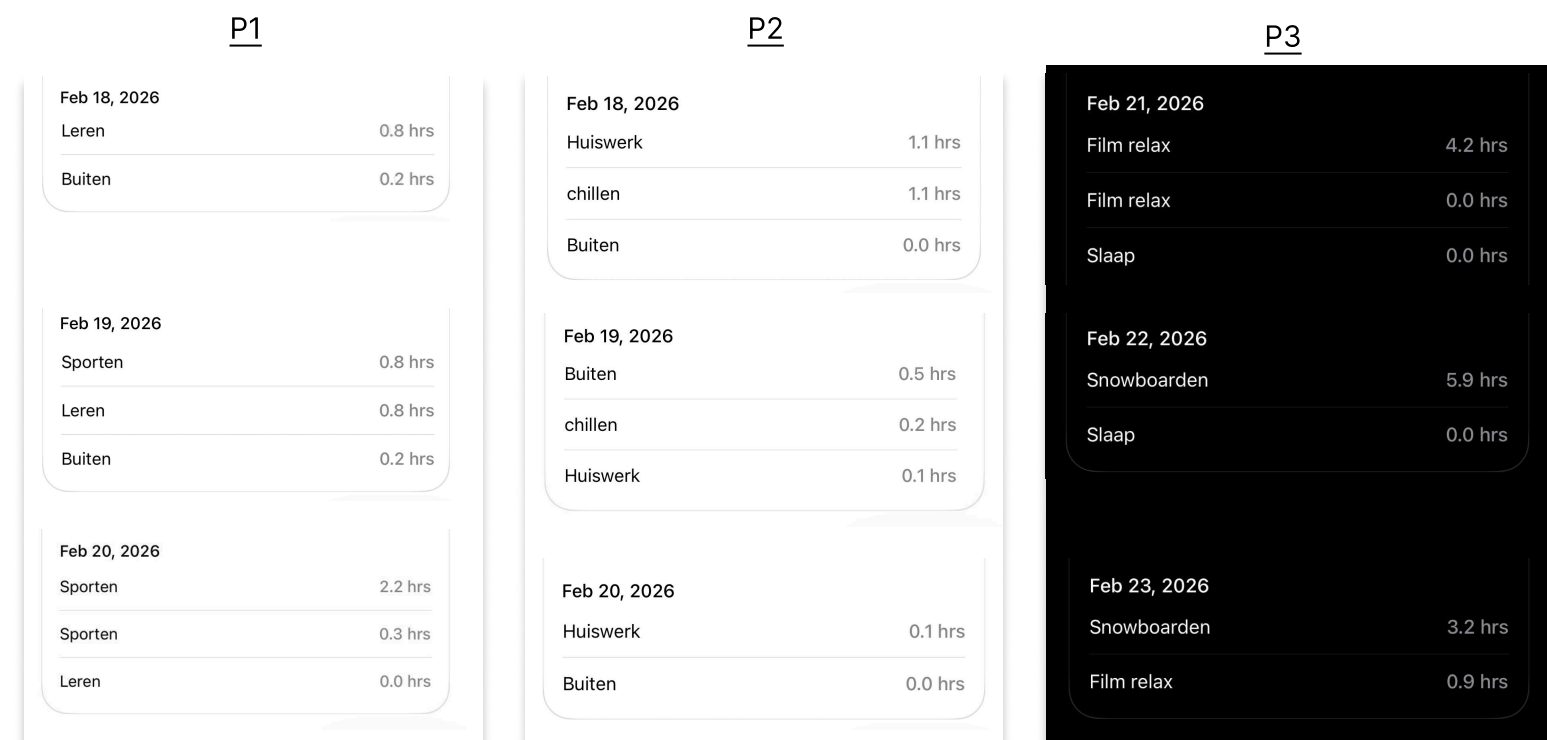
Some of the test days took place during school holidays, which influenced the types of activities and MOODs activated. For example, P3 created a snowboarding mood while on vacation. At the same time, fewer school-related tasks meant that focus MOODs were used less frequently.

The conversations about the tracked use also revealed practical challenges. Some felt that the created MOODs did not include all necessary apps, as one participant explained: “I mainly had the problem that I had disabled apps that I actually needed.”(P1)

In addition, MOODs were sometimes forgotten, and motivation to activate them was occasionally low. Here again the extra ‘Switch MOODpin’ step disrupted the intended smooth interaction flow and sometimes resulted in MOODs remaining inactive.

Participants suggested that smoother activation, context-specific MOODs, notifications or reminders or optional time limits could strengthen usage.

However, these features should be implemented carefully, as the concept must remain supportive rather than restrictive. Maintaining a sense of autonomy is essential for long-term use and acceptance.



(Fig. 43 Overview of Tracked MOOD activation per participant)



Brand view MOOD

To understand how MOOD should look and feel, brand perception was explored in the evaluation interviews. Participants described the brand as playful, cool, useful, active, happy, and fun.

The proposed visual examples (see Appendix K) were generally well received and aligned with these associations. However, some images felt too styled or unrealistic. Participants suggested making the visuals more relatable and showing the phone cases more clearly in everyday contexts.

For promotion, visibility in daily life was seen as key. Seeing others use MOOD in familiar places such as sports clubs, study groups, or parks would spark curiosity and show that it fits everyday routines. Influencers were also mentioned as an (paradoxical but) effective way to reach the target group. Additionally, limited edition pins and collaborations with brands or clubs they like were seen as a way to keep the concept fresh and appealing and could promote them as collectable items.

Key insights post-evaluation interview

Strengths

- Enables more conscious social media use.
- Increases perceived control over time and attention.
- Creates a deliberate choice moment that improves focus and free time quality.
- Blocking apps effectively reduces automatic scrolling.
- Fits naturally into daily life, as adolescents already use phone cases.
- Keychain provides practical storage, especially for outdoor or on-the-go use.
- Product and app are intuitive and easy to understand.
- Sparks peer interest and can inspire others, both to use the product and to engage in activities.

Improvements/ additions

Physical Product

- Improve the security of the pin attachment for reliable daily use.
- Offer different case designs and personalisation options to match various styles.

App & Technical Function

- Support MOOD creation with default moods, examples, or shared templates.
- Add motivational elements such as reminders, notifications, or time insights.
- Make MOODs editable after creation.
- Ensure social sharing remains optional and adjustable per contact.
- A way to exit MOODs in case of a lost pin.

Branding & Positioning

- Show the product more clearly in real-life contexts to increase recognisability.
- Explore collaborations with brands, clubs, and events.
- Promote in free-time environments (sports clubs, study spaces, parks).
- Introduce limited edition or collectible pins.



Reflection

Choosing to create personalised prototypes took more time and effort than my original plan to simulate the context and test a basic user flow. However, it was definitely worth it.

Making physical prototypes also created an extra moment to test and improve the design itself. It made the concept feel more real and engaging. It sparked natural reactions and honest conversations about how it looks and works.

Tracking the MOOD activation data was especially valuable. Without it, I would mainly have had positive answers in the interviews. While that was encouraging, it did not fully show what participants actually did.

As I also noticed in the generative research of this project, adolescents often know what the socially desired answer is around this topic, but their real behaviour can be different. By combining what participants said with what they actually did, the evaluation became more honest and insightful.

This process taught me that when designing for behavioural change, it is important to look beyond opinions and reflect critically. Using real behavioural data can be a tool to help understand what can truly work in practice.

7.6 Conclusions

The user tests show that MOOD addresses the design brief effectively and aligns well with the target group.

The concept increases perceived control over time and attention and strongly supports more conscious social media use. By interrupting automatic behaviour, it helps reduce endless scrolling and creates moments of intentional choice and focus, which can improve the quality of adolescents' free time.

Both the physical product and the app were experienced as intuitive and engaging, and generally fit into daily life. The inclusion of logged usage data added important depth, revealing actual behaviour beyond self-reported feedback.

The findings of the tests highlight strengths as well as areas for improvement. These found insights form the basis for the design iterations and recommendations presented in the next chapter.

8

Iterations & Recommendations

From the user test, several areas for improvement and potential additions were identified. In this chapter, these insights are implemented as iterations of the final concept design. Additionally, recommendations are provided for aspects that could be further investigated, developed, or explored to strengthen or expand the concept.

To conclude this final chapter, several critical questions about the design are addressed and answered.

8.1 Iterations

Improvements on final concept

Physical Product Iterations

Securing pins

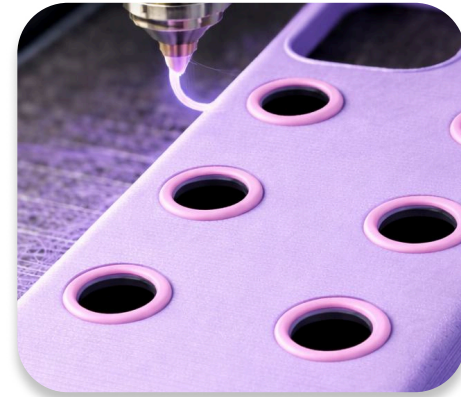
The iterations regarding the physical product mainly focus on improving the security and durability of the pin placements. In professional production of the cases, the extra rings should be secured more reliably than in the prototype, where glue was used.

This could be achieved through stronger fastening methods or by integrating the rings directly into the case design (by for example using a technique like 3D printing)

Additionally, the shape of the rings may be slightly refined to ensure the product moves more smoothly in pockets and feels more comfortable during everyday use. A rounded ring made from rubber or silicone could be a good option, as it would reduce friction while maintaining a soft feel.

Look of the Cases

Testing showed that adolescents are more likely to wear the case daily if it matches their personal style. Therefore, offering different design options or allowing users to choose or customise their own designs would increase adoption and everyday use.



App technical Iterations

Default MOODs

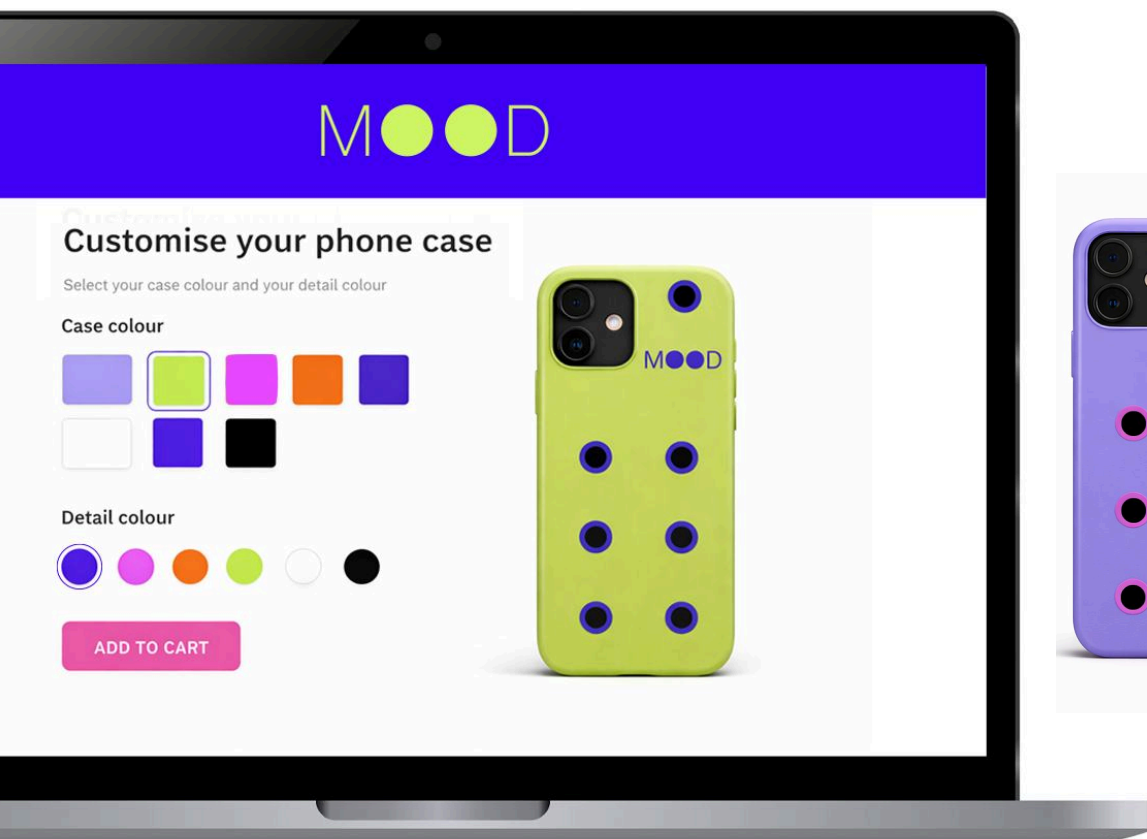
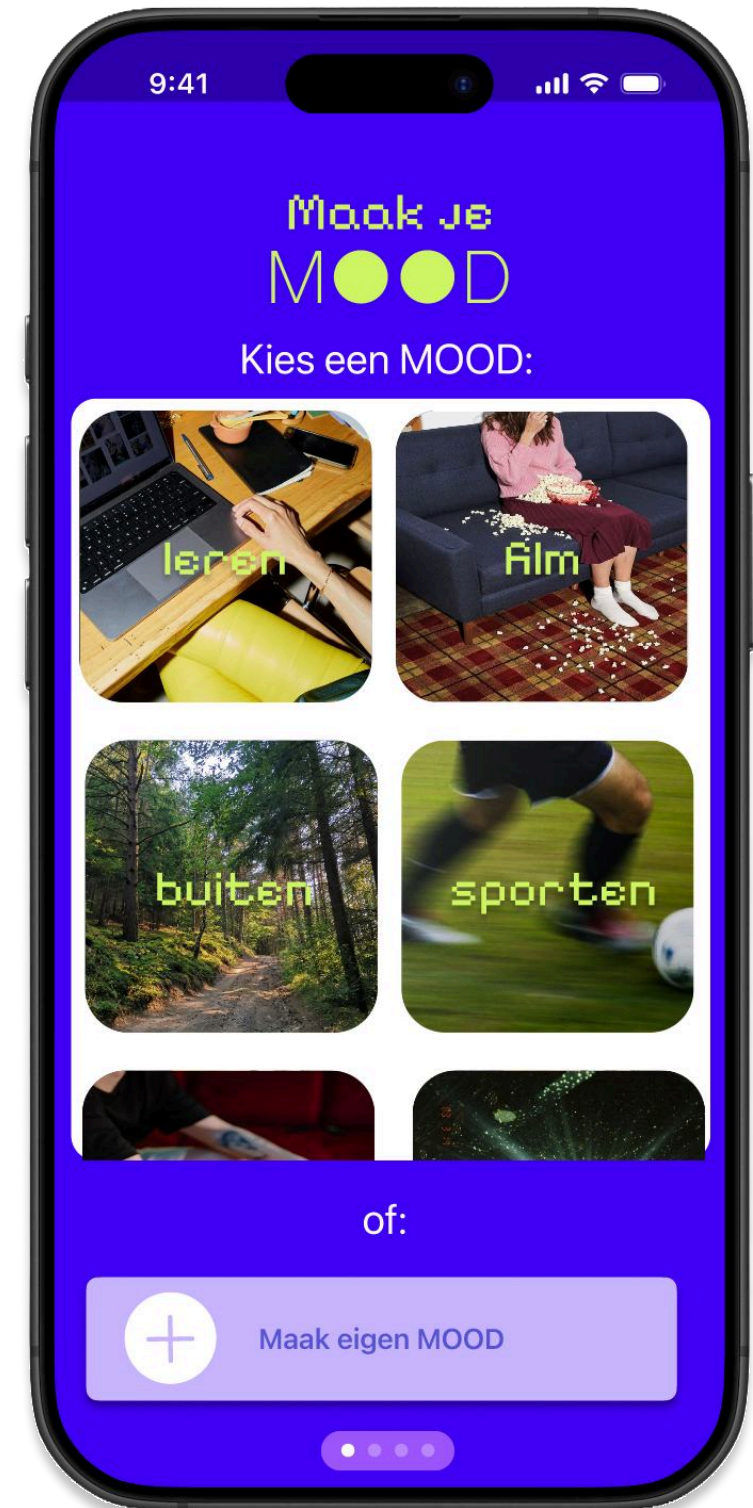
To make setting up MOODs easier and faster, the app includes a set of predefined default MOODs. These are based on commonly used contexts such as sporting, sleeping, relaxing, or studying, and already contain carefully considered app settings. These default MOODs allow users to quickly start using the system without needing to configure everything themselves.

They also create a standardised reference point, enabling comparisons between users because everyone can use the same baseline MOODs. This can strengthen the social shareable element.

For users who want a more personalised setup, there is still the option to create fully customised MOODs.

Additionally, a MOOD sharing platform could allow users to share their created MOOD configurations with others, enabling people to discover and use settings developed by the community.

In the iterated prototype, the images from the brand evaluation were chosen as the looks for default MOODs because participants felt they clearly represent the intended mood or activity.



Planner

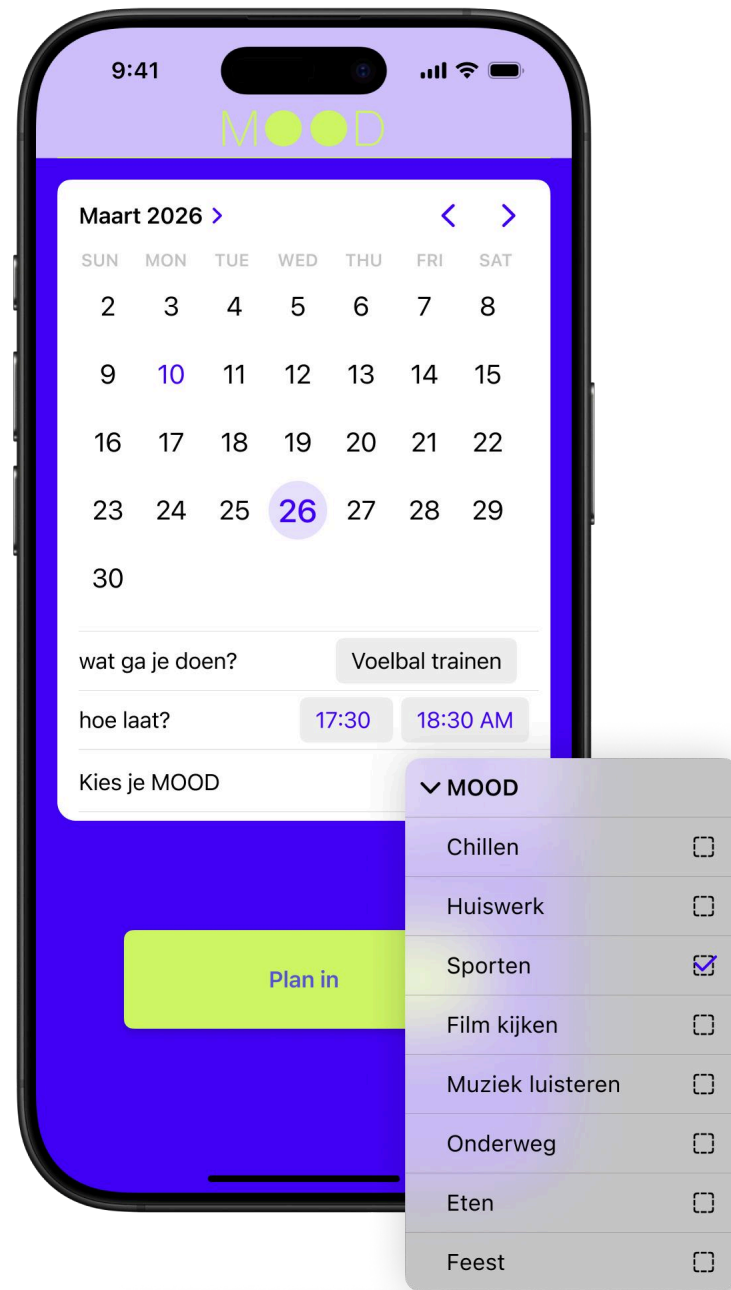
The history page is extended to a calendar so also serves as a way to plan your MOODs and activities.

Reminders

The ideal use-flow of the product assumes that a MOOD is always active. Users switch between different MOODs by physically changing the pins. To support consistent use, reminders can be integrated into the system. For example:

- A reminder for a planned activity + MOOD
- A reminder if a user stays in a chill MOOD for an extended period
- A reminder if a MOOD has not been used for a while

These prompts can encourage engagement and motivate users to activate a MOOD.



Peak moment

Sometimes a user may urgently need access to a specific app without wanting to completely deactivate their current MOOD.

To address this, a Peak Moment feature can be enabled. This allows temporary access to a selected app for a short period (for example five minutes) without the need to break the active MOOD session.



Sharing is optional

Sharing MOOD configurations with others is seen as a potentially beneficial feature that can support behaviour change and normalisation of claiming your time.

However, participation in sharing should always remain optional.

Users can decide individually whether they want to share their MOODs with others or keep them private.

Emergency MOODstop

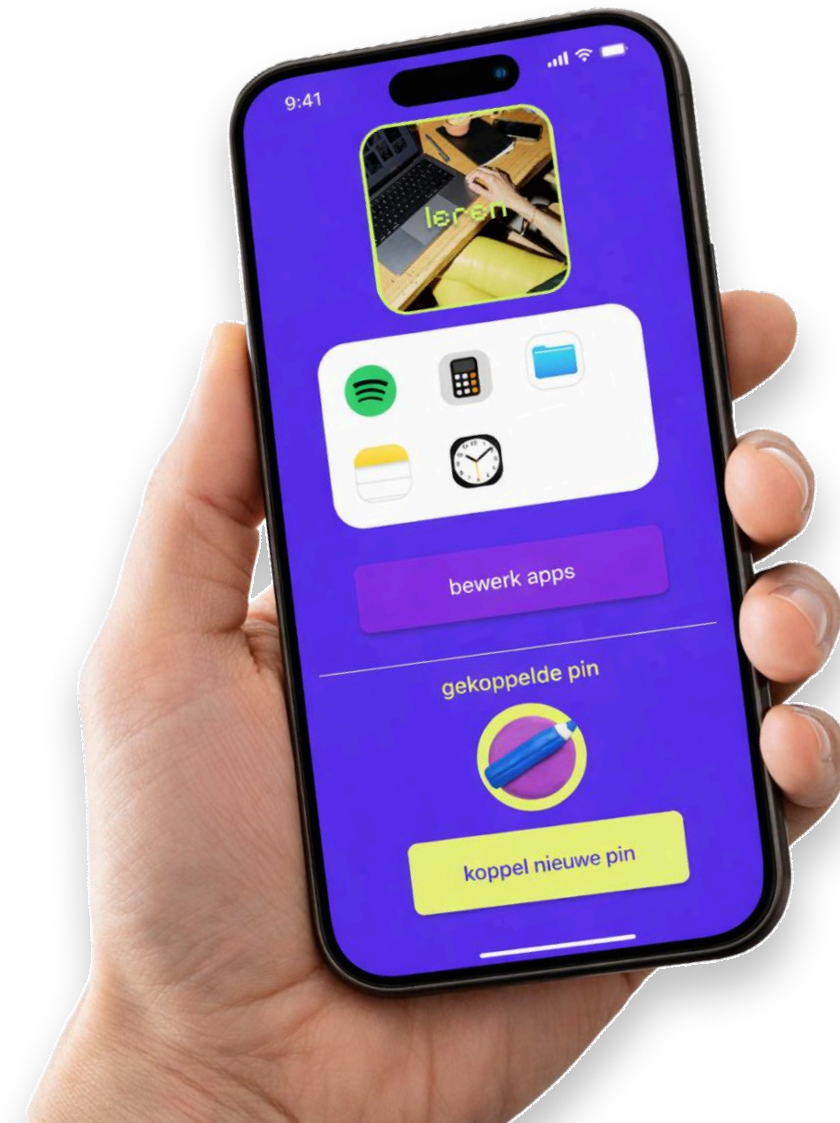
As participants in the user test also mentioned, the pins are small, loose objects and could be lost, even if they are secured more strongly.

If the pin for a specific MOOD is lost, a new MOODpin can easily be connected to that MOOD.

However, if the pin is not available, there still needs to be a way to temporarily remove the app restrictions so the user can access necessary apps. For this reason, an emergency MOODstop function was added to the product.

Inside the case, at the bottom, there is an NFC tag. When this tag is scanned, it deactivates any active MOOD. This ensures that the user always has an emergency option available when needed. At the same time, it still requires a small physical action, so stopping a MOOD is not too easy or tempting.

Once the MOOD is stopped, all apps become accessible again. To activate the 'lost' MOOD again, the user only needs to connect a new pin.



8.2 Recommendations

Suggestions for further development of final concept MOOD

Testing social sharing

To better understand the impact of the social sharing aspect of the MOOD concept, further testing is necessary. It is recommended to develop a first live version of the app or an online platform where users can see each other's active MOODs in real time.

This could then be tested within existing social groups such as a friend group, class, or sports team. The goal is to assess how seeing each other's MOODs influences behaviour and if it can contribute to more conscious social media use.

These tests would also help evaluate privacy preferences, such as when users choose to share their MOODs and when they prefer not to, allowing the privacy settings to be refined if necessary.

Collaboration & community

To promote and spread MOOD within the target group, partnerships with brands and organisations that are already part of adolescents' daily lives could be valuable. Collaborations with sports clubs, events, or youth-oriented brands could introduce MOOD in contexts that naturally connect to free time activities.

Event-specific or collaborative pins could link the product to real-world experiences. For example, limited pins for sports games or concerts (See example images) could represent partnerships while encouraging participation in offline events. In this way, the product becomes a reminder to step away from the screen and engage with real-life moments.

The pin system also allows for many themes, such as seasonal designs, special occasions, or activities like holidays and sports. The snowboarding pin in the user test (chapter 7.5) showed that themed pins resonate well with users and can stimulate use.

This approach could turn the pins into collectable items that adolescents enjoy having, sharing or giving to others, further strengthening their appeal.

Selling

To encourage adoption in the early stages, it is beneficial if multiple people within the same social circle use the product, as this strengthens the social sharing aspect of MOOD.

Therefore, it could be effective to offer package deals, where purchasing multiple items results in a discount. This could help the product spread more quickly within friend groups or social circles, supporting the social dimension of MOOD while also helping it grow as a recognisable brand that stands for making conscious phone use a shareable action.

The case and the MOODpins can be sold separately, allowing for multiple editions and also making pins a separate product suited for gifts etc.



Expansion beyond scope

This concept could also work for other target groups. If the style and the types of pins are adjusted, the idea of intentionally choosing an activity and creating a small physical barrier to phone use could help other people manage their screen-time as well.

Both the literature and the generative study showed that excessive phone and social media use is a problem for many age groups, not only adolescents. This means the concept could potentially be relevant for a wider audience.

However, expanding to other target groups is outside the scope of this project. It would require additional research into the specific needs and preferences of those groups. But the basic concept of MOOD could still be applicable.

8.3 Critical Questions

Answering my own questions about the design

Is this app not the same as social media?

In a way, sharing and seeing what others are doing on an online platform sounds a lot like social media, or at least what social media was originally meant to be. At first, these platforms were mainly about sharing small moments with friends and staying updated on what people around you were doing. Today, however, social media often works very differently. Instead of mainly seeing updates from friends, users are mostly shown large amounts of content chosen by algorithms that are designed to keep you engaged for as long as possible. Because of this, it is less about real connection and more about consuming curated and often idealised content.

The MOOD platform tries to only use the most simple core of social media: seeing what your friends are doing. By showing which MOOD someone is in, you can quickly understand if a friend might be available to hang out or if they are busy doing something else. It can make it easier to connect, while also helping normalise that it is okay not to be available online.

At the same time, it is important to stay critical of this feature. It should not become another type of social media where people feel pressure to present themselves in a certain way or where it creates more distance instead of connection. The goal is to support awareness, balance, and real interaction.

Can't you just switch on MOODs without the physical product?

Yes, there are already many options that allow you to block certain apps directly on your phone, so technically a physical element is not necessary. However, the extra friction that this physical product creates is an important part of the concept. It helps interrupt the automatic habit of doomscrolling or staying distracted on your phone for too long.

Because it requires a small physical action, it adds an extra step that makes users more aware of their behaviour. At the same time, the physical element works as a cue. It can remind users that a MOOD is active, or that they could activate one, without needing to look at their screen.

The phone case itself can also function as an accessory, making the physical element visually appealing and motivating people to use it.

Finally, the physical element communicates something to the people around you. It can make a small statement that you are focusing on something else or limiting your phone use. Screen-based modes are usually invisible to others, making conscious phone use a personal issue. As the research showed, a social element can be important in changing behaviour, especially for adolescents.

Will adolescents really be motivated to use the MOODs and block apps?

This concept is based on the insight that adolescents want to feel autonomy and control over their time and attention. Therefore, the concept allows users to decide which MOODs they activate and when. This raises a fair question: will adolescents actually be motivated to use it?

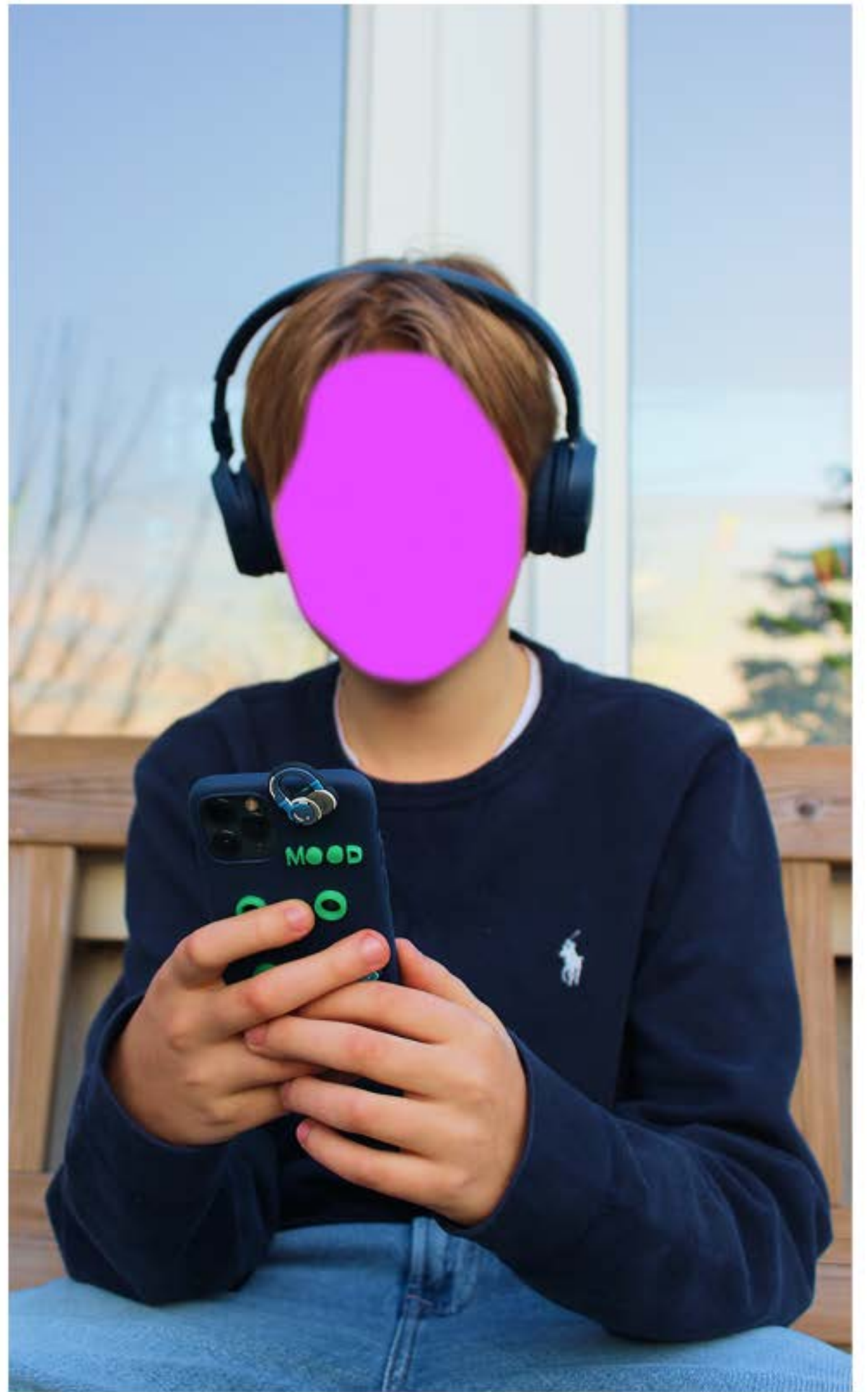
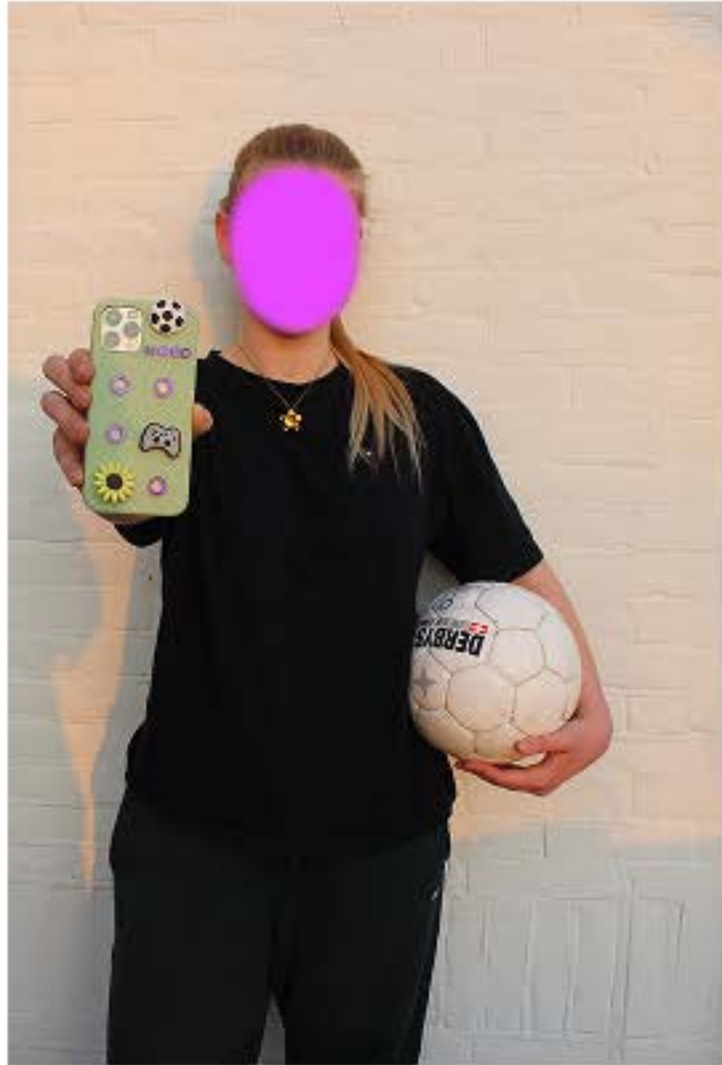
The research in this project showed that many adolescents already want to change their screen behaviour and spend time more consciously. However, they often struggle to do so consistently. A product like MOOD could help support them in making that change.

At the same time, the concept relies on the idea that the motivation to be more conscious is already present.

The system is designed to encourage and support this intention, rather than force it. For adolescents who do not feel the need to reduce their screen time, or who struggle more strongly with social media addiction, the concept may not be effective. In those cases, additional motivation or stronger methods could be needed.



Images of MOOD in use



Reflection

With the insights from the tests, I made several iterations. Most changes were made to the digital prototype by adjusting and adding functions. For the physical product, the main improvement was the attachment of the pins, but this would be better refined in professional production rather than with another prototype.

The main recommendation is to test the live functioning of the app. Participants were excited about the sharing features and thought these could motivate them, but this social aspect should be tested in practice.

Other recommendations focus on collaborations, sales strategies, and expanding to new target groups. I see the MOOD concept as a strong foundation that could grow in different directions, such as through new pins, collaborations, connections with events, or even an adult version of the product. These are only mentioned as examples, as they could be developed further and made more specific at a later stage, for instance once the product is launched.

8.4 Conclusions

This project ends with a tested working prototype, an iterated final concept, and several recommendations for further exploration. Through research, designing and testing, the concept gradually developed into MOOD, which successfully addresses the initial design brief:

Design an intervention that enables adolescents aged 11–14 to inspire one another to be conscious of their social media use and to spend more time engaging in offline activities.

It also meets the following criteria:

- It fits into children's everyday lives and resonates with their language and culture.
- It activates alternatives and reflections in a way that is engaging, not restrictive.
- It is scalable and self-sustaining, without relying on adult guidance.

After several iterations, I believe the final concept MOOD forms a strong and solid concept that could realistically be adopted by the target group. By encouraging intentional choices and using a social, shareable element, the concept empowers adolescents in becoming more aware of their social media use and spending more meaningful time offline.

Personal Reflection on My Graduation Project



Personal Learning Goals

At the start of this project I set several personal learning goals, here I reflect on them:

Design for reflection and awareness

I wanted to explore how design can encourage reflection on everyday behaviour. Instead of using restrictions, my aim was to invite curiosity and conscious choices. The concept MOOD reflects this approach by encouraging intentional decisions and focussing on what users want to do instead of focusing on restricting social media. During the sessions with the target group I learned how methods could create awareness and moments of reflection. Like the Path of Expression, Diary Study or Tracked Use-Data.

Behavioural and social design

I aimed to deepen my understanding of how design can influence attitudes and social norms. During the literature research I came across the Self-Determination Theory (Deci & Ryan, 2000), which explains that motivation increases when people experience autonomy, competence, and social connectedness. These principles appeared often in the context of digital behaviour and became important considerations while developing the concept. In the final concept MOOD, these elements are directly addressed. Autonomy is supported by allowing children to make their own intentional choices about their media use. Competence is encouraged through a simple and flexible system where they can easily adjust settings and block distractions in a way that fits their needs. Social connectedness is integrated through the sharing aspect of MOOD, both physically through the pins and digitally through the app. Through this project I learned how behavioural theories like this one can help understand a context, guide decisions and strengthen the impact of a concept.

Co-creation and participatory research

I wanted to improve my skills in facilitating co-creation with young people. Working with adolescents helped me learn how to guide creative sessions, gather insights, and translate their experiences into design opportunities. It also taught me the importance of being well prepared while staying flexible, as sessions may unfold differently than planned and that can be very valuable too.

Scalable intervention design

Another goal was to design an intervention that could grow beyond one specific context. During the process I realised that social media use is very personal and that contexts can differ greatly. Because of this, I kept personalisation and flexibility as important criteria for the concept. These factors allow the concept to work for different contexts.

I learned how keeping this scalability in mind and regularly zooming out helped me see the concept not just as a product, but as a bigger system that can promote the desired behavioural change.

Interdisciplinary collaboration

Finally, I wanted to gain experience working with different stakeholders. During this project I collaborated with Scroll Scroll Scroll, received guidance from my supervisors, spoke with experts during events and through interviews, and worked with the target group. This helped me learn how to work with different people who all have their own perspectives and ways of working, and how to connect these inputs to my design process.

Through Scroll Scroll Scroll I had access to a network of dedicated experts working on this topic. I would have liked to speak with even more of them, since their insights were very interesting. However, I also realised it was important to keep the project moving and focus on the next phases. Because of that, I focused more on the real-life context and the experiences of the target group. In the end, they were the most important experts in this project.

This taught me that sometimes it is necessary to choose a clear focus and accept that not everything can be included at once.



(Fig. 43 Pictures By Nicoline Rodenburg for Scroll Scroll Scroll)

Other Learnings Throughout The Project

Positive planner

I started this project with a lot of energy, ambition, and expectations. That is probably common for a master's graduation project. You want it to be the final highlight of everything you have worked on in the past years. Something successful, something you can really be proud of. During the kickoff meeting I enthusiastically shared all my plans and steps. I wanted to involve three secondary school classes in the generative research and organise multiple sessions with them in every phase. I quickly received the feedback that this might be a bit too ambitious for the time available. Because of that, I adjusted my plan and eventually worked with one class instead. In hindsight, this was a good decision. Even with just one class I already collected a huge amount of generative data to work with. Looking back, I recognise this pattern in myself. I often start with a lot of enthusiasm and assume everything will fit into my schedule. I like to call myself a "positive planner" (which sounds nicer than a bad planner). I tend to believe that many things can be done in a short time. It will work out. But when the moment comes, that can create stress and the risk that things are not done as thoroughly as they could be. At the same time, this ambition and positive attitude also help me to think big. I often get more done because of it. Still, when it comes to planning and expectations for both myself and others, it is important to be a bit more realistic and to critically remove things from the plan instead of trying to do everything.

Working with Adolescents

It might sound surprising, but at first I was not very eager to work directly with adolescents. I wanted to co-create, but was a bit hesitant on how to do so. Especially with teenagers as the target group, I felt unsure how they would collaborate. The ethical considerations felt like quite a barrier at first limiting spontaneous approaches.

In wait of all the ethic to forms get approved, I decided to start speaking with adolescents anyway, mainly to practice. For example, I saw a group of kids sitting together outside, looking at their phones, and I walked up to ask them why they were doing that and whether they often spent time like this. As expected, the response I got was not to interfere. But here and there I still received interesting answers. More importantly, it helped me learn how to approach these conversations in a more open and accessible way. Standing for a class, however, was something else. I had carefully prepared the generative session for a second-year middle-school class. I had a clear plan and knew what I wanted to learn from the session.

But guiding a whole class, keeping them engaged, managing the time, and collecting insights at the same time turned out to be quite challenging.

Luckily, two friends helped me during the sessions. This allowed to work in smaller groups, which made it much easier to have meaningful conversations and gather valuable insights.

In the end I unexpectedly ended up liking working with adolescents as a target group, mainly because of their still playful and sometimes just bold honest attitude.

Co-creation till what extend

With this class I conducted both generative research and co-creation sessions. I did not want to steer too much or impose my own ideas. Each time I approached the sessions openly, hoping that the next steps would become clear afterwards.

However, the insights were not immediately obvious. The data was very diverse: conversations, drawings, ideas, and different perspectives. At first, these did not say much on their own.

Only after analysing everything, revisiting the data, and taking some time to reflect, patterns and directions started to appear. I underestimated this process. It reminded me that even in co-creation, where you try to involve the target group as much as possible, the designer still has to find narratives in all the data.

Imposter Syndrome

So I was the designer and the one who had to make guiding decisions. In a way, I was the expert of this project. That felt strange and overwhelming at first.

In previous design projects during my studies, you also influence your own process. But there was always a bit more guidance from professors or supervisors. In this project it sometimes felt like that structure was gone. During meetings I was asked whether I thought I was on the right track and what the next steps should be.

Of course, this made sense. I was the one working on the project and I had to explain and justify my choices. Still, it felt unfamiliar. I sometimes looked for confirmation and wondered: Am I going in the right direction? Over time, however, I learned that I can carry this role. I did the research, followed the process, and made decisions based on that. After completing both my bachelor's and master's degrees, I am now truly a designer.

Feeling comfortable with that role will probably grow step by step with experience, but this project already helped me with that.

Working alone and sharing

This project was quite individual. Fortunately, I had Scroll Scroll Scroll, which added a collaborative layer to the process. I also had meetings with my chair and mentor for guidance.

But overall, I worked alone most of the time. In many ways, I actually enjoyed that. I like diving deeply into a project, exploring different directions, and developing ideas independently.

At the same time, there were moments when I felt stuck. Sometimes I could not see clearly which direction to take or I kept changing my perspective from one day to the next. During those moments, it became clear how important it is to talk about the project with others. Conversations with supervisors, Scroll Scroll Scroll, friends, or family often gave me new perspectives or simply confirmed that I was on the right path.

Looking back, I realise that I could have shared my thoughts earlier in the process. I tend to only share ideas once I have thought them through very carefully and know exactly how I want to present them. This tendency probably goes back a long time. Even as a child I liked figuring things out on my own first.

I think that explains why I did not plan many meetings with my chair and mentor (and also partly because I already had guidance moments with the client).

In future projects, I want to challenge myself to ask for help or input earlier and make more use of the people around me during the process.

Flexible

As a person and as a designer, I tend to think in possibilities and I am quite flexible. This helped me a lot during this project.

Working with adolescents meant dealing with many different people, schedules, and situations. Plannings often changed and making appointments was sometimes difficult. Because of this, I tried to stay flexible. Sometimes I travelled across the country for a test if that worked better, or I adjusted sessions so they could still take place. I think this mindset, being able to switch to a different plan when needed, is valuable in almost any design project, especially when co-creating.

Updates

Even though I did not have many meetings with my mentor and chair, I always kept a clear overview of what I had done between meetings. This allowed me to quickly update everyone and also helped me keep track of my own progress. These small updates were very helpful and are something I would like to continue using in my future work.

Enthusiasm

To end as I started: enthusiastic. This is probably one of the core elements of how I work. I approached this project with a lot of enthusiasm. Of course, there were also difficult moments. There were some mental breakdowns and days where everything felt overwhelming. But overall, I felt excited about what I was working on and about the potential of the project. The positive atmosphere created by Marcel and Puck from Scroll Scroll Scroll helped a lot. They supported both me and the project in a very encouraging way.

The meetings with my supervisors, which I initially found a bit intimidating due to the imposter syndrome, also often ended on a positive note that gave me new energy.

For me, enthusiasm is essential as a designer and as a person. When I feel excited about something, I want to invest time, effort, and care into it. It motivates me to grow ideas into something meaningful or impactful. And when you share that enthusiasm with others, people are likely to engage, allowing the idea to grow even further.

So I end this reflection with the same feeling I started the project with: positivity and enthusiasm.

Only now it is directed toward what lies ahead as I officially finish my studies. :)

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