Personal Development Plan FMP – Veerle van Wijlen (February 2021-July 2021)

**VISION & PROFESSIONAL IDENTITY**

**Vision**

Nowadays, western society is performance-oriented and characterized by individualism. People feel pressure to perform well, socially integrate and fit the high societal standards in a variety of daily contexts and situations. This inner and societal pressure can make people feel uncomfortable and vulnerable in daily life settings. According to Alper et al., *“Individual freedoms at the core of modern democratic systems have brought unprecedented quality of life to their citizens.”* (Alper et al., 2012, p.363). These include amongst others freedom of expression, freedom of worship and freedom of fear. However, for people with mental health problems these freedoms are even more challenging in daily life (Alper et al, 2012). Therefore, in my work, I aim to empower and socially integrate people who are affected by mental health issues and as a result restricted to participate in everyday life—I want to enable people to be their "best self" in society.

In parallel to this it can be seen that digital technologies are developing fast, human beings evolve and adapt to these new technological opportunities. Those technologies are often used to socially integrate, fulfill needs of self-esteem and support these freedoms that bring quality of life (Maslow). However, are these digital solutions the optimal way to support people within mental health, enhance their empowerment, social integration, and enable them to reach their “freedoms”, and so enhance their quality of life? Through courses as ‘tactile experience’ and ‘tangible & embodied interaction’ in my first year as Industrial Design student, I discovered the potential of tangible interactions to fit with the human needs of expression and integration. Especially by making a tangible 3D map for visually impaired people to orientate in public places, showed the immense added value tangibles can have, supporting the ever growing digital world, especially for “special need groups”.

That is why I want to create a daily life experience for special need groups that enhances their feeling of empowerment and fulfills their needs of social belonging which allows them to add value to others in society on a daily basis. This through design research, making use of tangible design probes that fit the complex needs existent in mental health contexts, and to bridge the gap in understanding between various stakeholders in (clinical) mental health.

Evidence from projects that addressed and contributed to this vision (see portfolio). These include: RELAX-CHANGE (M1.2 / M2.1), Talki Talkie (M1.1), Final Bachelor Project, internship Studio Tast (B3.1), B2.2 Design Research, B2.1 Design, and projects done for ‘Tactile Experience’ in B1.2 and ‘Tangible & Embodied Interaction’ in B1.4.

**Professional identity**

I am a multi-disciplinary design researcher focused on supporting mental health contexts especially through tangible interactive design probes. This to create optimized support for various mental health target groups, and to bridge the gap in understanding between various stakeholders in (clinical) mental health. I like to ask myself the question, whether digital solutions are the optimal way to support people within mental health, enhance their empowerment, social integration, and enable them to reach their “freedoms”, and so enhance their quality of life? Moreover, this is a question I not only like to ask myself, but also love to discuss and reflect on with various stakeholders in the field of mental health, to optimize mental health support from a multi-stakeholder perspective, for target groups such as anxiety disorders, dementia, elderly care or visually impaired people. Moreover, I have expertise in multi-disciplinary design research, participatory design research (incl. co-evaluations), concept development for wicked problems, interactive design probes, and qualitative data analysis. Next to that, I have worked with educational design company Studio Tast, elderly care home Archipel, and Bartiméus, an organization for visually impaired. And worked on projects that addressed service design, design for mental health support, and personalization design processes (see portfolio).

**GOALS**

In this personal development plan I describe a set of goals that connect with the changed direction within my final master project from a service design orientation to user experience and interaction design oriented approach. These focus merely on development of design research competencies within my main expertise areas of Creativity & Aesthetics and User & Society.

In short, change of direction in my final master project entails a switch from mental health service design around the design probe RELAX-CHANGE, to the following aspects that will be emphasized instead: the design probe will function as a **research object** to evaluate the effects of the probe’s underlying relaxation principle and the users’ user-experience around expressive drum play for relaxation. And in this way,will inspire specific **design directions** and **improved concepts** around accessible multi-sensory expressive tangibles for relaxation and anxiety.

**Creativity & Aesthetics**

1. Improved skill-set of brainstorming techniques and methodology.

That allows for the translation of complex mixed user (experience) data into new ideas and concepts.

Since, the complex data sets out of the planned diary studies, cannot be transformed into known methods as personas, user journeys or logic maps, but still functions as inspiration for designs that entail improved aspects around certain found user experience and interaction limitations, I want to learn about new techniques and methodology to translate these complex diary data insights into new concepts.

I will do this by implementing at least 4 new brainstorming techniques or methodologies within the ideation & conceptualization phases within the two iterations within my project.

By making use of methods from the IDEO design kit (<https://www.designkit.org/methods>) and through reading and implementing insights from chapter 2,3,10 & 11 from the data-enabled design thesis by Janne van Kollenburg and Sander Bogers (van Kollenburg & Bogers, 2019). This all within a time period of about 2 months within the last weeks of quartile 3 and entire quartile 4.

*Context*

In past projects I have already gained quite a lot of experience with idea generation and conceptualization techniques. Due to my expertise within the area of user & society, I have gained a lot of skills, and methodological experience, to translate user insights from different perspectives, such as user/expert interviews, contextual inquiries, literature research & benchmarking, user tests, co-evaluation sessions, focus groups or material studies into new concepts and design directions. Such as through the use of personas, user journeys, thematic analysis of discussions or interview results, value mapping, or empathy maps as inspiration for mind maps, brainwriting, sketching, storyboards, rapid prototyping or material and interaction probes.

Within this final master project, I aim to inspire specific directions and a variety of concepts for multi-sensory “tension-release” tangibles, out of a combination of qualitative and quantitative user-experience and relaxation effect data (a huge mixed data set) from diary studies with people having elevated trait anxiety, which is new for me as design researcher.

*Job applications that make this goal relevant*

* UX design researcher / project manager: expert in concept development (Muzus).
* Social designer: expert in ideation (Butterfly Works). “Ideation is the creative process of generating and visualizing new ideas inspired by developments in the creative and technology sectors. An open attitude and creativity come first; that is how we are able to build innovation and start with fresh ideas.”
1. Concept and interaction design visualization techniques as 3D modeling and user interaction animations.

In order to be able to visualize a set of new multi-sensory “tension-release” tangibles that strengthen the unsatisfied needs in relaxation, as focus points for future design iterations to optimize relaxation support, I want to learn to model 3D concepts, render 3D concepts, and if possible render 3D user interaction animations with these new concepts.

I will do this by spending 4 hours a week on learning 3D modeling, rendering and animating in the software called Blender via youtube tutorials, practice, and with the help of fellow ID students from the play & learn squad, in specific Jolie Smets (fmp student Industrial Design). To be able to create the final 3D mockups in iteration 2, quartile 4.

All in a time frame of about 2 months within the last weeks of quartile 3 and entire quartile 4.

*Context*

In previous projects I have gained experience with visualizing my design concepts, scenarios and interactions through hand sketches (also through the course Exploratory Sketching), use of storyboards, rapid prototyping or material and interaction probes, but mainly through 2D drawing software as Adobe Illustrator.

In this final master project the main emphasis is on evaluating and visualizing the effect of the design probe’s novel relaxation principle on relaxation and decrease in state anxiety of people with elevated trait anxiety. This will be an inspiration for specific directions and a set of concepts of multi-sensory tangibles, that draw from the same novel playful tension-release principle, but have improved aspects around limitations, as result from the ux and effective data insights and playing the drum. Therefore, the conceptualization of the final set of multi-sensory “tension-release” tangibles will be visualized, instead of prototyped. Also because the research prototype of RELAX-CHANGE also takes time to be optimized.

*Job applications that make this goal relevant*

* Social designer: being able to translate results from “field research” into tangible and experiential designs (to make quick progress).
* UX design researcher: rapid prototyping (Butterfly Works).
1. Aesthetics of interaction of the design probe RELAX-CHANGE

Since the prototype of RELAX-CHANGE, made in M2.1, still has minor issues with updating of the sound and light feedback during playful interaction, I want to improve both the light and sound interaction before the 2nd person perspective diary studies in iteration 2.

This will be done within the last 2 weeks of April, before the start of quartile 4, with the help of electrical engineering student Tijmen Tubbing, who also supported the realization of the prototype in the previous M2.1 project.

Next to the multi-sensory interaction of the prototype, the quality of the form has to be optimized, to create an overall good finish, sensitive to the target group, that invites for play within the 2nd person perspective diary study in iteration 2, and won’t evoke any additional anxiety due to issues in appearance. This will be done by making sure the crocodile clips are on the inside of the prototype, magnets are fixed and by putting the knobs in the right place in the 3D printed model. This will be done within the last 2 weeks of April, before the start of quartile 4, with the help of the workspace and employees of Innovation Space, who have also supported the realization of the prototype in the previous M2.1 project.

*Context*

The design probe RELAX-CHANGE, is used within this final master project merely as a research object, to evaluate the effects of the probe’s underlying relaxation principle and the users’ user-experience around expressive drum play for relaxation. In order to evaluate the effect of the probe’s underlying relaxation principle, and the user-experience around the drum play for relaxation, it is of major importance that the aesthetics of the multi-sensory interaction is optimized, to optimize the play engagement and the support function of the multi-sensory feedback mechanisms on achieving playful tension and release (novel relaxation principle), and so the evaluation of the effects. Furthermore, especially since the diary study in which the prototype will be used will also include person(s) with generalized anxiety disorder, even though under control, it is important all interactions work fine to not evoke any extra anxiety and create counter effects.

*Job applications that make this goal relevant*

* UX designer: Create & test loop (Butterfly Works). “The finer details of the solution are developed in a loop of testing and adjusting, until it suits the needs of the users and stakeholders involved. Rapid prototyping, first test products and real life trials ensure cheap fails and successful solutions.”

**User & Society**

1. Diary study methodology and mixed methods data collection approach, sensitive to the target group of people with elevated trait anxiety.

I want to learn about methodological ways of data collection, in which the design probe could be central to data collection around the users’ relaxation effects and users’ drum play experience for relaxation. This, within the natural context of people with elevated anxiety (target group), and studied over time, to also evaluate changes in effects and UX to enhance the value of user insights. That is why I want to become acquainted and skilled with the preparations and execution of diary studies and the experience sampling methodology (ESM). Furthermore, due to the nature of experience sampling data collection using a research prototype as a data gathering device and researching effects on relaxation / anxiety, I want to get acquainted in mixed methods data collection literature (Creswell, 2003) and improve my skills in gathering a combination of qualitative and quantitative user-data. Preferably, focusing on using new methods within quantitative data collection as prototype’s data logging and video observations.

I will do this by researching experience sampling methodology literature; literature about the creation of diary booklets; literature about data-enabled design, and diary studies using a research prototype; literature about the evaluation of user-experiences within ESM; and literature about mixed methods data collection, in the field of user-experience research and data-enabled design.

Next to that, I will ask my peer students and Industrial Design teachers central to user research methodologies, as Panos Markopoulos and Carine Lallemand, for advice on ESM or UX-research related methodological papers.

Next to that, I will turn my literature research insights into a clear description of the research method, data collection procedures and tools, data analysis procedures, research population, participant recruitment and ethical considerations by finishing the ERB form and getting it approved by the Ethical Review Board of the TU/e.

Furthermore, I will reach my goal through the preparation of consent forms, digital diary booklets and potentially interview hand-outs, for participant profiling purposes and questions around perceived experience on relaxation and usability of the prototype.

This goal will be completed by leveraging experience sampling using diaries, interviews, and questionnaire data at multiple points in time with a small pool of participants (1-3) who work with the drum for a fixed number of days (about 1 week). In which I will gather and analyze a large set of combined qualitative (perceptual and contextual use) data and quantitative anxiety and touch behavior data, through questionnaires and prototype’s data logging and video observations.

All within the time frame of the second design research iteration, in the month May, in quartile 4.

*Context*

In previous projects I have already gained lots of experience and knowledge around user-centered data collection, from participatory design research to personalized design research processes. In which I used various methodologies ranging from user/expert/stakeholder interviews, contextual inquiries, user observations (in relation to design brought in context), user tests (product and interaction-level), co-evaluation sessions, focus groups or material studies.

However, this project draws from constructive and data-enabled design practices. In which the design probe and research object RELAX-CHANGE is key to constructing knowledge around the effects of the probe’s underlying relaxation principle and the users’ user-experience (UX) around expressive drum play for relaxation, for people with elevated anxiety.

*Job applications that make this goal relevant*

* Social designer: being able to move into the context of the user, and give everyone a voice in the design process, and able to understand different perspectives on the complex societal “question” (We are Social Rebels).
* Social designer: participatory design research (We are Social Rebels / ABZ).
* Creative strategist: being able to ask yourself “why” all the time, challenge current systems, and together explore change over the long-term (We are Social Rebels).
* UX design researcher / project manager: expert in reaching “vulnerable” target groups (Muzus).
* UX design researcher: deep dive ethnography (STBY).
* UX design researcher: blended research, a combination of research methods to achieve relevant and effective results. As diary studies, interviews and data gathered with wearables. Choose the right blend of research methods in various project phases. “A combination of qualitative and quantitative research can support a business case with ‘hard’ evidence in the form of numbers and statistics, while also providing rich and empathic illustrations of the user experience in everyday life. We have experience with two mixed-method research designs: exploratory and explanatory sequential design. Exploratory sequential design involves first collecting qualitative exploratory data and using this information to guide further, larger-scale quantitative enquiry (e.g. surveys or auto-ethnography). Explanatory sequential design helps to explore quantitative findings. Here, quantitative data is used as the starting point. We then gather and use qualitative data to explain the quantitative data in more detail. Often these approaches are strung together in a series of phases.”(STBY)
* Social designer: creative research (Butterfly Works).

**Math, Data & Computing**

1. Mixed methods data analysis, as part of data-enabled design research (with a focus on quantitative data analysis and using numbers in qualitative research).

Due to the nature of data collection in the diary studies in this project, I aim to improve my mixed methods data analysis skills and more specifically through: mixed methods data analysis procedure preparations (creating analysis frameworks for quantitative and qualitative data; and procedure of combining and comparing mixed data); using video annotation methodology and software, such as MAXQDA; scoring of psychological questionnaires, such the State-Trait Anxiety Inventory items; and working with Excel, to make sense of the prototype’s logged csv. touch behavior data. Next to that, I will use literature around using numbers in qualitative data analysis, such as “qualitative content analysis” (Hsieh & Shannon, 2005) and the paper by Maxwell (2010).

All within the time frame of the second design research iteration, in the month May, in quartile 4.

*Context*

In previous projects I have built lots of experience with different types of qualitative data analysis, such as open coding methodology (Khandkar,2009) and different types of thematic analysis (Clarke & Braun,2014) such as note-based analysis or transcript-based analysis (Krueger & Casey, 2002). Not so much with quantitative data analysis, aside from learnings from the Bachelor course Making Sense of Sensors; interpretations of already scored questionnaire data; and a project within the New Product Design & Marketing Use track, in which I learned to analyze market segments using R-studio software.

However, this project draws from constructive and data-enabled design practices. In which the design probe and research object RELAX-CHANGE is key to constructing knowledge around the effects of the probe’s underlying relaxation principle and the users’ user-experience (UX) around expressive drum play for relaxation, for people with elevated anxiety. And I will therefore gather for each diary participant a large set of mixed methods data around relaxation / anxiety effects and UX, and focus on new quantitative data gathering methods as video observations and drum behavior data logging by the research prototype.

*Job applications that make this goal relevant*

* UX design researcher: deep dive ethnography in the form of “video documentaries” (STBY).
* UX design researcher: blended research (STBY).
1. Data visualization techniques.

For me, learning about visualizing a set of mixed user data is not an end goal in itself but functions more as an exploration to improve my communication skills, competencies within creativity & aesthetics such as concept development, and to bridge the gap between user insights (US) and conceptualization / envisionment (CA).

In this way, I want to learn how to improve communicating huge combined data set results, to coaches, fellow students, and assessors. And how to use those data visualizations as inspiration for specific design directions and improved concepts around accessible multi-sensory expressive tangibles for relaxation and anxiety.

This by gathering data visualization inspiration out of data-enabled design theory (Van Kollenburg, & Bogers, 2019), the book Truthful Art by Alberto Cairo and examples on the online platform Behance.net. And creating various iterations of data visualizations of the analyzed and annotated observational videos, touch behavior data logged by the prototype, and qualitative user-experience and contextual data.

All within the time frame of the second design research iteration, in the month May, in quartile 4.

*Context*

Within previous projects, in which I have done qualitative analyses with large data sets, I noticed I struggled a lot with clearly communicating my main insights. Furthermore, I often finished projects with just a summary of data insights, and did not use those to inspire a next iteration of design concepts. That’s what I want to change, as a user-experience design researcher within the field of mental health, envisioning novel designs for accessible daily relaxation for people with elevated anxiety.

*Job applications that make this goal relevant*

* Social designer / UX design researcher: being able to handover user research and project results (Butterfly Works).

**Business & Entrepreneurship**

1. Conducting market analysis and identifying competition for the final set of proposed design directions and improved concepts around accessible multi-sensory expressive tangibles for relaxation and anxiety.

In this fmp, I also aim for a set of visualized multi-sensory “tension-release” tangibles concepts; that strengthen the unsatisfied needs in playful multi-sensory tension-release creation, functioning as focus points for future design iterations to optimize relaxation support. Therefore, next to the user investigation and evaluation around this set of envisioned novel tangibles for optimized relaxation support, I want to learn about more business-related benchmarking, competitor analysis and value creation.

This through researching and mapping (multi-sensory) tangibles, musical instruments, or digital technologies drawing from similar playful tension-release principles, for relaxation and decrease in anxiety that are available in the “daily relaxation market”, clinical mental health field, or as part of mental health services.

All within the time frame of the second design research iteration, in the month March, in quartile 3 and in the reporting phase of the final master project in end May and beginning of June (quartile 4).

*Context*

In previous projects I have gained experience with benchmarking, but more on a design research level. Focused on exploring the context around the design probe RELAX-CHANGE and positioning within the clinical mental health field.

*Job applications that make this goal relevant*

* Strategic designer / design researcher: strategic scoping studies (STBY). “Strategy development for innovation often focuses on a time frame of 2 to 5 years. However, it is possible to broaden this scope considerably, by looking at both the past and immediate future and identifying larger trends and developments in society, technology, politics and other areas affecting organisations. A scoping study is a co-creative examination of an organisation’s current situation placed in this broader context, so that participants develop a more accurate understanding of what the next five to ten years will bring. This helps you to ensure that the customer perspective is embedded in innovation strategy.”
* Strategic designer / design researcher: desk research and research synthesis (STBY). “Our clients often have several existing reports that could be used as input for further exploratory investigation. We identify and summarise the relevant patterns and trends from these, and we also enhance this synthesis with further desk research to create an informed starting point for future interventions and strategic research questions. This offers new perspectives and enables your organisation to better understand how to use the data as a foundation for innovation, i.e., to understand what kind of interventions could be most productive.”

**EXPLORATION OF JOB APPLICATIONS**

**Role of me as design researcher**

Multi-disciplinary (user-experience) design researcher, supporting people from special need groups, who are limited in daily functioning and partaking in society (empowering, socially integrating and participating), through making sense of the “wicked world”;

Making use of multi-stakeholder empathy, participatory design research methods, complex mixed methods data analysis (focusing on qualitative), visual communication (data, insights), tangible design probing, and novel value propositioning (strategic design research / innovation methodology).

This, in order to enable people to be their "best self" in society, with a particular interest in people having mental health issues.

**Envisioned working environment**

Variety in my design research work, especially in terms of design research context and social/service design approaches. Next to that, I want to have the ability to learn and grow in my skill set, and further explore my vision and professional identity as a design researcher with great passion being valuable for mental health groups.

In order to achieve this in a rather financially secure way, I want to start **working in a team**, at a **social design or UX design research related design studio / design consultancy**.

That addresses i.a. design research, for societal challenges, offering new perspectives on societal challenges (reframing/re-thinking society), multi-stakeholder empathy methods, participatory design research methods, tangible probes (for intervention/discussion), complex data analysis/visualization and/or strategic design research around societal challenges and (tangible) design (social innovation).

* Reframing societal challenges (offer visions, and novel solution perspectives)
* Empathy, multi-stakeholder and participatory design research
* Tangible probe creation
* Complex, mixed methods data analysis and visualization
* Social innovation, strategic design research around societal challenges and (tangible) design innovations

**Job positions**

* UX design researcher
* Social designer
* Strategic designer (in a social context, more focused on envisionment and reframing) / Creative strategist
* Multi-disciplinary design researcher

**Design studios and fit with skill development**

* We are Social Rebels
* Reframing Studio (<https://www.reframingstudio.com/> )
* Joes + Manon
* A/BZ
* Muzus
* Butterfly Works
* GGZEi
* STBY & network for global design research
* Rijksoverheid (strategic advisor)
* Rijksoverheid (researcher)
* Clever Franke
* Korein Kinderplein (freelance projects)
* van Berlo BV.

Later on I could see myself end up as a freelancer, to work on more vision related projects, and more specifically on multi-disciplinary design research supporting mental health contexts.

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