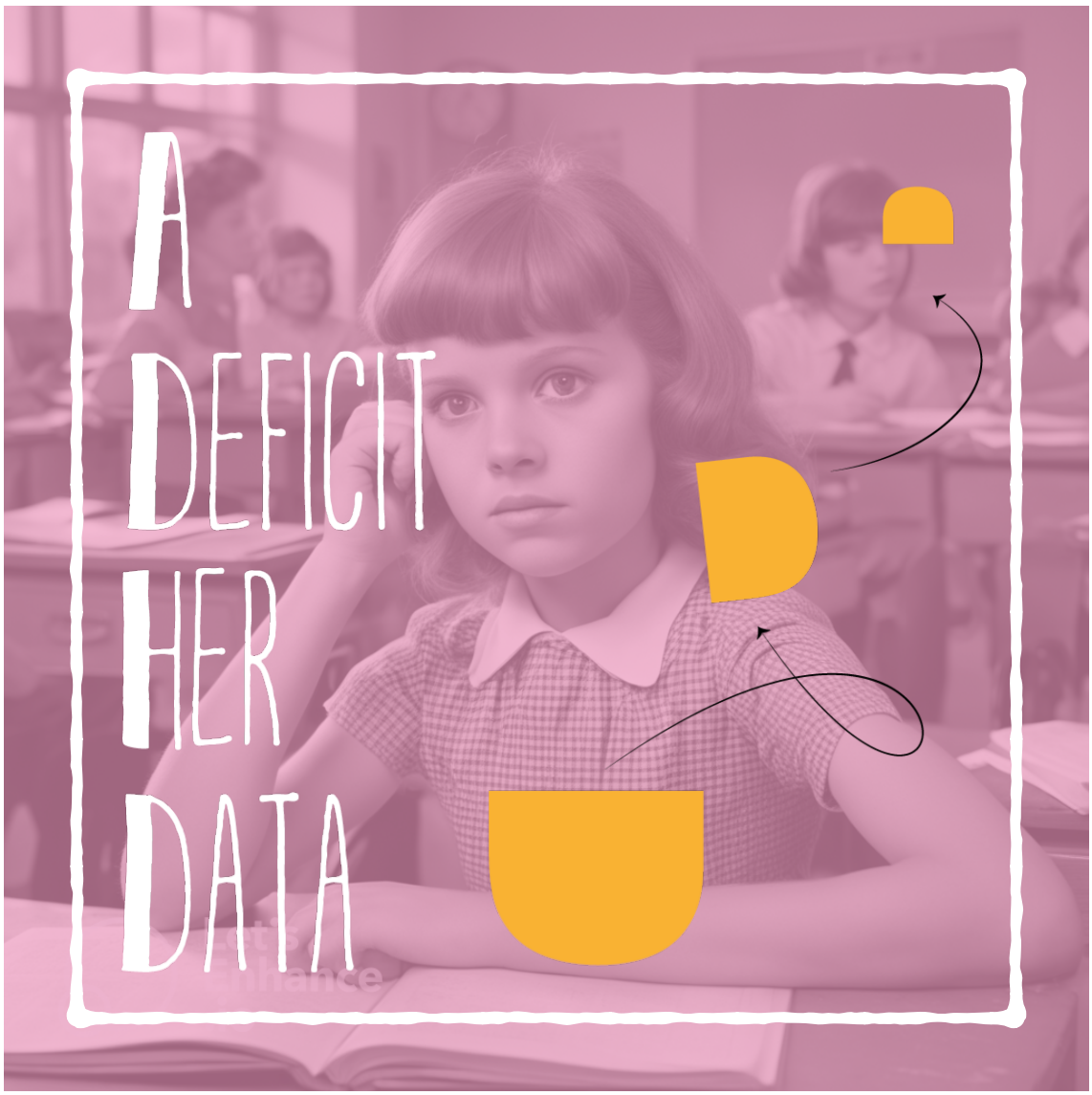


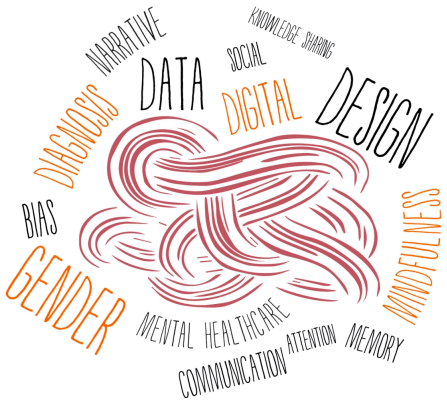
Volume One: Thesis

EXPLORING MINDFULNESS IN A HEALTHCARE DESIGN RESEARCH CONTEXT WITH ADHD WOMEN

Donna Jamieson

Year 2 Part-Time Masters of Research Student

School Of Innovation And Technology


NARRATIVE
KNOWLEDGE SHARING
SOCIAL
DATA
DIGITAL
DESIGN
DIAGNOSIS
BIAS
GENDER
MINDFULNESS
MENTAL HEALTHCARE
COMMUNICATION
ATTENTION
MEMORY

Research Abstract

This study aims to embody a mindfulness-based approach to design research inquiry with ADHD Women. So that we may explore its potential to enrich both the research experience itself, and generate insights that can shape foundational components of healthcare experience design.

Future healthcare envisions “patient empowerment” driven by health tracking and “self-management” technologies. Within this purview, ADHD Women present an entanglement of healthcare design challenges. Themes of gendered diagnostic data, accessibility issues, and potential challenges with design participation offer abundant opportunities to frustrate the research, design and development process. The study seeks to enter this space, by creating an empathetic design research pathway, in which to mindfully explore diagnostic perceptions.

The mindfulness paradigm is defined here, as the cultivation of awareness, compassion and right action. Clinical trials have evidenced long-term positive impacts of mindfulness training on symptoms and general well-being in the ADHD community. The study aims to build on this success, by exploring how mindfulness praxes may be introduced into a group design setting. So that ADHD Women may be mindfully supported to create insights that inform future diagnostic support solutions.

Six women will be invited to participate in online workshops, to investigate current ‘lived experiences’ of female ADHD diagnosis in Scotland. In doing so, contributions will be made to the fields of healthcare design research and the ADHD community.

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List Of AI Images

Chapter section images were created using AI generation tools. I experimented with these from the project's outset to subtly mirror biases derived from machine coding and interpretation. AI has evolved since the study began, however, it is worth noting that in basic text prompts such as "designer", we glimpse gender bias at work. This serves to mirror a research theme of gendered diagnostic criteria. Whilst the staring eyes of ADHD Women, and the inaccuracies in the images rendered suggest that more sophisticated means of modelling are required.

AI Image 1 - Thesis Cover - TEXT PROMPT " A Realistic black and white photo of 1960's schoolgirl that has attention deficit hyperactivity disorder", Source: letsenhance.io 27/11/23

AI Image 2 - Chapter 1 - Introduction
TEXT PROMPT " A photograph of five 1970s Scottish schoolgirls taken from behind, one girl in the group has forgotten to bring her school satchel. ", Source: gencraft.com 27/11/23

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AI Image 6 - Chapter 4b - Fieldwork
TEXT PROMPT "Five ADHD Women Engage In Mindful Inquiry", Source: Microsoft bing.com, 27/11/23

AI Image 6 - Chapter 4b - Fieldwork
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Glossary Of Terms

DIGITAL HEALTHCARE DESIGN

End User

in digital product development, an end user is a person who ultimately uses or intends to use a product. As such products are designed with the end user in mind.

Empathy Map

is a widely used visualisation tool within the field of UX. The primary purpose of an empathy map is to bridge the understanding of the end user within the context of its application. It is used to build a shared understanding of the user's needs and provide context to a user-centred solution.

Healthcare Vignette

Vignettes are reports of clinical cases that provide insight into clinical practice and generate hypotheses for innovations in clinical practice, education, and research

User Journey

a person's experience during one session of using a website or application, consisting of the series of actions performed to achieve a particular goal.

User Experience (UX)

the overall experience of a person using a product such as a website or computer application, especially in terms of how easy or pleasing it is to use.

MINDFULNESS

Body-Mind

---

is an approach to understanding the relationship between the human body and mind as a single integrated unit. It attempts to address the mind–body problem and resists the Western traditions of dualism.

Mindfulness

The quality or state of being conscious or aware of something. A mental state is achieved by focusing one's awareness on the present moment, while acknowledging and accepting one's feelings, thoughts, and bodily sensations, used as a therapeutic technique.

Heart-Centre

Is a yogic term related to chakras or energy centres. It is located in the chest, it serves as our centre of love for oneself and others, empathy and forgiveness. It is associated with unconditional love, compassion, and joy. It is the source of deep and profound truths that cannot be expressed in words.
Heart-Centre

Interbeing

---

interbeing is derived from the Zen religion, it describes the countable and uncountable, plurality of interconnected phenomena. For example, without clouds there is no rain, no trees, and no material to make paper, we can therefore say that the clouds and paper inter-are.

Non Violent Communication (NVC) or Compassionate Communication

---

It is a method of communication created by psychologist Marshall Rosenberg based on universal human feelings and needs. Its purpose is to create empathy and promote cooperative solutions to meet peoples' needs.

ADHD

ADHD, Attention Deficit Hyperactivity Disorder (definition is not consistent with the view of the study)

---

is one of the most common mental disorders affecting children. Symptoms of ADHD include inattention (not being able to keep focus), hyperactivity (excess movement that is not fitting to the setting) and impulsivity (hasty acts that occur in the moment without thought)

Neurodiversity

---

is a popular term that's used to describe differences in the way people's brains work. It suggests there's no "correct" way for the brain to work. Instead, there is a wide range of ways that people perceive and respond to the world. It acknowledges that impairment does cause obstacles, and misunderstanding can create exclusionary issues, some see it as an identity that helps them understand their difficulties as brain-based.

Neurodevelopment

---

is a term referring to the brain's development of neurological pathways that influence performance and functioning (e.g. intellectual functioning, reading ability, social skills, memory, attention or focus skills). When you learn to do just about anything, you are improving neurodevelopment.

Emotional Valence

---

describes the extent to which an emotion is positive or negative

Emotional Dysregulation

---

describes a person who has difficulty regulating their emotions. They may feel overwhelmed, have difficulties controlling impulsive behaviours, or have angry outbursts. These intense responses can cause trouble with relationships, work, school, and daily life

Rejection Sensitivity Dysphoria (RSD)

---

describes heightened sensitivity to rejection or criticism. Although the rejection or criticism may be minor or nonexistent, it can cause intense emotional pain and distress.

Declaration

I, Donna Jamieson, declare that this submission of the full thesis for the degree of Master of Research (MRes) meets the regulations as stated in the course handbook.

I declare that this submission is my work and has not been submitted for any other academic award.

Donna Jamieson

School Of Innovation And Technology, Glasgow School Of Art

January 2024

Acknowledgements

Firstly, I would like to thank Digital Health & Care Innovation for funding this Masters, without which I would have not had the means to undertake this study.

I would like to thank the participants, it has been an absolute privilege, to listen to your experiences and share workshop insights. White Grass, Snow Harp, Pavilion Coral, Sea Bloom, Indigo Noise, Scarlet Crane, Acorn Rain, Cloud Music, Sparrow Twist. Clinicians: Agate Brush and Opal Shell.

Thank you to my insightful supervisors, Dr Tara French and Dr Sneha Raman. Thank you Lorna Walker aka my Mindfulness Supervisor for your love and wisdom. Thank you to Dr Marianne McAra, Dr Lynne McHattie-Sayers and all the staff at GSA for sharing your knowledge and support. To my children Freya, Theo and Alex thank you for making it through lockdown and beyond with me in full-on research mode, I know it has not been easy! Paul thank you for upping your cooking game. And finally to my Mum, for her steadfast support and faith in me.

Preface

USER TEXT PROMPT:
A photograph of five 1970's Scottish schoolgirls taken from behind, one girl has forgotten bring her school satchel

MACHINE LEARNING GENERATION:
Rendered by gencraft.com on 27.11.23

Preface

This study is a meditation on mindfulness within a design research context. It delves into the contemplation of embodied human perception and sense-making while casting a soft gaze towards the immanent horizon of automated digital healthcare. Although the study's focus remains fixed on the seemingly complex adult diagnosis of ADHD Women, themes of encoding pre-existing human biases in digital systems, and universal design conventions are also brought into sharp relief.

The primary motivation for this study came in 2018 when my daughter's counsellor suggested that she may have ADHD. I laughed, and jokingly said, "but she's horizontal … the opposite of hyperactive." The counsellor replied, "It's different for girls", sighed, then suggested that I "Go home and do some research."

My good humour in the counsellor's office soon faded, as I trawled the internet. There was a deluge of Female-specific information, symptom lists, online tests, and a worrying prognosis for the advanced years of menopause and beyond. My daughter and I frantically took online test after test, and in disbelief, we consistently scored ten out of ten each time. Within the diagnostic picture painted, I not only saw my daughter, but generations of our female relatives who couldn't possibly know the neurodevelopmental origins of their "difficulties", my heart ached for us all. The next morning, I arranged for a private clinical assessment for my daughter, and once all the boxes were ticked and tallied she was given a diagnostic label of Aspergers. This new label created further research. Well-intentioned people plied me with booklists and the internet served up a slew of medical research papers. After a few weeks, my head was gridlocked with too much information, I became overwhelmed and had to take a break which unintentionally extended to almost two years.

In 2020, 'lockdown' presented a fresh new opportunity to restart ADHD research, as commitments to work and outside responsibilities were all but swept away. This time, however, my various roles in life as a mother, designer, mindfulness teacher and community arts practitioner consolidated into a firm resolve. I would somehow bring mindfulness into the digital design space for the benefit of ADHD Women. This seemed, a eureka moment at the kitchen table as concern for my daughter became energetically charged into an explosion of action. I applied to join the Masters programme, to design an app, that would visualise health data, to show the interplay of hormones and ADHD symptoms. The app would embody mindful principles to improve focus and mental health,

particularly concerning a sense of self, with a working title of “Capturing The Dynamic Self”. Lockdown, it seemed had created “the perfect storm” for this project to unfold. I hold such gratitude for Lynne McHattie-Sayers' guidance at the time of applying, and to DHI for its Studentship to support this vision.

As you may have observed, the study has an alternative title. This reflects the journey I have been on in the past three years. At the time of my application, I could have not known that I held so many assumptions and beliefs that would require unpacking and investigation. A truer sense of the project’s genesis began to emerge throughout this study. My apparent “eureka moment” at the kitchen table, had been preceded by decades-long experience of working in design. This had created a bubbling undertow of curiosity toward a) design lexicon and praxis that extolled empathy as a method b) my professional practices that engaged in finding and fixing design problems c) aggregating user “data” to create typifications without ever meeting a real person. (My experience of working in community engagement roles, privy to unique life stories, had disabused me of the notion anyone could neatly be put in a box). Another entanglement to unexpectedly emerge was mindfulness. I had been a Buddhist and Zen practitioner for twenty-plus years and had spent the last six teaching secular mindfulness. This had created internal tensions around religion, ethics and the PR image of mindfulness as a tool for well-being akin to a warm bubble bath. As the scientific world is waking up to these ancient praxes, they are being offered as an antidote to mental health issues for some of society’s most vulnerable, including those with ADHD. I am curious as to how digital may be designed to embody mindfulness beyond a simple relaxation technique.

On returning to the kitchen table, almost three years on from the project's inception, my perspective has shifted a great deal. What I’ve learned in the process is firstly that society’s growing awareness of human diversity existing on a spectrum is positively impacting design approaches and methods. Secondly, human biases are limitless, they impact the data we collect, how we interpret it and the actions we subsequently take in response. Our innate negativity bias creates an abundance of ‘design problems’ and seemingly infinite opportunities for innovation. The speed of which, must be tempered through consciously turning towards the positive, slower, and more restorative practices, if we aspire to design sustainably. And thirdly, despite an initial conceit, my long-term Zen praxis is not a cure for Neurodevelopmental issues. I have missed deadlines, and meetings, and researched the nature of consciousness, colloidal formations, bifurcating plant structures and existential frameworks to craft mental metaphors that better support my understanding of highly abstract theoretical concepts. That said, my unbounded curiosity has remained tethered by my heartfelt commitment to the courageous ADHD Women who have

patiently engaged with this project with a sense of curiosity, authenticity and hope that they can make a difference.

Positionality Statement

“A Deficit Her Data” design research, has been conducted by Donna Jamieson. I identify as a white Scottish woman, who speaks and writes only in English. I come from a lower working-class community and recognise my privilege of access to academic institutions at a Masters level in Scotland. My background in Western Buddhist teachings and mindfulness praxes although self-directed, have been influenced and generously supported by Western teachers and peers. I recognise my Western experience as having limitations for deep work that has its origins firmly rooted in Eastern religions, philosophies and practices.

I further acknowledge my position has changed from the project’s outset, where I initially identified as the mother of a Neurodivergent (ND) daughter. I now position myself as ND, within an ND family. I recognise that sharing an identity with the participant group creates implications for research concerning bias, power dynamics, and objectivity. I sought to mitigate these through transparency, openness and design processes that maintained the voice and unique ‘lived experiences’ of the participant group, which are unequivocally not a reflection of my own. Although now positioning myself as a peer seeking to advance community concerns, I also acknowledge the professional advantages gained from this work. In recognising my position, its implications, and limitations I humbly strive to maintain an open and curious mindset, to learn other ways of conducting complex interdisciplinary research that seeks to elevate and enhance human experience.

Chapter One: Introduction

USER TEXT PROMPT:
A Designer Undertaking A Novel Mindful Research Approach

MACHINE LEARNING IMAGE GENERATION:
Rendered by Microsoft bing.com 27.11.23

Chapter 1: Introduction

1.0 Research Aims

The study responds to DHI strategic themes of Mental Health, Digital Tools, and Citizen Empowerment in Long Term Healthcare (Digital Health & Innovation Scotland, 2021) for which it was awarded a DHI studentship. Its proposition convergences praxes of mindfulness and UX design to support healthcare design research for and with ADHD Women. The study appears timely, as clinical trials of mindfulness have evidenced increased capacity for symptom management (Xue, Zhang, Huang, 2019). There is currently no comprehensive utilisation of mindfulness in supporting methods of design inquiry, rendering this a novel proposition. In this chapter, I will discuss the intentions and goals of the study, its focus, the themes arising with the participant group, the research questions and the address.

Intentions And Goals

The aspirations of Scotland's Digital Health and Social Care Strategy to deliver patient empowerment digitally, met my aims, to mindfully and digitally support ADHD Women during diagnosis. A period that is viewed as critical, reportedly having the potential to impact a patient's mental health, self-esteem and future coping capacities (Young, Braham, Gray, Rose, 2008). The study aims to understand how mindfulness may be incorporated into the design inquiry framework to positively influence research participants' well-being and create insights for future healthcare to similarly support this goal.

Vibrant Research themes:

Healthcare Design: The study views patients' lived experience as a foundational element on which future UX experiences will be built.

Mindful Methods Of Inquiry: This study aims to identify how mindful praxes may serve as methods of design inquiry, beyond simple calming effects.

ADHD Women & Diagnosis: As an under-researched populous, the study aims to understand the diagnostic experience of ADHD Women.

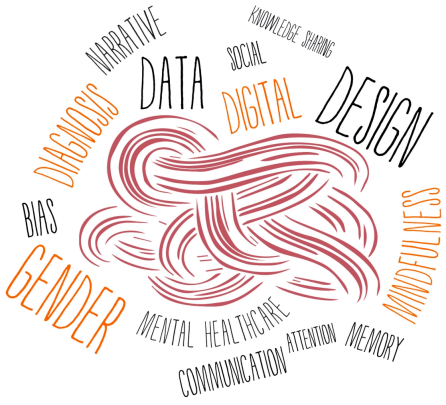
A Deficit Her Data

1.1 Defining The Design Problem Space

How to begin a design research inquiry when faced with an apparent deficit?

As the titular theme points to, ADHD symptoms and diagnostic criteria in the DSM-5 (Diagnostic and Statistical Manual of Mental Health Conditions) are said to be androcentric (Kooji, 2012), and ADHD Women themselves are defined as under-researched populous (Langvik, Holthe., 2017, Kooji, 2012). ADHD Women statistically have an increased risk of misdiagnosis, self-harm and suicide (Waite,2010., Lloyd, Brown, Lock, 2021), rendering the perceived lack of data, a critical mental healthcare issue.

ADHD WOMEN AND DIAGNOSIS



Current Tensions:

Visibility: Women's symptoms are often expressed as "internalised mental health issues," such as anxiety, depression and low self-esteem. This can create increased opportunities for mistakenly identifying, misdiagnosing, and mis-prescribing medications (Kooji, 2021). The decision made in 1987 to combine Attention Deficit Disorder and Hyperkinetic Disorder into the single term ADHD, is suggested to have rendered inattentive subtypes - and typically female symptoms that are less likely to be overtly hyperactive - invisible (Hansen, 2014). By contrast, on social media platforms #ADHD hashtags rank into billions of hits, with #ADHDinwomen, #ADHDmom following close behind in clocking up over 200 million views (Joho, 2021). It would seem that Women are very much visible in this space. The abundance of awareness-raising around gendered symptoms may, conversely, make diagnosing women victims of the skyrocketing trend (Korducki, 2022).

Current Understanding Of Challenges:

Towards Design Inclusion: Although the DSM-5 outlines hyperactivity, inattention and disorganisation as ADHD's primary components (American Psychiatric Association, 2013). For women, it seems secondary mental health impacts may ostensibly be their most apparent symptom (Waite, 2010., Loyd, Brown & Lock, 2021., Quinn, 2010). In response to this, research sensitively foregrounds the symptoms of anxiety, depression, and low self-esteem (Rucklidge, Kaplan, 1997), as its foremost concerns in working with ADHD Women. While also acknowledging that their primary Neurodevelopmental issues may require reasonable adjustments.

Questions

1.2 Developing Research Inquiry

The healthcare context and user research are new areas for me as a practitioner. I aim to build on my digital design experience and praxes and draw from my previous engagements, of working mindfully and creatively with Women experiencing mental health challenges. In doing so, I aim to support the generation of phenomenological data concerning the female 'lived experience' of diagnosis in fieldwork activities.

Healthcare Design Thinking:

Healthcare design typically begins by defining the problem through question and purpose (Oliveira, Zancul, Fleury, 2021). For example:-

How might we …

Design UX to support the diagnostic experience of ADHD Women ?

So that …

They may experience diagnosis as an empowering step towards greater self-understanding and well-being.

Introducing a mindfulness paradigm* into the design research space, how can the articulation of the study's vision engender similar sensibilities for the research experience itself?

How might we …

Mindfully support ADHD Women to investigate their diagnostic experience?

So that …

They may experience design inquiry as an empowered first step towards self-understanding and well-being.

Empowering And Empathetic Inquiry: In drawing inspiration from the mindful paradigm, the study aims to generate a robust empathetic understanding of the participant group, that will enable compassionate facilitation.

Mindfulness praxes will be adapted and designed to realise insights for both design healthcare research and the participant group.

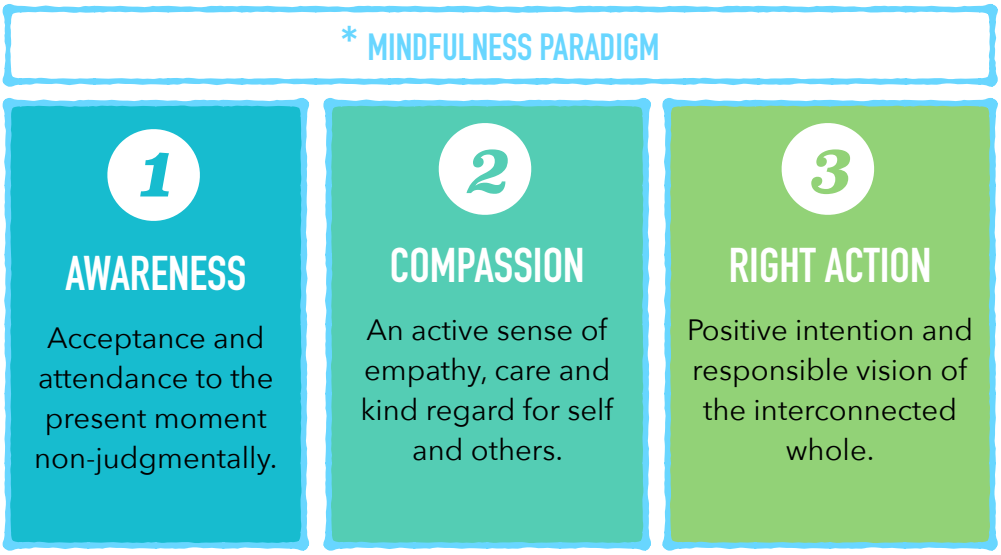
> The design space will embody a sense of experimentation, and the engagement framework a prototype, through which a sense of empowered collaborative inquiry may be achieved.

Although the vision for this study has evolved in response to research findings, its focus has remained firmly on the adult diagnostic experience of ADHD Women, and the application of a mindfulness paradigm, in healthcare design research. Inquiry is orientated around two key questions:

(See **Appendix F** which outlines the evolution of the research questions)

Q1. What can the **mindfulness paradigm** contribute to **healthcare design research** for and with **ADHD Women?**

The primary question will be addressed through the research framework, and approach to the design of fieldwork activities that aim to integrate and embody a mindfulness paradigm*, defined here as:



Secondary Question:

Q2. How does **mindful inquiry** impact the perceptions of the **diagnostic experience** of **ADHD Women?**

The secondary question will be addressed by identifying the current perceptions of diagnostic experience and documenting any changes in perception cultivated by mindful praxes.

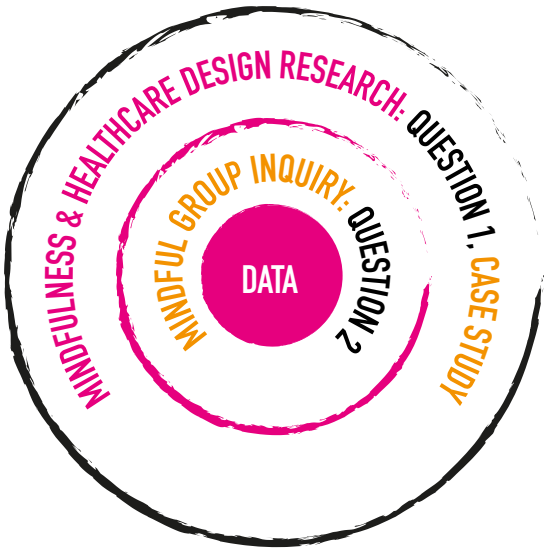


Fig 1- Model Of Fieldwork Proposition, Source: Author

1.3 Fieldwork

The objective of the research pathway and fieldwork activities is to approach issues of embodied human experiences and their translation or encoding into future healthcare experiences. It seeks to understand how perceptions of deficits in medical data, narratives of female invisibility and disembodied digital design approaches may be mindfully approached to cultivate data generation.

The Research Pathway:

User Experience And The Empathetic Framework: The research process sets out to understand future healthcare users, beyond their diagnostic typifications, by initially listening to their diagnostic experiences, and then mindfully facilitating group inquiry of their diagnostic perceptions. I have taken inspiration from UX researcher Indy Young's framework of "Practical Empathy" (Young, 2015)

Fig 2- Empathetic Research Pathway, Adapted from Indy Young (Young, 2015) Source: Author

Pre-fieldwork:

Stage 1: **Developing Empathy:** ADHD Women Topic Research

A three-month period of desk research, followed by a five-month digital immersion, and thematic analysis.

Stage 2: **Engaging Empathetically:** Scoping Activities

Mindful grounding to conversations with Six ADHD Women and Two Clinicians.

Stage 3: **Designing Empathy:** Fieldwork Design

Recruitment, design and facilitation of online group design workshops.

Fieldwork:

Stage 4: **Embodying Empathy:** Conducting Fieldwork Research

Facilitating an empathetic design context to support group mindful inquiry.

FIELDWORK CONTRIBUTIONS

Inquiry To Design Artefact, aiming to address the research questions, the project will create:

- Online **“mindful inquiry”** workshops
- Generate, analyse, and document **“mindful insights”**
- Mindful UX design artefacts to inform future healthcare experiences

Potential Outcomes: the project intention is for the participant experience to be valuable and rewarding. They may experience a sense of

- **Connection:** through empathising with one another from shared experience
- **Visibility:** authentically being seen and heard
- **Engagement:** actively involved in advancing research
- **Insight:** into their experiences and mindfulness as a tool of inquiry

Submission

1.4 Thesis Structure

The format of submission for this research is a full thesis with documentation of my design practice integrated throughout. The thesis is made up of seven chapters that follow the recommended structure of a research thesis rather than present a chronology of research activities.

Chapter 1: Introduction

Identifying the design problem space, themes and research questions.

Chapter 2: Literature Review

Exploring the field of mindfulness and design research inquiry, ADHD Women and diagnosis.

Chapter 3: Methodology

Influences from philosophy through to methods of inquiry and analysis.

Chapter 4: Fieldwork

Description of fieldwork activities and outputs.

Chapter 5: Analysis And Findings

Workshop findings and analysis.

Chapter 6: Discussion And Conclusion

Key contributions to the problem space and areas for future research.

Chapter 7: References

Chapter Two: Literature Review

USER TEXT PROMPT:
An ADHD Woman Using A Digital Mindfulness App

MACHINE LEARNING IMAGE GENERATION:

Rendered by midjourney.ai 27.11.23

Chapter 2: Literature Review

2.0 Introduction

The literature review presents an outline of what is currently known about the domain of inquiry. A domain which may be delineated by its intentions towards seeking to understand the application of mindfully informed healthcare design approaches. The beneficiaries of this approach are viewed as Healthcare Design Practitioners and Participants or “end user” groups who may require accommodation regarding attention, memory and mental health. The entangled themes of Healthcare Design Praxes, Mindful Praxes and ADHD Women will be explored fully in this chapter.

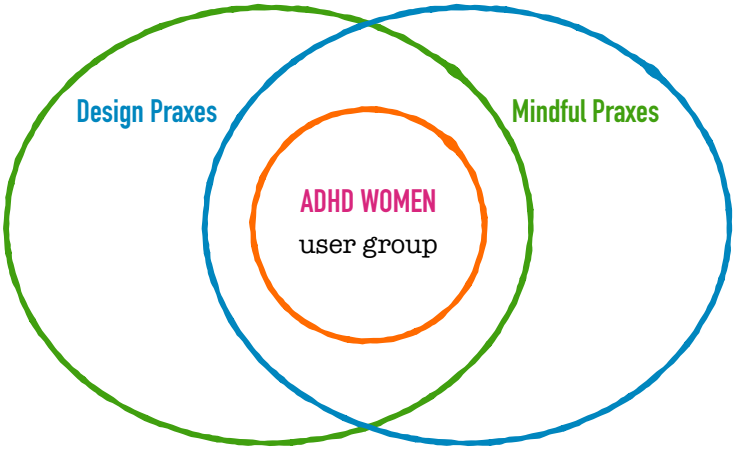


Fig 3 - Focus And Scope Of Literature Review Source: Author

Mental Healthcare Design Themes

2.1 Healthcare Design

Fieldwork aims to bring together mindfulness and UXD praxes for shaping future digital healthcare to support diagnostic well-being. As a novel proposition, literature sought to find alignment in praxes that incorporate aspects of a mindful paradigm.

HEALTHCARE UX DESIGN: MENTAL WELL-BEING AS A PARTICIPATORY ACT

A Speculative Future Of Mental Well-being:

Scotland's Digital Health & Care Strategy 2018 (Thompson, Hendry, Mead, 2021) envisions future health and well-being as self-management via digital tools and services. It recognises our current mental healthcare crisis (Stavert, McKay, 2020), and that COVID has ushered in "at-a-distance services" (Rycker, 2020). In order to deliver on the future vision of empowerment, the strategy foregrounds issues of equity and inclusion in the design process.

In this healthcare context, the value of involving end users in the design process may be felt both by positioning them as "subject matter experts" (Entwistle, et al. 1998, Ku, Lupton, 2020) and by enhancing the efficiency and usability of the design of digital products (Bowen, 2010). From an ethical standpoint, participatory design practice sees "users" not as merely passive "informants" or "evaluators" but as co-designers in the process (Sanders, Stappers, 2008., Simonsen, Robertson, 2013).

Mental Health within this context has been aligned with the WHO (World Health Organisation) proposed definition as a "state of appropriate internal equilibrium" (Sartorius, 2009) which may be maintained in relationship with one's mental "disability" or "disorder" (Galderisi, et al. 2015). In order to approach the cultivation of one's well-being as both participatory and dynamic, Peter Jones suggests that healthcare design recasts patients as active "health seekers" (Jones, 2013). Whilst positive psychology's forefather William James encouraged a melioristic view of well-being in the support of "human flourishing" (Pawleski, 2017). Although proposing mental health as a participatory act, and recognising the capacity to achieve equilibrium with a mental disability or disorder, the how

via digital has yet to be fully realised beyond the so-called gimmicks of mental health apps (Marshall, Dunstan, Bartik, 2020). Additionally, digital mindfulness apps apparently lack a sufficient number of research studies to draw firm conclusions (Gál, Ștefan, Cristea, 2021).

Entangled Enactments Of Empathy And Data:

The literature review acknowledges the increasing Gordian Knot of collaborative enterprise between the designer, data, and the end user, whose interactions generate new knowledge and conceptualisations about "bodies and selves" (Lupton, 2020). In Lupton's work human and data form assemblages of devices, software and human interaction. Through which concepts of selfhood, identity and embodiment are renegotiated via digital technologies (ibid). Critically in her accounts of materialising and visualising the mattering of data, the bias of "embedded power relations" looms large, and ethical responsibility enters the fray (ibid).

This evolving role of design/designer extends far beyond aesthetic articulation, into the "wicked problems" of complex social systems design (Buchanan, 1992). Within the Digital Healthcare Design context, technology is viewed not only as an interface but a collaborator in the co-creation of well-being (Dubberly, 2010). As such, designers are not only tasked with the humanisation of technology (Kolko, 2010) but also the responsibility of infusing empathy into design practices and outputs. By extension, empathy in action may now be viewed as a performative demand of the healthcare designer's role (Kolko,2010., Aguirre, Agudelo, and Romm., 2017).

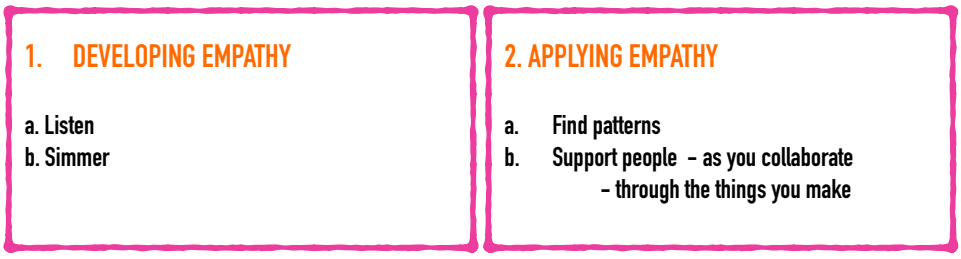


Fig 4 - Indy Young's Model of "Practical Empathy" (Young, 2015) Source: Authors Own

In Peter Jones's book "Design For Care", he likens the professions of design and healthcare by their drive to improve lives (Jones, 2013, p.8). Further yet the theme of diagnosis itself finds symmetry in both praxes, seen as tasked with investigating human-centred "problems" in order to map pathways towards restorative solutions. Roles that again coalesce through professional descriptors such as "empathy in action" (Vernon,

2013., Young, 2015). It is here that fieldwork becomes enlivened through a desire to investigate how “empathy in action”, may be enacted and experienced as an embodied quality arising at the intersections of design, user and technology.

A Practical Empathetic Design Framework:

Within Indy Young’s framework of “practical empathy” cognitive empathy is achieved through curiosity and listening, in order to better understand user’s emotions, decisions and behaviours (ibid). This is further expanded as “the willingness to take time to discover the deep down thoughts and reactions that make another person tick”. Empathetic activities require time and purposeful intent, also asking that we put our preconceptions to one side (Young, 2015).

2.1.3 DESIGN INCLUSION

User research is viewed as an integral part of early-stage strategic design frameworks, situated at the furthest point upstream in the discovery cycle (Rosala, 2020). This is defined as “the study of people’s behaviours, motivations and needs in a particular context, which affects how people understand and use things in their daily lives” (Marsh, 2018). Within healthcare design, patient accounts are crucial to articulate design problems and difficulties caused by current approaches as qualitative approaches to reveal meaning and opportunity (Ibid., Lupton, 2020).

In seeking to map issues of design inclusion, user research understands that design solutions built for the average user can cause harm to those whose needs haven’t been considered (Young, 2020). Inclusive design is not just about designing for those with disabilities it is also about designing for diversity. As a philosophy, this encourages designers to consider the whole range of human experiences and how these shape our interactions with the world (Design Council, Designing For Inclusion CITE., Young, 2022., Rose, 2016).

Modelling Beyond “edge state” user typifications:

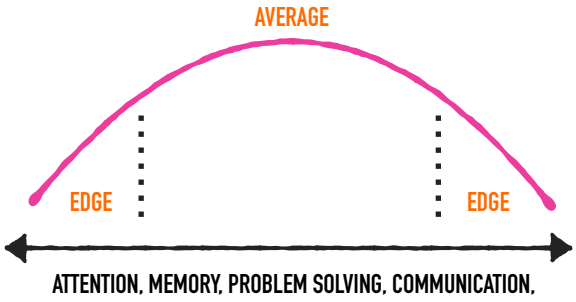


Fig 5 - Model Of ‘Extreme Users’, adapted from IDF interaction-design.org Source: Author

Within user-centred design praxes, ADHD Women may be categorised as “extreme” or “edge state users” (Mortensen, 2020) as their capabilities for interaction may sit towards the ends of a spectrum regarding cognition and behaviours. However, this definition requires finer granularity to identify individual interaction styles. Todd Rose’s “jagged principle” (Rose, 2016, p.65) offers a multidimensional model of human factors, that steps away from fixed generalisations and typifications, offering the potential to model the unique qualities of human experience and behaviour. This then segues into Shoda’s situational view of behaviour, which suggests that every individual interacts differently given a certain context (Rose, 2016). As such the study recognises the difficulties of mapping user needs in both the design space and UX solution given the lack of research data concerning women’s behaviours and needs ADHD Women.

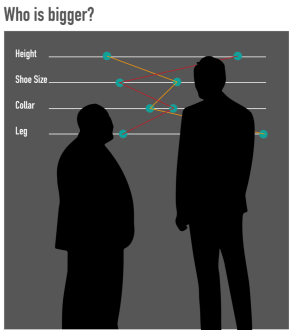


Fig 6 - Todd Rose maps the ‘jagged principle’ for male physique, (Rose, 2016) Source: Author. AI figures from letsenhance.io

2.1.6 UX HEALTHCARE DESIGN: LITERATURE REVIEW SUMMARY

The literature findings looked at design, user and healthcare data as an entanglement of knowledge creation, that can support future well-being during diagnosis. It spoke to the imperatives of entering the field ethically and empathetically, in a bid to know and

understand our participant group beyond their simple diagnostic typifications. In the face of apparent “deficits” we looked to existing models and saw that although they go some way to creating user typifications, our group may embody qualities of dynamic variability that are contextually and situationally influenced by the design space.

Mindful Methods Of Inquiry

2.2 An Overview Of Mindfulness

The introduction of mindfulness into research praxes was inspired by the success of clinical trials within the ADHD community. This section will discuss the clinical applications of mindfulness, followed by its application in design and research contexts.

2.2.1 CIINICAL RESEARCH AND MINDFULNESS

Foundational Mindfulness Practices In Clinical Healthcare Settings:

Jon Kabbat-Zinn is recognised as influential in bringing secular mindfulness into a Healthcare setting, initially through his eight-week Mindfulness Stress Based Reduction (MSBR) programme (Hang, 2019). His was the first of many evidence-based studies into the effectiveness of Mindfulness used as a therapeutic tool. Zinn’s approach was informed by Japanese Zen, as such it is suggested that he learned of a millennia-old practice called Bompu or “ordinary zen” meditation. A meditative practice which lay folk engaged in without following any religious doctrine (Web, 2022). At the same time as Zinn advanced research on attentional or “present moment” practices, Sharon Salzberg’s 1995 book “Loving Kindness: The Revolutionary Art of Happiness” prompted researchers to similarly test its “heart-based” practices as a clinical intervention (Hang, 2019., Salzburg, 2011). These practices are influenced by Indian philosophies of Maitri (Loving-Kindness), which in a clinical context, are expressed as the cultivation of compassion, and connection to promote healing (Seppala, 2014).

“the awareness that arises from paying attention, on purpose, in the present moment and no-judgementally”

Jon Kabat-Zinn, (Moore, 2019)

Both the praxes of Zinn and Salzberg, have been secularised and studied in the clinical domain. By removing religion, they are perhaps reduced to a method towards a generalised and expected result, that of better mental health as a side effect of praxis (Lundh, 2019).

Mindfulness And ADHD

Dr Lidia Zylowska head of the ADHD programme at UCLA Mindful Awareness Research Centre claims that mindfulness can "improve your ability to control attention" and increase awareness of your "emotional state." (ADDitude., 2017). It is presented as a training practice to self-regulate our attention, affect and stress responses. (Zylowska, Smalley, and Schwartz, 2009). The approach to childhood ADHD appears to step away from the psychiatric domain and into occupational therapy (OT). Within this context, mindfulness is viewed as a therapeutic tool and means of providing sensory regulation, targeting three main areas, multi-sensory integration, emotional regulation, and executive function (Gibbs, 2017). A child's anxiety, is seen as the result of "poor response patterns" to overstimulation and is seen as the gateway to attention (Ibid., Langvik, Holthe, 2017). Here ADHD is viewed as compensatory behaviour for "unfinished childhood development" issues, which can be integrated via mindfulness (ADDitude, 2021).

The growing body of clinical evidence sees Mindfulness as an accepted component of a comprehensive treatment plan for those with ADHD (Jansen, 2015. Smalley et al, 2009., Deshmukh, 2020., Cairnross and Miller, 2020). Trials have engaged participants in lengthy training programmes, using self-reporting tools such as the MSRS (Mindfulness Self-Reporting Scale) to evidence improvements (Bergomi, Tschacher, Kupper, 2013).

2.2.2 MINDFULNESS OUTSIDE OF THE CLINICAL FIELD

Psychology That Speaks Back to Buddhist Principles

Zen Master and Clinical Psychotherapist Dr Jules Shun Harris has integrated psychological methods of mindful inquiry that use a framework of "Mind Body Bridging" techniques. This work aligns with the ancient Buddhist sutra, the Abhidharma, which views our understanding of reality as a phenomenological and psychological construct (Jacobs, 2017). The bridging or mapping techniques, allow contemporary practitioners to overcome tendencies towards "emotional and spiritual bypassing" and staying present to "what is" of

present-moment experience (Harris, 2019). His model seeks to evidence personhood and what we ascribe to it, in the Buddhist context this seeks to loosen ego-clinging.

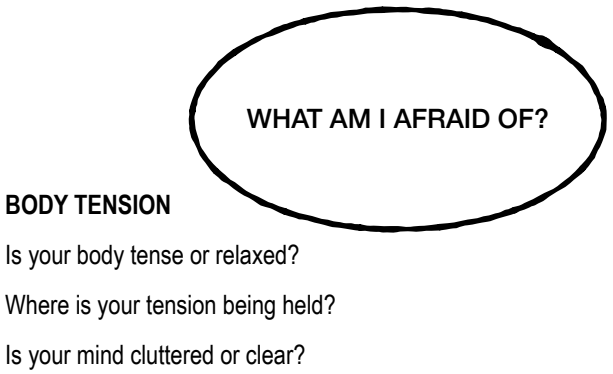


Fig 7 - "Mind Body Bridging map", Adapted from Harris 2019 Source: Author

Mindfulness As a Pathway Of Female Political Action:

A lesser-known and researched component of the mindfulness paradigm is engaged action. Here mindfulness is not simply viewed as a passive exercise but a practice of conscious decision-making outside of meditative practice (Doobinan, 2018). The work of eco-feminist Joanna Macy uses the mindfulness paradigm to advocate for environmental justice (Macy, 1991., Curtin, 1994). Whilst Nadja Furlan Štante's paper "Mindfulness As A Path of Women's Empowerment" (Štante, 2016) captures this beautifully in suggesting that the practices of mindfulness possess the ability to spiritually liberate us from the illusion of dominance, men over women, mind over body, and human over nature. The ethical goal is to improve relationships through our attentiveness to the interconnectedness of all things (Ibid). Dr Kirsten Neff describes the value of "fierce self-compassion for women" in her practices "harness the energy of action to alleviate suffering—when these are fully integrated, they manifest as caring force. Our force is more effective when it's caring because it combines strength with love" (Neff, 2021).

"Mindfulness possesses the ability to spiritually liberate us from the illusion of dominance"

Nadja Furlan Štante, 2016

Mindfulness In The Research Context:

Few research practitioners have used mindful praxis in conjunction with their methods of inquiry, other than exploring how it can innovate their craft (Nicholls, 2019). It has been described as an aid to phenomenological “bracketing”, and practitioner reflectivity, (ibid) whilst removing the duality associated with the participant and researcher towards a more interactive relationship and “co-construction of data” (Lemon, 2017). In the ethnographic field, it has been advocated for as a conduit for personal transformation by operating at the juncture of mind, heart and experience (Orellana, 2020). As a tool for action research, mindfulness and the compassion generated through practice, are seen as an “energising force” to help researchers engage more fully with the concerns of their stakeholders (Ward, Varnon-Hughes., 2016). The literature reviewed found one instance of its use as a tool of research facilitation. Here praxis was qualified as a “mini-meditation” used as a “guided landing”, to encourage engagement in the present-moment research activities (Adriansen, Krohn, 2014).

2.2.3 SUMMARY OF MINDFULNESS

The literature review findings uncovered a modest amount of mindfulness research that had been conducted outside of the clinical domain concerning ADHD. In its approach, it appears that mindfulness aligns with developmental and sensory concerns in childhood and the disciplined training of attentional focus in adulthood. For research practitioners mindfulness praxes appear to be undertaken to primarily integrate with their existing research practice. The conceit of this study is to realise mindful insights for the practitioner, participant group and data generated while speaking to integrating aspects of female empowerment and Buddhist philosophies.

Healthcare Design Participant Group

2.3 ADHD Women

Within this section, I will explore the complex entanglement of adult female diagnosis and the clinical work that has sought to evidence the female experience. Then I will move towards an understanding of establishing how female presentations of ADHD may impact design participation.

2.3.2 WOMEN'S EXPERIENCES OF RECEIVING AN ADHD DIAGNOSIS

A psychological study exploring the impacts of receiving an ADHD diagnosis in adulthood conducted in 2008, indicates the importance of psychological interventions to help patients cope with the "adjustment process". It suggests that patients typically engage in a review of their past, consider their future, and experience a mix of emotions surrounding diagnosis that range from elation to confusion and anger. It concludes that there are heightened risks of depression and anxiety if not met with "coping styles that involve positive reappraisal of stressful situations." (Young, Branham, Gray, Rose., 2008). This small study did not differentiate between genders and reported responses beyond stating the group comprised 4 women and 4 men. We can speculate that ADHD Women's predisposition towards mental health symptoms (Waite, 2010., Lloyd, Brown and Lock., 2021., Quinn, 2010) may indicate a greater risk of negatively experiencing diagnosis.

2.3.3 WOMEN'S PERCEPTION OF DIAGNOSTIC EQUITY

Dr Patricia Quinn founder of America's National Centre For Gender Studies and ADHD, alongside Dr Kathleen Nadeau, created the female self-reporting scale (Nadeau, Littman, Quinn., 2015) to address the androcentric diagnostic criteria of the DSM-5. In 2017 a UK expert panel review of diagnostic guidelines declared "a lack of gender-specific data", suggesting "adaptations" be made to rating scales which they claim are based on male "norms" (Young, Hollingdale et al., 2020). Equal amounts of men and women are annually assessed, men are 3 or 4 times more likely to achieve a diagnosis. Gender it would seem appears to actively impact diagnostic ratios, through the tools of clinical assessment (Lloyd, Brown and Lock, 2021). The existing

diagnostic criteria create specific issues for women, (Quinn and Mahoo, 2014, Quinn, 2010 p.5, Quinn, 2010 p.5) as such Quinn et al suggest changes:

- extending the age of onset to 12 years old
- amending school reports to include high IQ and overachieving traits
- ability to amend diagnostic subtype, which may be more fluid in women
- diagnostic criteria to be more representative of female concerns

At the time of writing, and to the best of my knowledge, these recommendations have not yet been taken up by the Scottish Government. (Collinson, Chappele, 2020). With high-profile UK organisations such as the ADHD Foundation taking up “A Call To Action” on gender disparities (Lloyd, Brown and Lock, 2021), it may be safe to assume that many women are aware of the gender issues surrounding diagnosis, and perceive themselves as disadvantaged in the diagnostic setting.

2.3.4 WOMEN’S LIVED EXPERIENCE OUTSIDE OF DIAGNOSTIC CRITERIA

A critical review of diagnostic criteria advises that we must “move away from stereotypes” (Young, Adamo et al., 2020). These are currently expressed as a binary between the “hyperactive schoolboy” versus the “inattentive or dreamy schoolgirl” (García, 2019). The work of Dr Patricia Quinn, Dr Katheleen Nadeau and Dr Sandra Kooji presents a more nuanced typification of ADHD Women and Girls.

At school, a girl’s intellect is initially an early psychological “protective factor” (Kooji, 2012., Quinn, 2010). However, the functional impacts of ADHD, see school girls working twice as hard, a trait which is often misperceived as perfectionism or overachieving characteristic (Quinn and Mahoo, 2014., Quinn, 2010 p.5). As the responsibilities of adulthood mount, they are at an increasing risk of burnout and overwhelm (Brattberg, 2006).

The progression of those without this “protective factor” is depicted through negative life outcomes such as teen pregnancy, lone parenting, substance misuse, self-harming, eating disorders, promiscuity, poverty etc. (Holthe, Langvik, 2017). Whilst the traditional female role as the family's “organisational linchpin”, is said to leave ADHD households in “chaos”. (Kooji, 2012. p.17)

By late adulthood, and eventual diagnosis, women's self-esteem and self-image have suffered over their lifetime, from repeated failure and a sense of inadequacy. (Holthe, Langvik, 2017). The American Psychological Association reports this as "learned helplessness" in response to negative life events (Crawford, 2003).

2.3.5 MINDFUL DESIGN INTENTIONS AND ADHD WOMEN

Prior healthcare studies suggest that empathetic design is the quality or willingness of the designer to "know our participants" (French, Teal, 2016). So that we may understand how to create a space to "move participants through the design process" (ibid). Understanding ADHD Women and their diagnosis requires that we engage with an entanglement of themes that encompass the psychological, intimately personal, and social domains.

The study proposes that we move beyond binary typifications towards a more holistic and dynamic view of the participant group. Seen through the lens of mindfulness, they are afforded qualities of Neuroplastic theory, that describe brain development as heritable, and an ongoing process. (Merzenich, DeCharms, 1996., Mirkovic, et al, 2020). Drawing from the theories of Dr Gabor Mate, the participant group's symptoms may be described as "trauma-informed." This hypothesis claims that early life adaptations, increase the chances of survival in the child, and set up addictive patterns in adulthood through the need for constant reward (Maté, 2011).

For the design space psychological, gender, and negative life experiences concerns are thematically weighty, and all within the scope of female "lived experience" and late adulthood diagnosis concerns. As such the design space must actively set out to sensitively facilitate diagnostic inquiry, whilst training its focus on design activities.

Chapter Summary

2.4 Literature Review Findings

The literature review was undertaken to identify theories and practices that had gone some way to understanding the entanglement of research themes:

ADHD Women, beyond diagnostic criteria and medical profiles

The review found that in seeking to understand ADHD Women and their diagnostic concerns, we are drawn into issues of bias and stereotypes. In aiming to move away from these poorly rendered user typifications, healthcare design is tasked with offering more accurate modelling to approach issues of inclusion.

Mindfulness as a tool of design research inquiry

Prior studies appear to articulate mindfulness as a tool for training attention, and a sense of calm or ease as a "side effect" of praxis. Research practitioners utilise mindfulness to enhance their craft, leaving a knowledge gap in the domain of fieldwork that aims to study the impacts of mindfulness as a method of research inquiry.

Speculative empowered well-being, via healthcare UX design

Approaches to healthcare UX design sought to look at issues of inclusion and user profiling in the face of data "deficits". By way of addressing the solution, it prioritised empathetic design and mindful methods that may afford a more unique expression of diagnostic experience in the field.

Chapter Three: Methodology

TEXT PROMPT:
A Five Stage Methodological Waterfall

MACHINE LEARNING IMAGE GENERATION:
Rendered by Microsoft BING.com 27.11.23

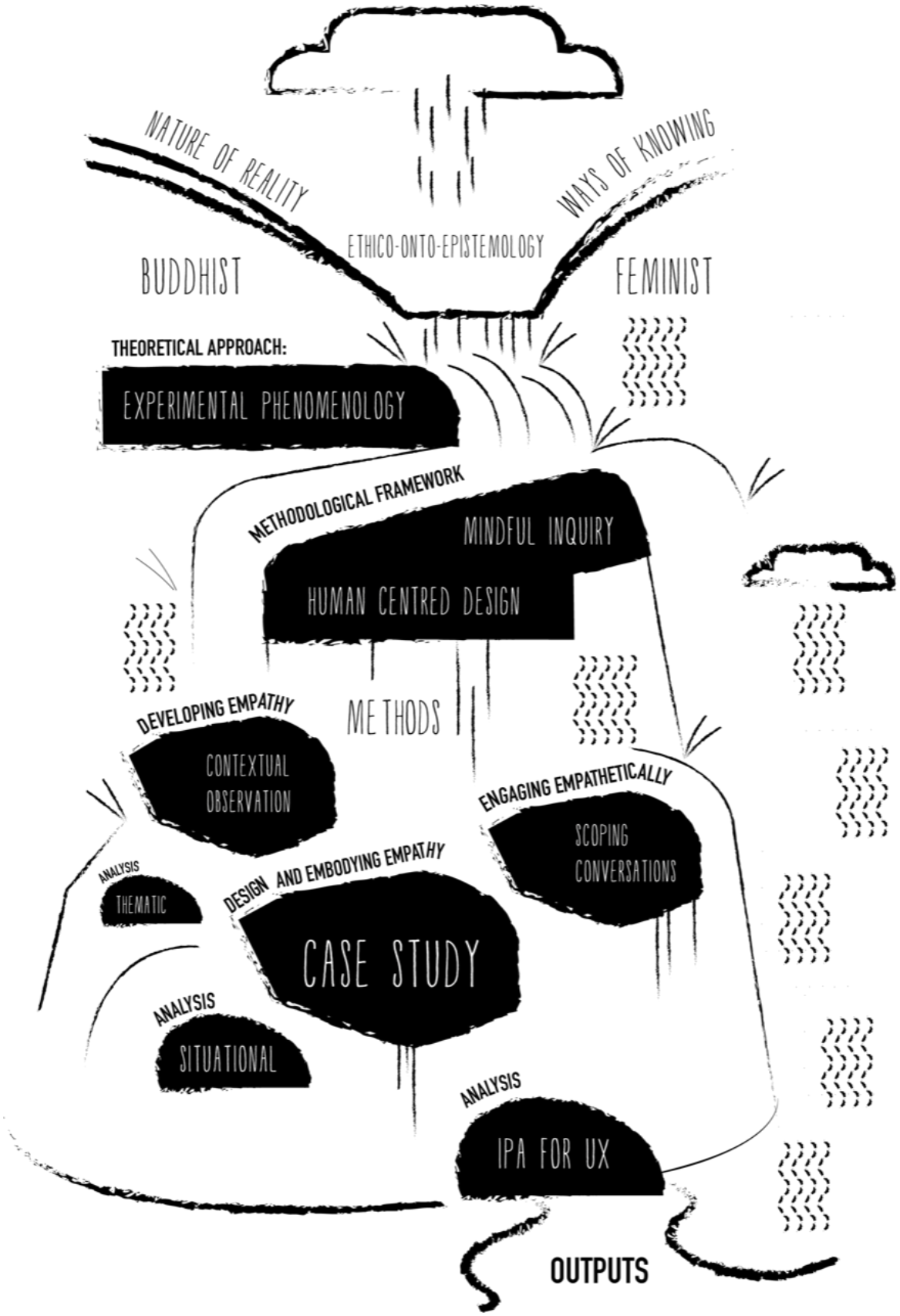


Fig 8 - Adapted Michael Crotty Waterfall Methodology. Source: Author.

Chapter 3: Methodology

3.0 Designing A Methodological Apparatus

The primary motivation for this study is to platform ADHD Women's "lived experience" of diagnosis, as a foundational component of purpose-driven healthcare design. In seeking to uncover phenomenological perceptions, the study acknowledges that these may be influenced by inquiry modes and contexts, aiming to create a positive impact. Grounding methods in mindfulness, the fieldwork's phenomenological findings, will be given shape by human-centred design approaches.

Methodology sets out to:

- Integrate mindfulness and design praxis
- Design novel methods of mindful inquiry with/for ADHD Women
- Utilise findings to inform the creation of healthcare artefacts.

This chapter will explore the philosophical undercurrents that influence the research proposition, move towards the methodological approach, and the design of fieldwork methods and engagement. It then outlines data collection, and approaches to analysis, ending with a discussion on ethics and recruitment.

Notes on Figure 8, page 44:

Michael Crotty's Waterfall (Crotty, 1998). I struggled to demarcate neat plateaus where the epistemological cascades into the philosophical and methodological. Stepping back, to view the waterfall set nature, its water oxygenating and nourishing, the still deep pool at its end, evaporation rising and condensing into cloud forms, and rain-making as the summation of the process. This dynamic view felt more true and as a metaphorical extension of the water cycle, ***it can be read from any starting point, as all flow and contribute into one.***

Aligning Spiritual And Feminist Ontologies

3.1 Onto-ethico-epistemology

3.1.1 BUDDHISM AN EMBODIED VIEW OF MENTAL HEALTHCARE

In aiming to ground research in philosophies, I travelled upstream from mindful praxis towards a Buddhist source, to gain perspectives on reality and knowing. Here we are asked to consider this view, as outside of our grasp, as our perceptions of the world are brought forth by our projections. This theorises that truth, mind, cognition and consciousness “emerges out of material and energy in a process of constant becoming” (Verala, Maturana., 1987). The self-referential cycle of perception and action constructs our reality, and in turn, shapes our neurobiology (Vogd, 2013). This philosophical proposition is not merely an idealistic notion of knowledge creation as a byproduct of thought alone, but one that speaks to a continual process of embodied ‘becoming’, a material reification of perception (ibid). This theory becomes lively in the mental healthcare design inquiry context. As it acknowledges a potential interface between user perceptions and their biological health. By extension, it foregrounds the ethical responsibility of design to facilitate interfaces between mental health and modes of well-being.

3.1.2 FEMINISM, KNOWLEDGE CREATION AND PARTIAL PERSPECTIVES

As we orientate towards female perceptions and philosophies, ethical responsibility yet again arises, in the entangled “ethico-onto-epistemology" model of physicist Karen Barad which speaks to the inseparability of ethics and knowledge production (Geerts, 2016). This framing finds utility through themes of encoding gender bias in healthcare systems that scholar Donna Haraway’s describes as “partial knowledge” that the patriarchal view affords. (Haraway, 2016). Philosophically and pragmatically Barad then presents the researcher and object of research, as an enactment of power dynamics. With the researcher extracting knowledge from and giving voice to, their object of study. Barad models, the tripartite lens in which the “object,” “representation” and “knower” are entangled (Brad, 2007). Mindful inquiry seeks to further this proposing participants as an embodiment of apparatus, focus and interpreter of inquiry during fieldwork experiments.

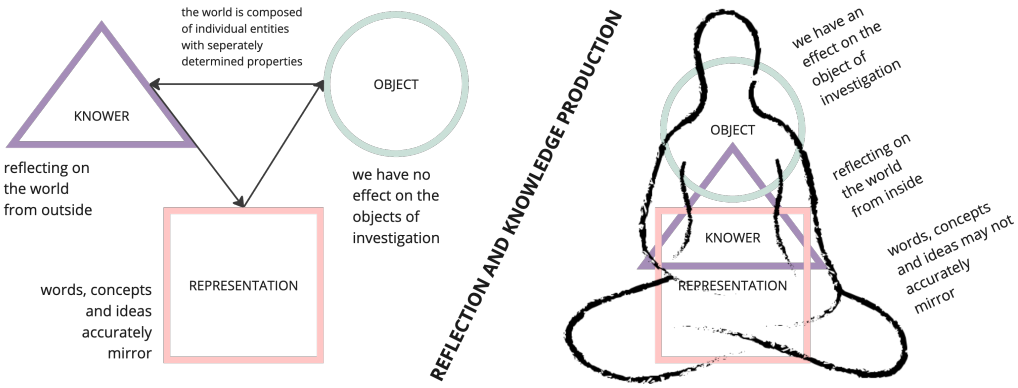


Fig 9
- Reimagining of Jennifer Moon artwork "I heart Karen Barad" 2018, rights artist. And Fieldwork as an interpretation of the tripartite lens.

Research Participant, Phenomenological De- and Re-Constructer

Returning once more to the philosophical and spiritual domain, the Buddhist concept of truth, reality and knowing aligns with the principles of Social Constructivism (Muller, 2018) in that they describe an aggregation of mental materials - form, feeling, perception, mental formation, act of consciousness that weave together to construct our sense of reality (Jacobs, 2017). Although sense-making happens within the personal sphere it is negotiated through the beliefs and values agreed upon by society (Muller, 2018). Fieldwork activities seek to encourage participants to observe and deconstruct phenomenological assemblages, to explore interactions between the concrete and more abstract qualities of experience.

3.2 Theoretical Perspective

3.2.1 TOWARDS TRANSFORMATIONAL PRINCIPLES

Mindfulness research in human-centred design appears to have no apriori theory, I have therefore set it within the boundaries of Lars-Gunner Lundh's catch-all title of "Experimental Phenomenology" which he positions as a subset of Theoretical Phenomenology, advanced by Husserl as "the science of our subjective experience of being in the world" (Lundh, 2019). Its concern is primarily with consciousness and its objects (phenomena) (Bentz, Rehorick, 2008) This study took inspiration from Transformational Phenomenology (ibid) and Mindful Inquiry (Bentz, Shapiro, 1998) as models of inquiry that enfold somatic-hermeneutics and the transformative experience of research activities into the field of inquiry. Although these are useful theoretical research paradigms, experimental phenomenology is more commonly used as a means of investigating the impacts of Mindful praxes and their effects on subsequent experience (Lundh, 2019).

Lundh Summarises of Husserl's phenomenological principles As:

- **Embodiment:** subjective experience is firmly anchored in a living body, situated as "here."
- **Temporality:** this anchor exists in a continually changing present moment "now."
- **Intentionality:** experiences are generally about an intentional "object", "this" is distinct from other things.
- **Intersubjectivity:** we perceive ourselves as "I", separate from other objects.

(Lundh, 2018)

These principles speak back to Buddhist/ Mindfulness theories, and forward to fieldwork activities that aim to explore the entangled views of reality using holistic concepts of body-mind (Lin, 2013) and interbeing (Lim, 2019) - defined here, as the interconnection of all things - during design inquiry mapping activities.

3.2.2 An Orientation Toward A Transformational View

In seeking to incorporate mindfulness within the phenomenological paradigm, we can begin to gain a sense of how it interacts with Husserl's principles, revealing a pragmatic approach to a transformative view of experience. Simply put, in anchoring ourselves "here", and experiencing the temporality of "now", our views of objects as fixed and separate may be otherwise experienced, affording a deeper sense of spiritual interconnectedness to all things (Van Gordon, 2018). Spiritual and psychological transformation finds relevancy in the study's ambitions to mindfully create a counterpoint to gender bias in mental healthcare. To counter psychological theories of "negativity bias" (Rozin, Royzman, 2001) and "learned helplessness'" (Seligman,1972), we can adopt "appreciative" and mindful intentions toward cultivating resilience through recognising successes, rather than constructing resilience on the foundation of problems (Judy, 2006). An outlook which echoes positive psychology's forefather William James, who sought to recognise the conditions for "healthy-mindedness" (Gable, 2005). Fieldwork aims to embody this optimistic outlook through mindfulness praxes of acceptance, gratitude and kind appreciation to nurture positive emotional states (Moffitt, 2002).

Mindful Inquiry & User-Centred Design

3.3 Methodology & Methods

The study has applied a methodology aimed at aligning mindful praxes and user-centred design approaches to create outputs that inform the design of healthcare experiences. These ambitions position the study group as empowered co-inquirers with the capacity to realise insights.

3.3.1 MINDFUL PHENOMENOLOGICAL INQUIRY

Methodological inspiration has been taken from experimental phenomenological approaches typically used in mindfulness research. This aims to capture "phenomenological data" which is both retrospective and introspective. (Lundh, 2020). The study will not offer a comprehensive approach to mindfulness training, but instead provide guidance and instruction during praxis that speak to the attitudinal qualities of

training. Due to the short timeframe involved in fieldwork praxis, this approach may be viewed as “micro-phenomenology” (Petitmengin et al., 2019) or sampling of brief moments of experience and note-taking to “evoke experience” when sharing it with others (ibid). Experimental Phenomenology recognises the difficulties of generalisation, and replicability in studying mindfulness, as the process is unlikely to produce the same results in all individuals (Lundh, 2020).

3.3.2 EMPATHY AND USER CENTRED DESIGN PRINCIPLES

User experience design is rooted in the insights and narratives of the participants, with a focus on meeting their unique needs digitally (Hassenzahl., 2013). It belongs to a family of Human Centred Design (HCD) praxis, that has evolved methodological frameworks to address the challenges people encounter in their interactions with technology (Cooper, 2004). It places the ‘user’ at the centre, its situatedness asks that we also understand their environment, cognitive responses and emotions. (Giacomin, 2014., Kolka, 2010). Preliminary design methods such as interviews, undertaken as part of “user research” (Marsh, 2019, p.129) seek to understand the human and their experiences. Pre-fieldwork observation and scoping activities although engaging a typical UCD methodology additionally drew from UX designer Indy Young’s framework for building “Practical Empathy”. Her praxis encourages mental modelling of cognitive decisions (Young, 2008); an empathetic framework for design (Young, 2015); and the development of an “empathetic mindset” of listening deeply with curiosity and neutrality to get the most out of our “short interactions with study groups” (Young, 2015 p22., Young, 2022).

3.3.3 INTEGRATING MY DESIGN PRAXES AND EXPERIENCES FROM COMMUNITY CONTEXTS

My design practice can be described as one of a generalist, as it spans the domains of visual communication design, community engagement and creative direction for UX. Throughout this study, my skills and experiences have been deployed at various stages.

Visual Communication Design: I broadly researched themes about ADHD, Women’s Mental Health and design. Practically this encompassed looking at design and accessible technologies that sought to enhance reading and focus. I researched fonts and layouts that make reading easier for those with dyslexia (that many with ADHD have). And to embrace themes of representation, I researched female designers particularly those with ADHD who had a focus on typography. I found frameworks such as bionic text **th**at

creates **bo**ld **le**tters **at th**e **st**art **of wo**rds **to im**prove **at**tention (Mangas, 2022). In addition to this, I looked at the art direction and tone of voice used to engage ADHD Women, and generally the visual language of female mental health. The results of this research informed the design of the participant information sheet and website and can be found in Appendix A.

Community Engagement: I drew from my experience of facilitating community mindful sewing classes. Here, I observed that physical activities can help ground attentional focus, providing a tangible anchor outside the mind or mental domain. This appeared to provide elements of psychological safety away from intrusive thoughts and emotional overwhelm. The Mindful postal pack was designed to reflect this observation by bringing a similar sense of this physicality and activity to the online workshops. These design outputs can be found in Appendix B. I also understood that those with poor mental health can struggle to show up, arrive on time and stay on task. This can lead to a sense of shame, or self-reproach for apparent failure. This helped me design a tone of facilitation as one of non-striving, curiosity, and the creation of a space where it was impossible to 'get it wrong'. Presence and a willingness to participate were considered achievement enough.

Creative Direction For UX: My digital design practice is typically conducted in large interdisciplinary teams of designers, technologists and business stakeholders. Here, my role is to draw together concepts and create a vision for digital products, identifying utility and purpose. User modelling practices build on notions of average and typicality. However, in a context trying to capture "divergent diagnostic experiences", generic strategies would serve to undermine the very proposition of the study. The mindfully informed phenomenological approach additionally demanded the creation of unique methods for data capture. Typical feedback on mindful experiences can have little utility other than to provide reflections on hurting knees or having a song playing in their head. I employed strategies from Zen and healthcare design to create frameworks for capturing useable data that could inform the creation of UX artefacts. Although this approach is informed by my design practice, I have ventured into new territory through my direct engagement with healthcare users, as was my intention.

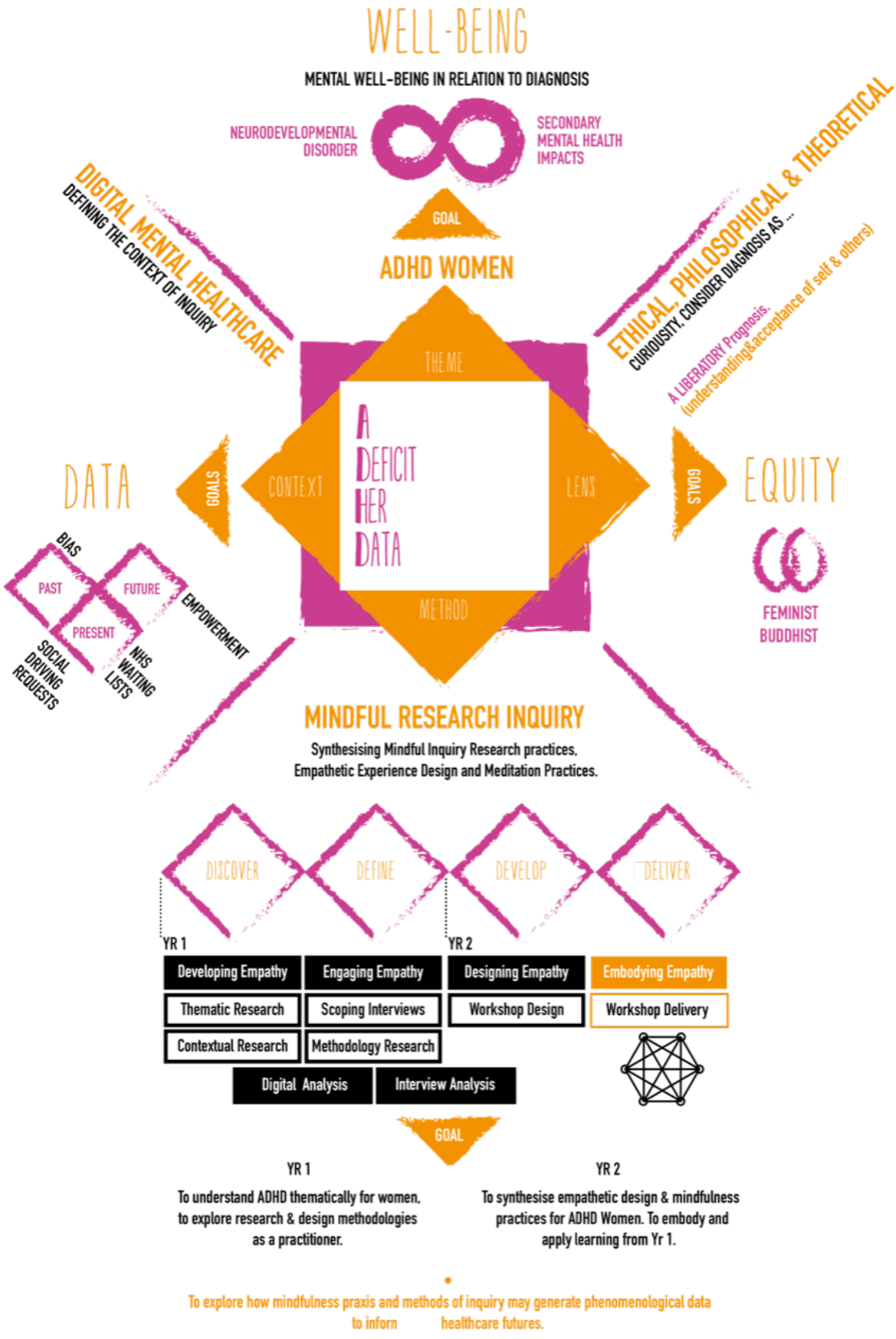


Fig 10 - Methodological Orientation, Or Compass. Source: Author's Own.

3.3.4 The Empathetic Pathway

STAGE 1: Developing Empathy, **Desk Research & Digital Observation**

These activities as a practical means of developing empathy seek to explore the online "life-world" of ADHD Women. This approach is informed by phenomenological practices of immersing in the "life-world." (Luft,2004). This will be achieved by seeking out media campaigns specifically targeting women, joining peer support groups online, and following female-specific "influencers." My approach will assume a passive role, refraining from commentary or sharing media. I will organically take notes and perform further desk research into the multifaceted concerns of female diagnosis.

OUTPUTS AND ANALYSIS

- group personalities and tone of voice for women
- lived experience of ADHD diagnosis
- thematic analysis, as an aid to project focus and scope

STAGE 2: Engaging Empathy, **Scoping Conversations**

As a collaborative study, it will seek to gain perspectives on female diagnosis by setting out to recruit both ADHD Women and Clinicians alike.

ADHD Participant Group: Scoping conversations will:

- trial mindfulness
- listen to the diagnostic experience
- gather opinions on the project scope
- humanise participants beyond their traits and behaviours
- model participation "edge states" for inclusion

Structure: conversations will be semi-structured, and participants invited to engage in a 15-minute mindfulness 'taster' or "guided landing" (Adriansen, 2016) session prior to the conversation. Approximately 20 minutes will be allocated to deep listening (Young, 2022) of the diagnostic experience in full which can promote a sense of well-being (Smith, Liehr, 2014), in the final 10 minutes, participants will be invited to share their perspectives on the project themes of mindfulness, female diagnosis and digital opportunities regarding diagnostic support.

Clinicians: this study group will also be invited to take part in a 45-minute conversation, to discuss their experience of diagnosing ADHD Women. During this time, clinicians will be free to lead the discussion to themes of personal importance. No pre-prepared questions will be given, however, questions will be informed by literature review findings and the experiences of the ADHD study group. Clinicians will also be asked for their views on the scope of the project in the final 10 minutes of the conversation.

OUTPUTS AND ANALYSIS

- project scoping, defining future fieldwork activities
- analysis IPA for UX

STAGE 3: Designing Empathy, **Workshops**

Aims:

- design and test a framework for empathetic engagement
- evidence the impact of mindful praxis on the perception of diagnosis.

Mindful Tools:

Facilitating Mindful Communication:

This modality comes from my experience and praxes in Buddhist Sharing Circles, NVC (Non-Violent Communication) and "Spaces For Listening" contexts. Principles derived are an invitation to:

Listen as a relational activity: Method extends 50% of our attention toward the speaker and 50% towards ourselves. Noticing how words “land” within us, and what rises up emotionally and cognitively in response.

Share from a place of “aliveness” (Tachine, Bird, Cabrera., 2016, Kashtan, 2002)**:** This encourages us to speak from a place of presence, not knowing or rehearsing what we are going to say, allowing ourselves to give this moment what it needs.

Taking turns to speak: we do not directly address or respond to the previous speaker with advice or opinions, speak instead from what arose in us.

Honour time limits: usually short between 2 - 5 minutes depending on the size of the group.

Three rounds: listening and sharing.

The experience of employing these methods typically results in rich communication, and a deep appreciation of the human experience, given such a short timeframe, it can be astounding to witness the breadth of the topics covered and the quality of communication.

Mindful Praxes:

Mindful praxes were chosen to align with aspects of design inquiry, the first related to somatic inquiry as a route to narrative deconstruction and mapping. The second speaks to the cultivation of loving kindness to map relationships and interactions in the diagnostic narrative.

Somatic Awareness: Praxis was designed by adapting an existing guided “present-moment” awareness exercise which uses the senses and soma to anchor attention in presence. This is typically performed as a mind-training exercise, to recognise that our mind ruminates on past events or concerns about the future and rarely attends to the “what is” of our experience. Through returning to the body, or the experience of our breath in the body we cultivate the skill to experience the unfolding of reality as it happens. In order to design a short ten-minute praxis, I drew from the work of Zen teachers Dr Michael Stone (Stone, 2011) and Dr Joan Halifax (YouTube, 2018). Stone is a yoga teacher who

establishes a good degree of somatic awareness at the outset of guided meditation, while Halifax links the attitudinal qualities such as strength and softness of praxis to elements of posture.

Relational Awareness: Loving-Kindness praxis was adapted into a method of inquiry firstly by asking participants to label their diagnostic relationships as caring, neutral or difficult. An additional adaptation was made by guiding participants towards their somatic responses to their memory of diagnostic interaction. After which they returned to their labels and noted any changes.

This is an ancient practice, which originates from Tibetan Buddhism, it encourages imaginative almost idealistic variations of reality or "what could be". As a Zen practitioner, I introduced the "heart centre" to create a somatic anchor to allow attendance to the present moment. This sought to counter the tendencies of the mind to wander off into fantasy. This esoteric practice, taken to its fullest realisation allows us to experience Metta (universal loving kindness) or the undiscriminating mind, which doesn't distinguish who is deserving of our kindness and who is not. In utilising this practice to investigate diagnostic relationships and interactions, positive and caring aspects of diagnosis may be emerge. Although the work of Sharon Salzberg (Salzberg, 2011) and Kirsten Neff influenced the design of praxis, by inviting participants to intentionally cultivate a kindly view. (Germer, Neff, 2013). The adaptations are derived from my experimentation and experience of guiding praxes.

Mindful Analysis:

Mapping As A Bridge Towards Design Artefacts: This component of the workshop is derived from participatory healthcare design principles, chosen to align with mindful praxis. Body maps may be used in healthcare design to help explore illness through embodied sites of pain (Jager et al., 2016) while actor maps may help identify key figures and relationships in healthcare services (Papadopoulos, Radnor, Merali, 2011). In the workshop, their purpose is to capture individual phenomenological data from the mindfulness praxis and act as a form of experiential analysis. The group will take the maps into the digital space where they will be able to review, comment and make group decisions based on these experiences.

Psychologist and Zen Teacher Dr Jules Harris, has developed mapping techniques to identify our judgements and their impact on our sense of self. He suggests that ordinarily, we experience separation from our felt senses when asked to step into designing and planning modalities (Harris, 2019). These mapping techniques may also be considered as a bridging technique towards the development of UX artefacts. In the field of UX design empathy maps can allow the visual articulation of "users" unseen cognitive and emotional processes (Ferreira, Silva, et al., 2015).

UX Design Artefacts As A Method Of Analysis: Thematic analysis was considered as a standalone method for this study, however, as the project sought to retain individual narratives rather than create generalised themes it was felt that the case-by-case analytical nature of Interpretative Phenomenological Analysis (IPA) could best achieve this. As a form of analysis, it is described as "a qualitative research approach committed to the examination of how people make sense of their major life experiences" (Larkin, Flowers, Smith, 2021). It is used primarily in qualitative research and is "unashamedly cognitivist" (ibid) focusing on how information is received, stored, and retrieved by the mind. This mode or theory of learning lends itself to research question two which seeks to understand the effects of mindful praxis on memory perceptions of the diagnostic experience. This cognitivist approach aligns with modelling cognitive processes used in the creation of mental models for UX (Young, 2008). The research paper IPA in UX Research (Linder, Arvola, 2017) provides a practical demonstration of how to analyse phenomenological accounts and create a UX artefact, the example used is a user persona. By using Linder and Arvola's method and stepped process, the study was able to build on a tried and tested method of analysis, that had already sought to bridge the gap between phenomenological experience and visual artefact for UX (See 3.5 for process).

STAGE 4: Embodying Empathy, **Facilitating Inquiry**

Online Facilitation:

As a design facilitator, my role will be to both personally embody and cultivate mindfulness in the design context. An “embodied mindful presence” is defined as the attitudinal foundation, awareness and compassion (Woods, 2013). These qualities will be encouraged through my own preparatory practices directly before engaging with the study group and throughout the project life cycle. Praxis such as formal meditation will be supported by walking praxis and reflective journaling will also be employed as a support.

The context itself will embody mindfulness in the compassionate design of its practices and design tools. Through this, it aims to embody a sense of collective and compassionate inquiry and peer-led innovation and action. Within the design context, it will foster mindful values of equanimity through neutrality in what is heard, attentiveness and responsiveness to what is observed, and compassion through communication.

Approach to listening:

The methodological principles to facilitate listening are again drawn from the intersection of UX design and Buddhism.

UX LISTENING	MINDFUL DEEP LISTENING
• clear your mind of questions	• attentional awareness or calm abiding
• notice your reactions	• body awareness, how the body respond
• understand the affects of empathy	• intention toward care and equanimity
Indi Young, 2023	*Thich Naht Hanh, 2016*

3.4 Data Capture & Analysis

Photo 1 - Mindful Participant Packs Photograph Source: Author

3.4.1 Mindful Packs And Worksheets

Each participant will be posted a Mindful design pack, with worksheets for mapping activities, a notebook for journalling and stickie notes, pens, rainbow pencils and teabags. This will add to the sense of shared experience in the group. The data captured will relate to the body and memory during the somatic workshop, and relationships, interactions and emotions in the relational workshop.

Individual Analysis: Participants will analyse and record their experience directly onto the worksheets.

Research Analysis: Individual findings will inform the UX artefact through IPA for UX, and thematic analysis will inform generalised findings.

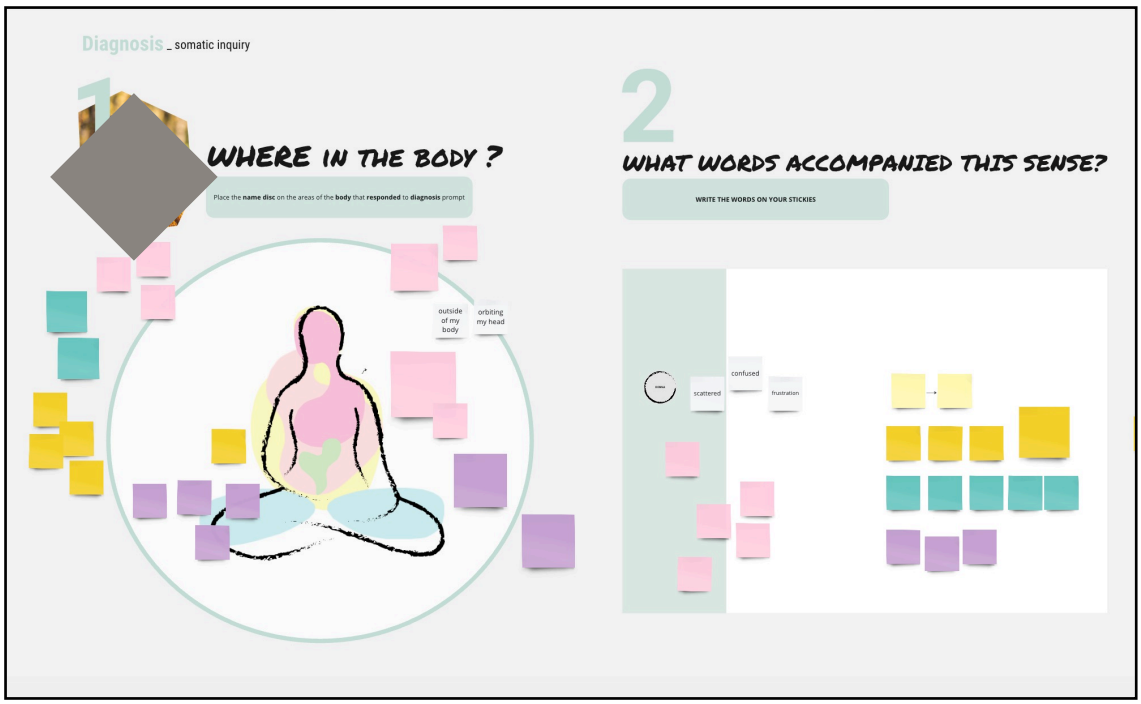


Photo 2 - Digital Somatic Mapping Collaborative Workspace Source: Author

3.4.2 Digital Collaborative Workspaces

The completed worksheets from the Mindful Packs will be photographed and uploaded to a digital board where participants can review each other's contributions.

Group Analysis: The boards will also allow reflective analysis by the participant group, through the ability to create virtual “stickies” to amend contributions and comment on one another’s submissions. The final board will ask participants to provide feedback on the experience of the workshop itself so that iterations may be made to the following session.

Research Analysis: Individual findings will inform the UX artefact through IPA for UX

3.4.2 Recording And Transcribing Workshops

Fieldwork workshops will take place remotely using Zoom. These will be recorded and transcribed for thematic analysis and coding themes.

Research Analysis: Recordings, worksheets, transcripts and digital boards will be analysed using IPA (Interpretative Phenomenological Analysis) for UX (Linder, Arvola., 2017) to identify empathetic and key themes surrounding ADHD Women’s experience and perceptions of diagnosis.

During fieldwork itself, participants' feedback will be captured using the Miro board, which will provide a layer of appreciative situational analysis of the workshop experience through which the following workshops may be iterated.

Finally, developing a UX artefact, e.g., diagnostic journey, healthcare persona or vignette, will aim to synthesise findings and contribute to understanding how future UX design may be developed.

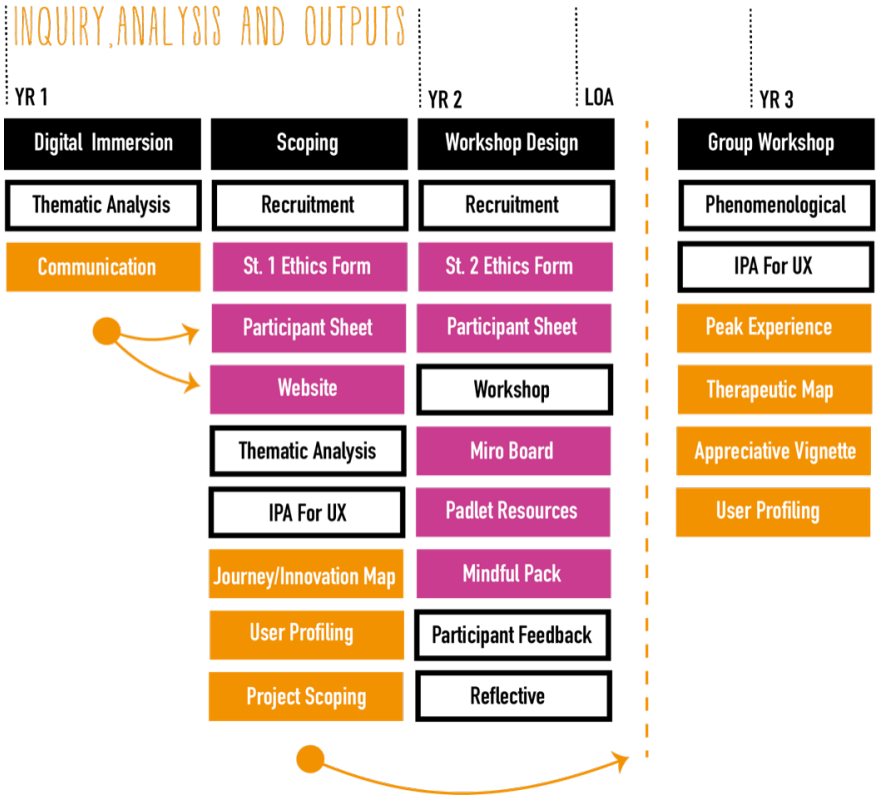


Fig 11 - Research Analysis And Outputs Source: Author

Summary of Linder & Arvola's IPA for UX as Analysis:

Step 1: Collection Of Data

Step 2: Analysis of the first case, interview transcript.
Bottom-up approach to capture the uniqueness of perspective.

a) Descriptions - Things and emotional responses
b) Linguistics - How something is worded
c) Conceptual - interpretation of participants perceptions

Top-down approach to look for specifics for Vignette design

1) UX design - Needs, goals, barriers & opportunities
2) Mindfulness - phenomenological experience and impact on diagnostic perception

Themes: Identify themes & find connections between them.

Step 3: Analysis of remaining cases following step two for each.

Step 4: Connections Between Cases
Table of themes, connections and quotes.

Step 5: Visualise Insights
e.g. Personas and experience maps that may be useful to a design team.

(Linder, Arvola, 2022)

Recruitment & Ethics

3.5 Recruitment & Ethics

The study has been devised during the COVID pandemic and subsequent concerns around in-person meetings. Remote working for many has proved to be advantageous enabling more flexible approaches. During the pandemic, I migrated my Mindfulness teaching classes online and hosted "Conversation Cafes" for those experiencing social isolation. Therefore conducting research remotely is seen as a natural fit, workshops themselves will be online whilst materials will be posted out to the study groups.

(See **Appendix A** for recruitment design and development of resources)

3.5.1 **Stage 1:** Scoping, Ethical Approval

Participant groups: ADHD Women & Clinicians

Women will be recruited via the SAW (Scottish ADHD Women) Facebook group where an invitation to participate will be posted, this will include my art school email contact and link to website with further project details.

Clinicians will be individually approached via linked-in, and recommendations will be sought from the Scottish ADHD Coalition. Participants will fit a professional profile of conducting clinical assessments in Scotland across the general populous i.e. adults, children and across all genders. So that insights on diagnosing women may be drawn.

3.5.2 **Stage 2:** Workshop, Ethical Approval

Participant group: ADHD Women

As the participant group have a potential for mental health challenges, stage 2 ethical approval conditions were met. I met with the participants before the workshop to complete a pro forma, this ensured that they met all the participation criteria.

Recruitment will aim to embrace a "life-span approach", so that we may learn from a diverse range of female experiences.

3.5.3 Participant Safety And Support

I am a qualified and insured Mindfulness teacher and hold a certificate in Mental Health First Aid. During the course of fieldwork, I engaged additional support from a Mindfulness supervisor (BAMBA, 2023.) Research findings suggest that mindfulness may be a conduit for cultivating emotional and psychological 'safety' (Carmelli, 2009, p65). Additional instruction will be given on "Mental Health First-Aid". These are defined as "square breathing" (Rajkumar, Dubowy, Khatib., 2021) and "5-4-3-2-1" sensory check-in to manage anxiety (Luna, 2022). Participants will be informed that they can have "time-outs" or leave at any time during the session without any need to explain. The participant information sheet provides contact details for Mental Health support organisations and recommendations to contact your GP or Mental Healthcare professional if difficulties arise.

3.5.4 Setting Expectations Of Mindful Praxes & Guiding Responses

Integrating mindful praxes into research inquiry created tensions in purpose and maintaining effectiveness. Through the careful - care full - design of inquiry, the study sought to strike a balance between the therapeutic attributes of mindfulness and the demands of rigorous research inquiry. So that useful design research data may be created.

Throughout the recruitment of participants, expectations were set by minimising notions of “peace of mind” (Kabat-Zinn, 2005, p.24). Instead championing John Kabat Zinn’s (Mindfulness For Stress Reduction Clinic) approach which states that “mindfulness is not for the faint-hearted” it requires an “intrepid willingness to show up to explore the interior landscape of the mind and body” (ibid). The “tone of voice” of the participant information sheet (Appendix A) equally served as a rallying call to women wanting to affect change. Participants were perhaps positioned as empowered co-inquirers engaging in self-directed inquiry, to therapeutically reduce harm in the research space and create rich self-insights for the benefit of themselves and design inquiry.

During inquiry participants engaged in brief mindful exercises to recall their diagnostic experience. They were invited to observe somatic, emotional and relational responses while minimising their engagement with narrative and thought. Although the study acknowledges a potential to guide participants toward a desired outcome, this did not bear out in fieldwork reports. Individuals appeared to retain their unique and individualistic memory perceptions, however, the increased sense of awareness, led to an apparent uncovering of unseen facets of their diagnostic experience such as the “emotional journey”. See research limitations (page 151).

3.5.5 Digital Security And Data Protection

The participant group were interacting with research in an online setting, therefore security and privacy were of concern. I used a Zoom professional account to ensure high levels of security. Each session was recorded locally onto my laptop, access to Miro and Padlet required a password. Participant data and any identifying information

were stored in a password-protected laptop which only I had access to. Data stored in the iCloud and Google Drive was anonymised before uploading.

Chapter Summary

3.6 Methodological Chapter Summary

In this chapter, I have discussed the philosophical underpinnings of research that begins by attempting to align the philosophical positions of Buddhist and Feminist standpoints on knowledge creation and their relevancy and influence on fieldwork activities. From here I spoke to theories pertaining to the construction of phenomenological experience and the underlying principles that delineate the space for transformative insights to arise. A pathway is then mapped from experimental phenomenology towards fieldwork design which uses “practical” mindful strategies and methods to progress an empathetic approach towards understanding the diagnostic experience of the study group. The methodological approaches themselves drive methods of analysis and synthesis of fieldwork data towards a design conclusion.

Chapter Four: Fieldwork

USER TEXT PROMPT:
Fieldwork

MACHINE LEARNING IMAGE GENERATION:
Rendered by Microsoft BING.com 27.11.23

Chapter 4a: Pre-Fieldwork

This chapter outlines pre-fieldwork research development and engagement, leading to fieldwork design and implementation. Findings from pre-fieldwork are presented here, as they influenced fieldwork considerations. The empathetic design pathway (Young, 2015) sets out to enable a deep understanding of the study group. Here I discuss the approach and findings of desk research and digital observation, scoping conversations, and finally fieldwork design to engage ADHD Women in mindfully investigating their diagnostic lived experience.

Activity #1 Digital Research
4a.1 Developing Empathy, Observation

Stage 1

Desk research and **Digital Observation** activities were combined to gain a deeper understanding of "health-seeking" themes for ADHD Women. I organically took notes as I explored the domain and conducted further desk research into female diagnostic concerns. During this time, #ADHD trended and peer group membership grew exponentially. I found the digital space to be hugely supportive and conflictual at times. On two occasions overwhelm took hold, and I stepped away from observation, using the time to reflect and perform further desk research to understand the significance of these tensions on fieldwork.

Summary Of Emergent Themes

Mental Healthcare Context

Sensitivities arise around feelings of invalidation, being heard and taken seriously. Digital 'awareness raising' campaigns for women, appear to adopt an empowered, "self-help" tone, rather than a clinical or medical one.

Identity And Privilege:

Identifying as ADHD without a clinical diagnosis is seen as valid in online communities. As your individual circumstances such as Healthcare practitioners, postcodes, finances, ethnicity, and emotional/mental health resilience may act as a barrier to assessment.

Binary Concepts:

Perceptions of Neurodiversity, initially coined to champion inclusivity and rights (Singer, 2016), occasionally led to divisive online discussions creating an “us and them” dynamic that sparked conflict. The positive side of this demarcation is expressed as “finding my tribe” in peer groups.

Scoping Considerations

The digital domain was found to be broadly speaking an encouraging and supportive space. Media messages targeting women encouraged clinical diagnosis as ‘health-seeking’ towards self-understanding and access to life-changing medications. Lively conflict regularly broke out around concepts of difference, with the most heated being the Neurotypically designed “normal” world versus the Neurodivergent. These differences in opinions and conflictual conversation styles may emerge during scoping.

Activity #2 Scoping

4a.2 Engaging Empathy, Conversations

Conversations were undertaken to gain an empathetic understanding of diagnosis; trial mindfulness and gather opinions around the project themes in order to delimit the project scope.

Recruitment

Six ADHD Women and Two Clinicians elected to participate, each was assigned a pseudonym for privacy using a coded naming system derived from the Japanese Whisk Fern. A model was selected due to the plant's bifurcating nature, which represents a binary framework from which complexity grows (Husby, 2023).

PSEUDONYM	DIAGNOSIS	RESULT	WHEN	OCCUPATION
Snow Harp	Private	Yes	> 2 yr	Nurse
White Grass	Private	Yes	> 2 week	Events Planner
Sparrow Twist	NHS	No	> 6 month	Researcher
Pavilion Coral	Private > NHS	Yes > ?	< 1 yr > ongoing	Musician
Cloud Music	Private	Yes	> 1 yr	Home-maker
Acton Rain	Private > NHS	Yes	< 25 yr > 4yr	Psychiatrist

Table 1 - Participant details, Source: Author

PSEUDONYM	QUALIFIED	Healthcare Sector	Experience
Agate Brush	Psychiatric Nurse	Private Business Owner / Public	> 25 yrs
Opal Shell	Psychiatrist	Private & Public (retired)	> 35 years

Table 2 - Clinicians details, Source: Author

Pre Session Preparation

FACILITATOR PRAXIS

Prior to opening the call with each participant, I engaged in a Mindfulness of Breathing practice, that sought to encourage a deeper sense of presence on arrival. During my 30-minute praxis, I first ground my attention in my body, then systematically work through each sensory perception, before anchoring my awareness in the sensation of the breath in the body, I then open my attentional focus to embrace an “observational” perspective on the stream of arising phenomena without cognitive or emotional attachment to any one thing. When my mind is pulled away by thoughts, feelings or sensory discomfort this is recognised, accepted, and investigated, then attention is encouraged back towards the observational mode. This serves to loosen my mind from ruminating on how the conversation will unfold, or what the study will seek to gain from the exchange.

Beginnings, Trialing Mindfulness

GUIDED “LANDING”

After an initial welcome, participants were invited to engage in a 15-minute ‘mindfulness of breathing praxis’. To cultivate a sense of “landing” presence and ease in the online conversation space. This would afford participants a taster session and myself an experience of guiding praxis with ADHD Women.

Praxis

SHARING PRAXIS WITH PARTICIPANTS

After initial greetings, and a welcome and introduction to the project given by me, each participant was offered a short 15-minute mindfulness praxis. During this participants were guided through three integrated praxes, consisting of a 5-minute body scan, 5-minute present moment awareness and 5-minute breath awareness. After which, participants were free to offer verbal feedback.

	PARTICPATION	REASON
Snow Harp	NO	Already feeling relaxed in the garden
White Grass	NO	Taking time out from work
Sparrow Twist	NO	In workplace, later confesses she doesn't like it.
Pavilion Coral	**YES**	Never done before, curious, lovely.
Cloud Music	**YES**	Had done before, as expected, nice.
Acton Rain	NO	Wants to jump straight into conversation.

Table 3 - Participation In Mindfulness Source: Author

Summary Of Findings

Surprisingly, the uptake of the praxis was modest considering the project theme. Participants suggested that their context wasn't right for participation. Those who did participate offered short and simple feedback that was consistent with my experience of teaching mindfulness classes online, such as "lovely."

Fieldwork Consideration

Awareness of home context, making time and creating space for workshop engagement.

4a.3 Listening, ADHD Women's Diagnostic Experiences

Facilitation employed modes of deep listening, conversations were semi-structured allowing for a natural flow. Participants were free to share their stories, following their own thought processes and communication styles. Transcripts were analysed chronologically into pre-diagnostic, diagnostic and post-diagnostic timeframes.

(See **Appendix E.2** for the development of chronological themes)

Chronological Thematic Analysis, Pre to Post-Diagnosis

Pre-Diagnostic Generalised Themes

Protracted Timeframes: Surprisingly this period was the longest spanning anywhere from 18 months to almost 30 years, in part due to the age of the group, and the lack of diagnostic provisions prior to 2008 (National Collaborating Centre for Mental Health, 2009). Self-identifying as ADHD had been arrived at through apparent serendipity. However, on further investigation, each serendipitous event came about through aiming to address an ADHD symptom.

Individual Examples Of ADHD Related Serendipity:

Pavillion Coral spoke of being clumsy, and loud with "big gestures." She was embarrassed to say at the start of the conversation that she found out about ADHD through a social influencer. "One day I'd like to look that classy and lovely."

Acorn Rain describes a hypomania episode - a result of incorrect medicine - in which she completely overspends, this leads to having to take in a flatmate who observes that she has ADHD traits.

Sparrow Twist was struggling with work and joined an online support group for Academics, where they spoke about supporting Neurodivergent students. She identified with their challenges and as ADHD.

Catalyst For Diagnosis: Using a female lens to uncover themes

- An act of 'self-care', a 'treat' after divorce settlement comes through
- Juggling caring responsibilities, and career
- 'Window of opportunity' before menopause is blamed for everything (symptoms)
- Mother's guilt, CM sought a diagnosis to support her son

Diagnostic Generalised Themes

Lack Of Universal Clinical Process: The diagnostic process itself appeared somewhat ad hoc, lasting anywhere from 3 weeks to 4 months. This was largely dependent on individual assessors and/or their respective organisations. The assessment consisted of a combination of questionnaires and interviews, some of which included family members. As

a group with memory issues, executive dysfunction, dyslexia, dyscalculia, dysgraphia, and RSD they found the administration challenging.

	PAIN POINTS	STRENGTHS
Snow Harp	FORMS • dyscalculia, mild anxiety form filling • reminders needed to return forms	PROCESS • extensive personal research • researched private orgs • commitment to process
White Grass	GP • Higher ed achievements, invalidates diagnostic request via NHS CLINICAL PROCESS • disempowered by inclusion of family • angered by inaccuracies in report • vulnerable by “confessing” traits	PROCESS • Joins peer support groups • Downloads DIVA forms • Research psych specialist • Commitment to process • Requests amendments to report
Sparrow Twist	CLINICAL • too much contradictory information • questions required “binary” answer • family to input into process • angry and shocked at results, just below the rating scale for treatment.	PROCESS • GP supported referral • Signed up to ADHD educational course • Joined a peer support group
Pavilion Coral	CLINICAL PRIVATE • GP supports private diagnosis, and requests an NHS diagnosis NHS PROCESS • Upset by family input • Upset by tone of questionnaire	PROCESS • Took time to process diagnosis • self management strategies, before trialling meds. • colour coded documents felt inclusive • formally complained to NHS about questionnaire. • committed and positive, to learning and understanding support needs.
Cloud Music	CLINICAL PRIVATE • ”There were a lot of forms” found the process very validating. • emotional, tears, "grief for what could have been” • Shame that she hadn't noticed ADHD traits in her son.	PROCESS • took time to process and reflect on the purpose of getting a diagnosis "at her age” • Good relationship with clinicians and pharmacy
Acton Rain	CLINICAL PRIVATE • lost forms for four years • more knowledgeable that assessors • hospitalisation	PROCESS • commitment to resolving her long-term severe mental health issues.

Table 4 - Process ‘Pain Points’ and required strengths Source: Author’s Own

Personal Strengths Required: Individual strengths require the capacity to research processes and reach out to peers online to get advice and information needed. Going private did not ensure that patients felt supported or received privileged treatment.

Post-Diagnostic Generalised Themes

Emotional Acceptance: Grief, self-compassion, self-understanding

Medication: shared care, profound initial transformational experiences, titration period and changing or coming off medication.

4a.4 Listen, Clinician's Diagnostic Experiences

Clinicians were invited to take part in a 45-minute conversation, to explicitly discuss their experience of diagnosing ADHD Women. These conversations were semi-structured as unprepared research questions were asked. These questions were informed by the literature review and diagnostic experiences of the ADHD participant group.

Female Specific Themes

Biological Sex And Gender: Clinicians would not be drawn into the area of sex, stating that data on the influence of hormones, although important was both "unreliable" and outside their area of expertise. Opinions were however offered regarding gender roles and societal expectations of women as barriers to diagnosis. These views were consistent with the literature findings.

Emergent Themes

Primacy Of Clinical Therapeutic Role: The administrative side of the diagnostic process was viewed as a burden on Clinical staff who were sceptical of its diagnostic utility. Clinicians saw their role and their expert "opinion" as key to diagnostic assessment and their ongoing therapeutic relationship with the patient. The "pain points" identified during coping conversations with ADHD Women, were seen as therapeutic opportunities. For example, Opal Shell suggested that

"hearing that your Mother found you difficult" may offer an opportunity to process, heal and take responsibility for your behavioural traits.

Therapeutic Tone Of Voice: Both clinicians had very different opinions and tones, one upbeat, the other philosophical. Where their views coalesced was on the therapeutic value and tone of diagnosis, one reframed diagnosis as a point of "celebration" whilst the other saw it as part of a "therapeutic process".

Tonally the views of the clinicians aligned with a Mindful view on interpretation and meaning-making of life's difficulties.

Fieldwork Considerations

4a.5 Summary And Fieldwork Considerations

The pre-fieldwork research phases were conducted as per a typical UX design process, and findings were mapped onto UX artefacts to begin to form a framework of user support needs. The diagnostic process was mapped to reveal pain points, strengths and opportunities for digital (see fig. 12 chapter end). Digital innovation was deemed too complex an undertaking in the timeframe and was placed outside the project scope. Additionally, the mindful "landing praxis" had yet to evidence contributions to design research inquiry, as such mindfulness as a form of inquiry became the primary scope of fieldwork activities.

Scoping Activity

Out Of Scope: The administrative process

The process had extreme variability, and accessibility issues deemed too complex. Clinicians had invalidated the role of questionnaires and form filling, by elevating their Clinical opinion. Clinicians were removed from the workshop design setting due to power imbalance potentials.

In Scope: Mindful Inquiry And The Diagnostic Experience Of ADHD Women.

Facilitating ADHD Communication Styles: Conversational differences emerged during scoping conversations. Cloud Music expressed "I don't do chit chat … only conversations with a purpose", and expressed a preference for one-to-one; Acorn Rain apologised for having ADHD, saying that she could not be interrupted at all for fear of losing her thread; whilst Pavillion Coral suggested that she was often "excitable" and "talkative" and at times dominated conversations.

Action: Employing a mindful communication framework would help as a structured facilitation method, giving each speaker an equal platform to be heard. Providing an asynchronous option would allow contributions outside of the workshop setting.

ADHD Accommodations: The group spoke of a wide range of ADHD symptoms including differences such as dyslexia, dyscalculia, dyspraxia, and dysgraphia, this was deemed too complex to approach in the study.

Action: Visual digital tools would be used for design collaboration, and asynchronous and synchronous modes of engagement.

ADHD And Attention: An emergent universal theme was one of personal preference as an anchor of attention. Each of them had communicated a fascination with the human brain and professed to be an ADHD "geek" due to the amount of personal research they had undertaken.

Action: Research assumes that attention and engagement challenges may be offset by the personal interest themes of ADHD and mindfulness.

Managing Emotions: Scoping conversations navigated around serious subject matters such as alcoholism, nervous breakdown, suicide, parental guilt, and not progressing in careers. The diagnostic experience created opportunities for an emotional upset in almost every interaction - people, letters and questionnaires had been met with anger, shame, or a sense of betrayal and two out of six had formally complained.

Action: The workshop would require careful holding for emotional sensitivity, so as not to turn into a group therapy session. The brisk pace and focus on design hoped to mitigate some of this. The design of the relational mapping tool would also include non-human interactions such as questionnaires and online forms to reflect the capacity of technology to create an emotional response.

4a.6 Reflexive Turn

The ambitions of pre-fieldwork have been to create a body of findings which would allow the participant group to step directly into a digital innovation space to improve the diagnostic experience of ADHD Women.

As empathy grew for the user group, and I integrated mindfulness further into the study, I began to suspect that my articulation of the project as “A Deficit Her Data” and the rallying call to action towards improving the female diagnostic experience had negatively skewed findings towards problems. As a designer and perhaps through my role as a mindfulness teacher, I had been professionally engaged in performing a problem-finding and fixing role. Through inhabiting this mindset, Mindfulness was in danger of being delivered as a fix for a problematised study group. Mindfulness teacher Clive Holmes often expresses the maxim “What you focus on grows”. The more I looked for gender bias and problems, the more they appeared to exponentially grow.

As such, the project took a pause to realign itself with appreciative and transformative research methodologies that aim to generate positive viewpoints. Here, I began to dig deeper into my own mindfulness praxes to similarly identify potentials for insights and awareness.

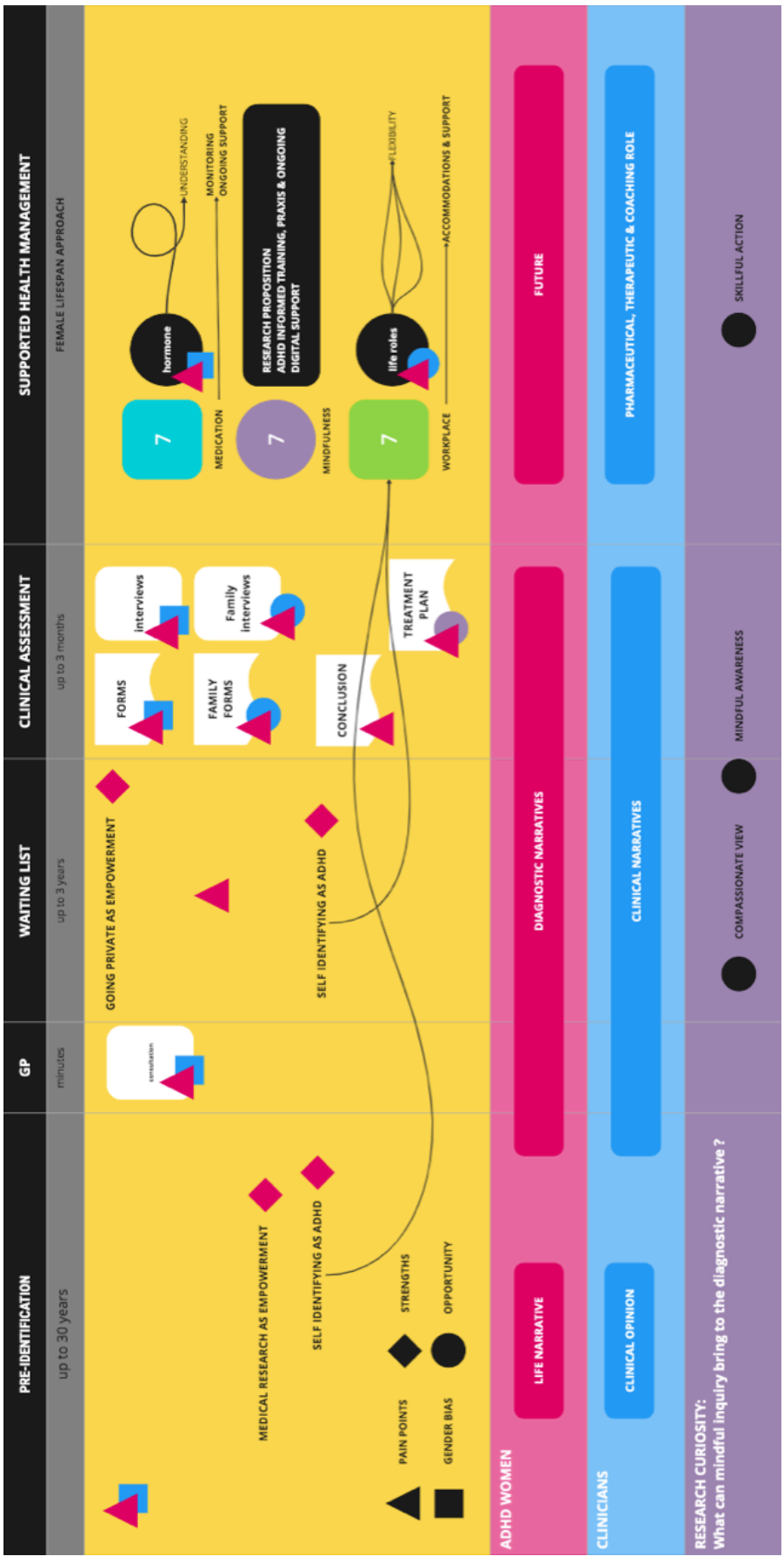


Fig 12 - Scoping pain points, therapeutic opportunity, strengths. Source Author's Own

Fig 13 - Exploring The Role Of Mindfulness In The Field Source: Author

Fieldwork: Mindful Inquiry

USER TEXT PROMPT:
Five ADHD Women Engage In Mindful Inquiry

MACHINE LEARNING IMAGE GENERATION:
Rendered by Microsoft BING.com 27.11.23

Chapter 4b: Fieldwork

4b Introduction

In the previous chapter, I concluded that in aiming to build an empathetic pathway towards fieldwork engagement, the study had paused to reframe inclusion and the use of mindfulness within design inquiry. Although the framework or vehicle of engagement remained, the tonality, scope and facilitation were suitably adjusted. As such the success and goals of fieldwork were similarly redefined. This concluding phase of fieldwork explores the embodiment of mindfulness and empathy within the design space, whilst aiming to cultivate these qualities within the participants. This chapter presents a detailed account of the stages of fieldwork.

Recruitment:

The extended project timeframe resulted in the need for an additional recruitment drive. This saw original participants White Grass and Snow Harp, joined by Sea Bloom, Scarlet Crane and Indigo Nature.

PSEUDONYM	DIAGNOSIS	RESULT	WHEN	OCCUPATION
Snow Harp	Private	Yes	> 4 yr	Nurse
White Grass	Private	Yes	> 2 year	Events Planner
Sea Bloom	NHS	Yes	> 1 year	Data Analyst
Scarlet Crane	NHS	Yes	< 5 months	Civil Servant
Indigo Nature	Private	Yes	> 2 yr	Entertainer

Table 5 - Stage 2 Participant Profiles Source: Author

Workshop Approach:

A flexible approach to workshops was necessary to accommodate work schedules and childcare responsibilities, and an asynchronous option to engage was offered. Each session lasted 90 minutes, and three iterative workshops were designed and planned towards creating digital diagnostic ideation.

Workshop Preparations

Mindful packs were posted to the participant group. I met with my mindful supervisor to walk through the workshop activities. Asynchronous materials were posted on the Padlet participant resource page. Immediately before opening the Zoom call, I engaged in mindful praxes.

Workshop Structure And Pace

Although a tightly structured framework was designed to motivate engagement and activities, the pace encouraged a relaxed approach to avoid a sense of participant overwhelm. This approach foregrounded participants' safety and well-being over project outcomes. By definition, this also anticipated engagement in mindful activities may not be achievable for the group.

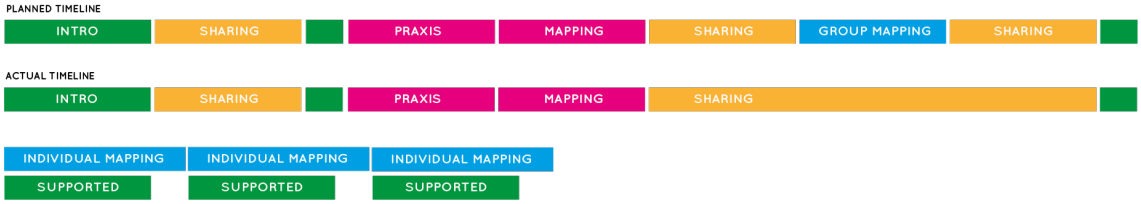


Fig 14 - Workshop 1, projected and actual timeline Source: Author

Fig 15 - Workshop 2, projected and actual timeline Source: Author

A Deficit Her Data:

Exploring the Transformative Role of Mindfulness in Design Research with ADHD Women

PARTICIPATORY WORKSHOP ACTIVITIES

Workshop Session 1: Exploring The **'What is'** Of **Diagnosis.**
Supported by a mindful **'present moment'** practice, 90 min workshop.

TIMELINE:

10:30	**INTRODUCTIONS**		**25 min**
	PROJECT WELCOME	Led by Donna	5 min
	SHARING CIRCLE #1	2 min each talking/listening space	12min
			<5 min break>
11:00	**PRESENCE**		**25 min**
	GUIDED PRACTICE	Led by Donna	10 min
	MAPPING ACTIVITY	All	10 min
			<5 min break>
11:30	**SHARING**		**25min**
	SHARING CIRCLE #2	2 min each talking/listening space	12min
	MIRO BOARD		
	SHARING CIRCLE #3	2 min each talking/listening space	12min
12 NOON	**ENDING**		

Workshop Aims:
Encourage Mindful Phenomenological inquiry of individual diagnostic experience. Support 'Mindful Communication' and Appreciative Inquiry Skills. So that the group have opportunity for connection, and appreciation of one another's experiences, and decide on themes to take forward into the next session.

Photo 3 - Workshop #1 Itinerary, Source Author's Own

Workshop #1

4b.1 Somatic Inquiry Workshop

This first session aimed to explore what cultivating 'somatic awareness' may offer the perception of diagnosis and design inquiry. A project introduction was given, followed by guidance on mindful communication and "square breathing", as a mental health first-aid measure.

Workshop Outline:

1. **Sharing Circle #1:** Sharing On Senses And "What is Alive?"

    Each person was invited to authentically share for two minutes, beginning with their sensory perceptions, what they each could see, hear, touch etc. after which, they addressed what felt "alive" in them. This activity was achieved within the timeframe, and as per the invitation.

2. **Introduction to Praxis:** Guided Adapted "Presence" Praxis

    After a short break, I shared a brief introductory description of mindfulness, then an adapted "mindful inquiry" practice. The word DIAGNOSIS was dropped as an inquiry probe into the praxis. Participants were asked to notice changes in energy, tensions or memories that arose in response to the word DIAGNOSIS. They were invited to place a hand on their heart to offer themselves a sense of care through touch. The session lasted approximately 12 minutes. I observed that participants appeared to be similarly engaged as an NT group.

3. **Mapping:** Somatic Response To Probes

    The group were guided on how to use the Somatic worksheets and given 10 minutes to complete them, using the resources provided in the design pack. On completion of the worksheets, we observed that the participants had used the timeline to emotionally map their journey rather than to pinpoint their diagnostic memory. This proved to be a fruitful deviation.

4. **Sharing Circle #2 :** Phenomenological Experience & Diagnostic Perceptions

Participants were once again given 2 minutes each to share their experience with the group. Due to the emotional nature of the mindful sharing, I relaxed the timings, which resulted in sharings lasting between 3 - 8 minutes. This activity continued until the end of the workshop.

5. **Digital Mapping:** not completed.

6. **Sharing Circle #3 :** not completed.

Data Gathering And Analysis

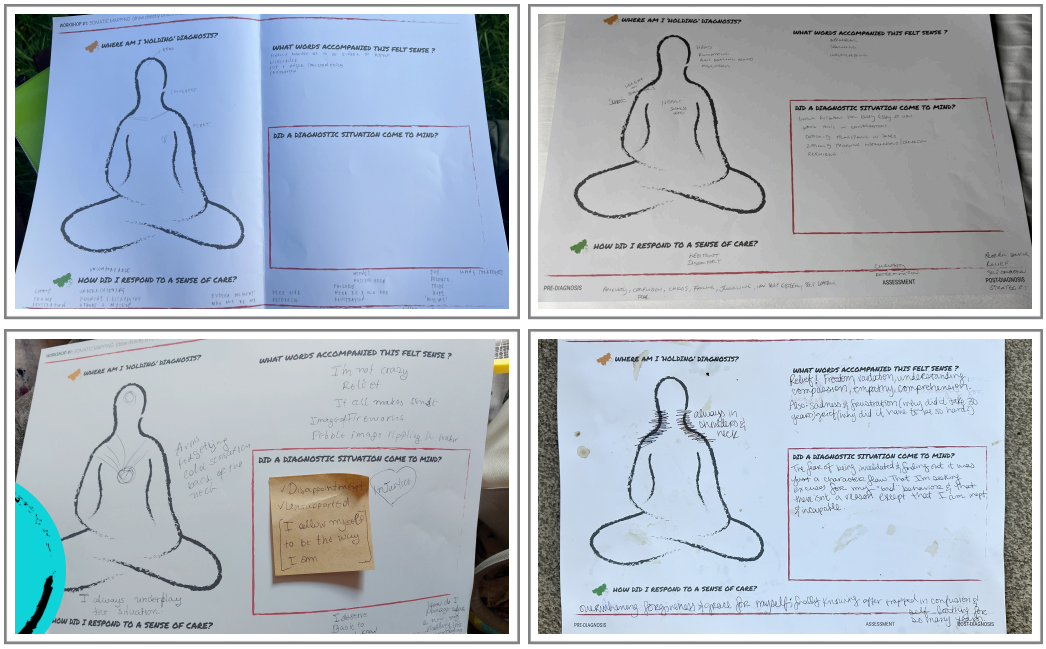


Photo 4 - Participants completed somatic worksheets, Workshop 1, Source: Author

- **Worksheet Photograph:** participants were invited to photograph and upload their worksheets onto Miro. Each of them emailed them to me.
- **Digital Mapping:** follow-up sessions were offered to the group to complete mapping. These took an additional week to arrange and complete, each participant roughly took one hour to be supported through their diagnostic narrative on Miro. This had a knock-on effect on the analysis, iteration and scheduling of the second workshop,
- **Comments & Reflections:** Participants were invited to reflect on their own experience and comment on each other's stories on Miro. No participants chose to make a further contribution.
- **Recordings:** Sessions were recorded and transcribed, to allow for thematic analysis

A Deficit Her Data:

Exploring the Transformative Role of Mindfulness in Design Research with ADHD Women

PARTICIPATORY WORKSHOP ACTIVITIES

Workshop Session 2: Exploring The **'What is'** Of **Diagnosis.**
Supported by a mindful **'loving kindness'** practice, 90 min workshop.

TIMELINE:

10:30	**INTRODUCTIONS**		**25 min**
	PROJECT WELCOME	Donna	5 min
	SHARING CIRCLE #1	2 min each (All) talking/listening space	12min
			<5 min break>
11:00	**PRESENCE**		**25 min**
	GUIDED PRACTICE	Donna	10 min
	MAPPING WORKSHEET	All	10 min
			<5 min break>
11:30	**SHARING**		**25min**
	SHARING CIRCLE #2	2 min each talking/listening space	12min
	MIRO BOARD		
	SHARING CIRCLE #3	2 min each talking/listening space	12min
12 NOON	**ENDING**		

Workshop Aims:
Encourage Mindful Phenomenological inquiry of individual diagnostic experience. Support 'Mindful Communication' and Appreciative Inquiry Skills. So that the group have an opportunity for connect, and appreciation one another's experiences, and decide on themes to take forward into the next session.

Photo 5 - Workshop 2 Itinerary, Source: Authors Own

Workshop #2

4b.2 Relational Inquiry Workshop

The aim of this session was again to revisit the diagnostic perception, this time using a relational model of actors and interactions. Loving Kindness practice asks that we extend well wishes to everyone, providing a form of "horizontalisation" of emotion towards all actors. For this session, I set my intention to follow the planned structure more closely and invited two participants to engage asynchronously due to scheduling conflicts.

Workshop Outline:

After a short welcome, participants were invited to share for 2 minutes,

1. **Sharing Circle #1:** "What is Alive?' Around Loving-Kindness

The workshop theme proved to be a challenging topic, participants shared extremely intimate and emotional stories, during which I agreed for a late-coming participant to join. Sharing went far beyond the allotted times, and participants did not adhere to cues to finish. We took a break to reorient the session. On returning to the call, I invited participants to anchor their intentions towards the project goals and each other and curiosity towards realising the potential benefits of mindful praxis.

2. **Mapping:** Labelling All Diagnostic Interactions

Participants were introduced to the relational map, and invited to note down everyone who had a part to play in their diagnostic journey, noting whether their role had a caring, neutral or negative impact. This activity took 5 minutes.

3. **LK Praxis:** Introduction And Sharing The Adapted Praxis

Guidance was provided on the adapted "loving-kindness" practice, this lasted approx 12 minutes. Participants were asked to bring a caring, neutral and difficult relationship to mind from the relational mapping exercise. Well-wishes were offered to everyone equally, regardless of the value label given. Well-wishes are then extended to everyone in the participant group, communities of healthcare and education who work in relationship to ADHD daily

4. **Mapping:** Changes And Transformations

Participants were invited to return to their relational maps and note any perceptual changes that they had observed, both positively or negatively.

5. **Sharing Circle #2:** Phenomenological Accounts

Each participant was invited to share for 2 minutes their experience of the practice and any changes that had occurred. I personally took notes on the Miro Board to allow the design activities to have a presence in the online environment.

5. **Sharing Circle #3:** Take Aways

In order to facilitate a sense of completion, I decided not to digitally map feedback and went straight to the final sharing circle. Where participants were asked

Q. What will you take away from today? What do you feel is important for the group to hear?

It ended very positively with expressions of gratitude from everyone who took part.

Data Gathering And Analysis

The session was recorded and transcribed for analysis, the relational worksheets were photographed and uploaded to the Miro Board. I did not pursue any further participant feedback, as the outcome of this workshop spoke directly to the capacity of mindfulness to transform diagnostic perceptions.

- **Worksheet Photographs:** participants were invited to photograph and upload their worksheets onto Miro. Each of them chose to email them.
- **Digital Mapping:** No significant digital Mapping was achieved.
- **Comments & Reflections:** No participants contributed in this way.
- **Recordings:** Sessions were recorded and transcribed, to allow for thematic analysis

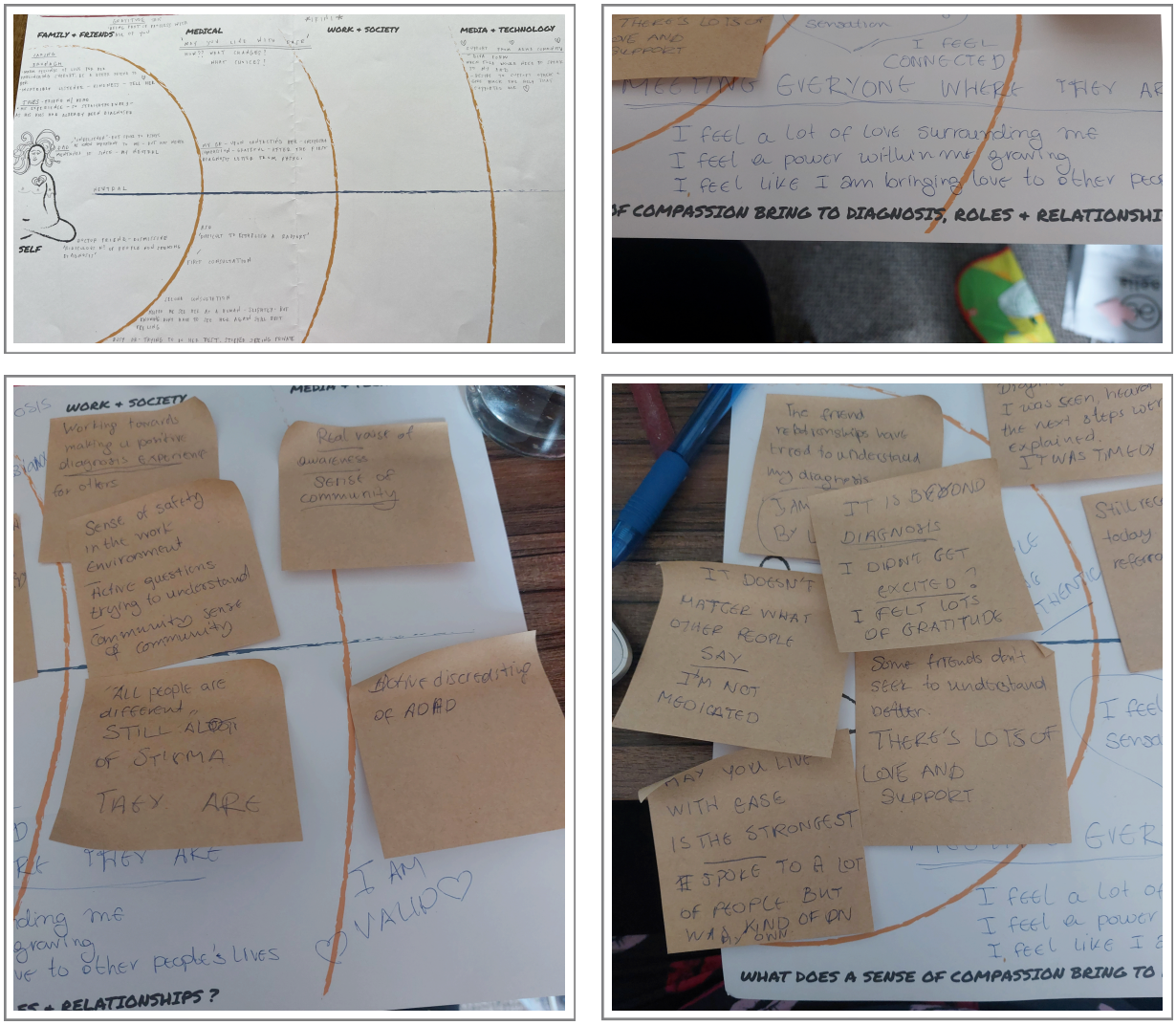


Photo 6 - Workshop 2 Participant Photographs of Relational Worksheets Source: Participants

Asynchronous option: materials were provided on the Padlet resource page, recordings of the praxis and instructions were uploaded from the session. Participants were invited to contact me if they had questions or needed support. Both felt they were confident in what was expected of them to go ahead. Neither of the two participants engaged with the materials, communication appeared to cease, no further information can be provided on this.

Chapter Summary

4b.3 Fieldwork Activities Summary

In this and the preceding chapter, I took the route of following an empathetic design pathway that sought to culminate in design innovation activities with ADHD Women.

Fieldwork Activities

WORKSHOPS

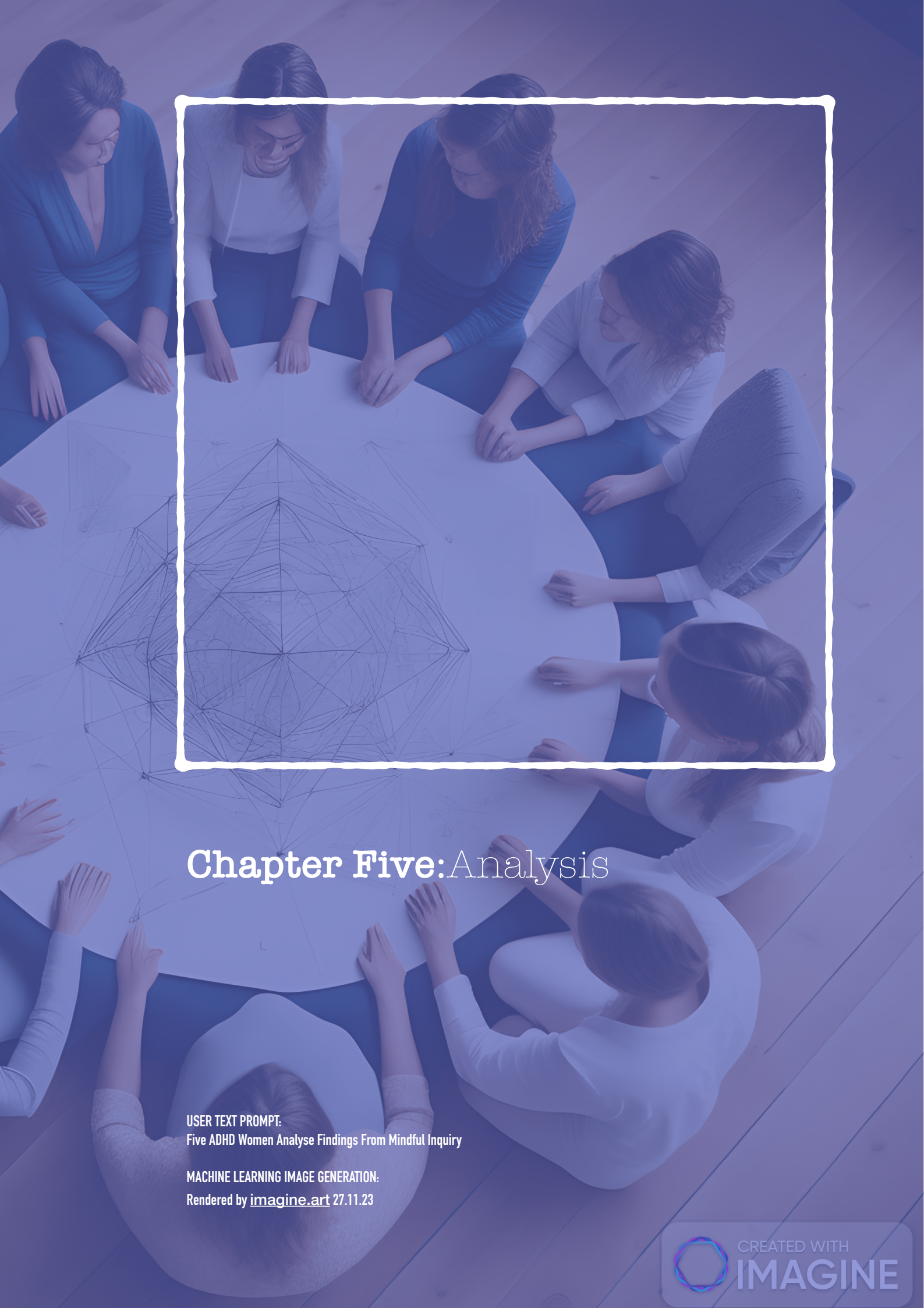
#1 Somatic, emotional and memory perception of diagnosis

#2 Relational, emotional and memory perception of diagnosis

Analysis of diagnostic perceptions, mindfulness, and artefacts.

#3 Asynchronous engagement option

The pace of the workshops, foregrounding of participant safety, and my novice research status resulted in incomplete fieldwork. However, mindful inquiry had evidenced impacts on diagnostic perceptions, and the method of IPA for UX synthesised research outcomes into useable design artefacts. These were felt to be significant and sufficient project outputs to create a sense of fieldwork completion.



Chapter Five: Analysis

USER TEXT PROMPT:
Five ADHD Women Analyse Findings From Mindful Inquiry

MACHINE LEARNING IMAGE GENERATION:
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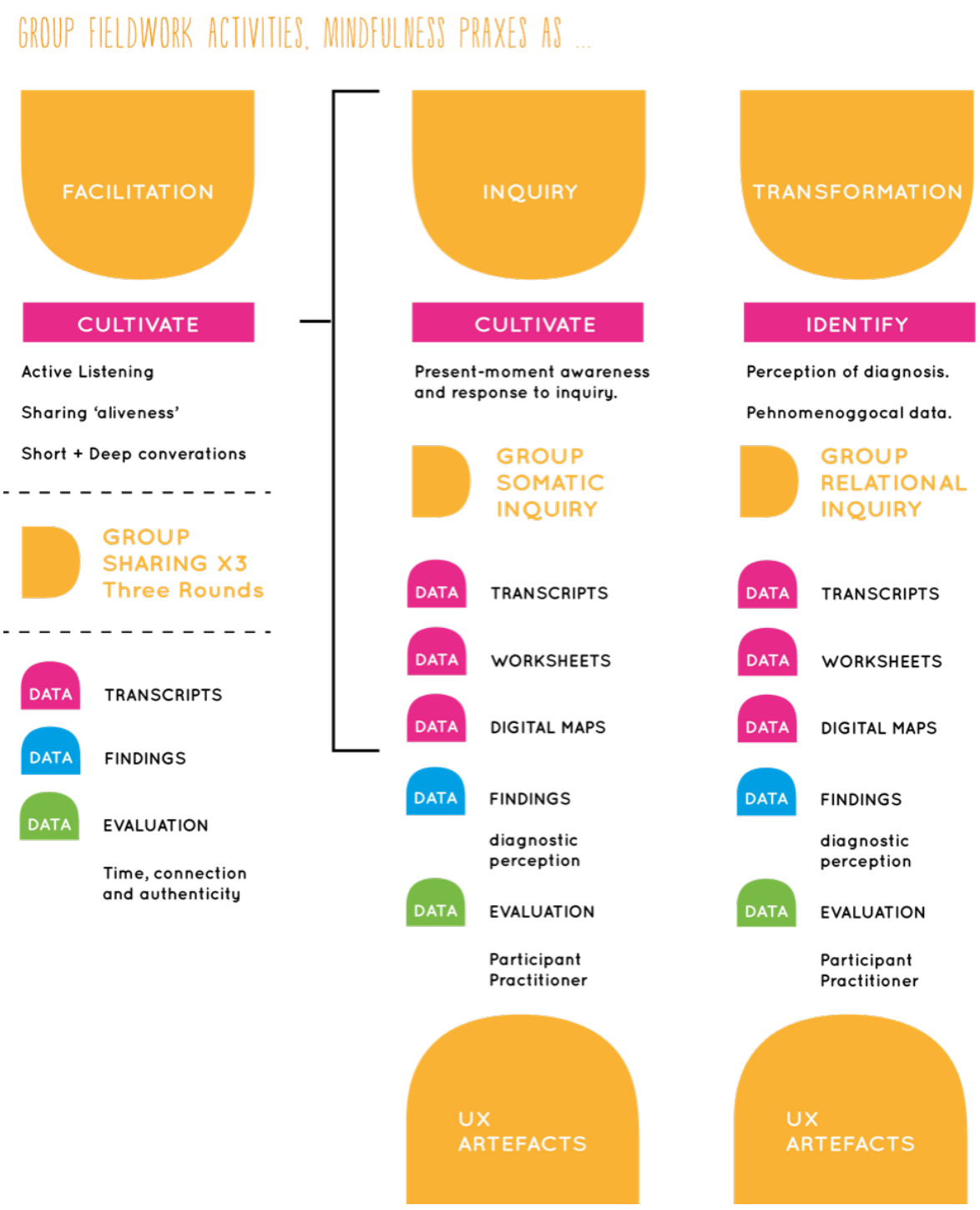


Fig 16- Fieldwork Activities, Praxis and outputs Source: Author

Chapter 5: Analysis & Findings

5.0 Introduction

Findings covered in this chapter, detail the outputs and analysis of fieldwork activities - mindful design research inquiry with ADHD Women. **Collectively we engaged in mindful praxes and methods of inquiry to explore diagnosis and observe how perceptions are discreetly transformed through praxes. I will begin by outlining mindfulness as a workshop method, then discuss diagnostic perceptions, the creation of UX design artefacts and validation of the approach.**

Mindfulness In The Field

5.1 Workshop Methods

The study identified an opportunity to explore mindfulness beyond its calming effects, towards its capacity as a tool of inquiry. Mindfulness was reframed as

6.1.1 A FACILITATOR OF COMMUNICATION

This framework was selected to provide a highly structured approach to communication, creating an opportunity for participants to explore deep listening and sharing techniques. The short and deep model aimed to strengthen connection and empathy within the group, and provide focus and purpose to conversation.

Q.1 What did mindfulness bring to facilitation?

Short Timeframe, Deep Listening And Inquiry Of 'Aliveness': Three Rounds of Sharing

Short & Deep:

1. Sharing Round #1: the two-minute timings worked well during the initial sensory somatic check-in, everyone adhered to their allotted time and covered a considerable amount of personal details. Although short, it appeared that deep emotional resonance was created within the group beyond the information shared.

> *Sea Bloom "Everyone who has spoken … are not reaching what they are supposed to be doing … I can relate … that resonates very much."*

During the relational workshop the topic - loving kindness - proved to be an emotional trigger, and timings were largely disregarded by the participants. However, again a good degree of emotional resonance was felt.

> *Sea Bloom "I want to give you a hug."*

2. Sharing Round #2: The emotional content resulted in sharings lasting between 4 - 8 minutes during the somatic workshop and 10 minutes in the relational workshop. It appeared that emotions were attributed to mindfulness and to the previous person sharing

> *Scarlet Crane "I'm really emotional after hearing your story … I don't know why … maybe after the mindfulness"*

3. Sharing Round #3: The somatic workshop ran out of time, and the relational group feedback was positive, concise and completed within the time frame.

> *Sea Bloom "Yeah, I think one thing for me is to kind of the little thing I felt for me today again, was that connection with everyone and that intense correlation and so many things kind of resonated with me so much."*

> *Snow Harp "I think I've actually got a very similar sensation to you SB, which is, which is lovely. I mean, we've all got such shared experiences. And it's, it's, I feel privileged. So thank you very much, ladies, for sharing your experiences as well."*

> *White Grass " Got big sense of gratitude for being part of this process with you all, and with you Donna for leading it."*

Findings:

Connection & Empathy: This appeared to be established through the use of ADHD language. Descriptions such as overwhelm, in a hurry, distracted, masking, chaotic, and uncertain, appeared to be successfully used to create affinity.

> *Snow Harp "hurriedly brushing my teeth",* used *"dry shampoo because I slept in"* when asked to report on what she could taste and smell.
>
> *Scarlett Crane was "distracted"* in relation to the sound of her kids watching TV in the other room and described *"millions of bits of paper"* in her messy room when asked to explore the theme of touch.

Symptoms As Coping Strategies: "What is alive?" appeared to uncover anxiety and uncertainty regarding the online workshop. Snow Harp spoke of "a lot" going on and *"taking in other people".* While *curiosity* and *apprehension* appeared in equal measures towards mindfulness. Most had tried it, Scarlett Crane described feeling *"intimidated"* by it.

In expressing anxiety, a link appeared to emerge to coping strategies:

> *Scarlet Crane "I shouldn't have started five simultaneous tasks just before this because now I've got them all incomplete."*

This reflection points to her apprehension prior to the workshop, and her individual distraction technique of starting new tasks.

> Sea Bloom similarly doodles on her notepad and feels *"strangely emotional"* stating that she normally *"masks"* in groups of people. Although finding it challenging, SB later laughs *"I'm crying, so I'll continue to cry"* which suggests a degree of self-acceptance and that authentic sharing/unmasking was achieved.

This observation suggests that ADHD "symptoms" can be reframed as coping strategies rather than inattention in the design space, and the invitation towards authenticity can encourage unmasking and acceptance.

5.1.2 Mindfulness As Phenomenological Inquiry

Participants engaged in the two mindful praxes of somatic awareness and loving-kindness. After which, they were invited to share their experience.

Q1. How did the group perceive the phenomenological experience of mindfulness?

Observations from Sharing Session #2: Phenomenological Accounts of Mindful Inquiry

Mindfulness was described as:

A struggle: The effort to engage in somatic praxis was described as a struggle.

> *Snow Harp "I struggle massively with mindfulness … my brain is like a Roomba … mindfulness makes that worse for me … at times of trauma it has been a suggestion … for grounding … its something I really want to get to grips with."*

> *Scarlet Crane "I really struggle with mindfulness … it exacerbates all the symptoms … my mind races."*

Sea Bloom was able to move from a place of struggle, as she describes

> *"I do not have the expectation of mindfulness that probably neurotypical people would have … I visualise … a core … while everything else is happening around me … I have in my brain … about fifty lanes of traffic, making different noises… the biggest change has been trying to shape mindfulness into what a neurotypical mind would be able to do."*

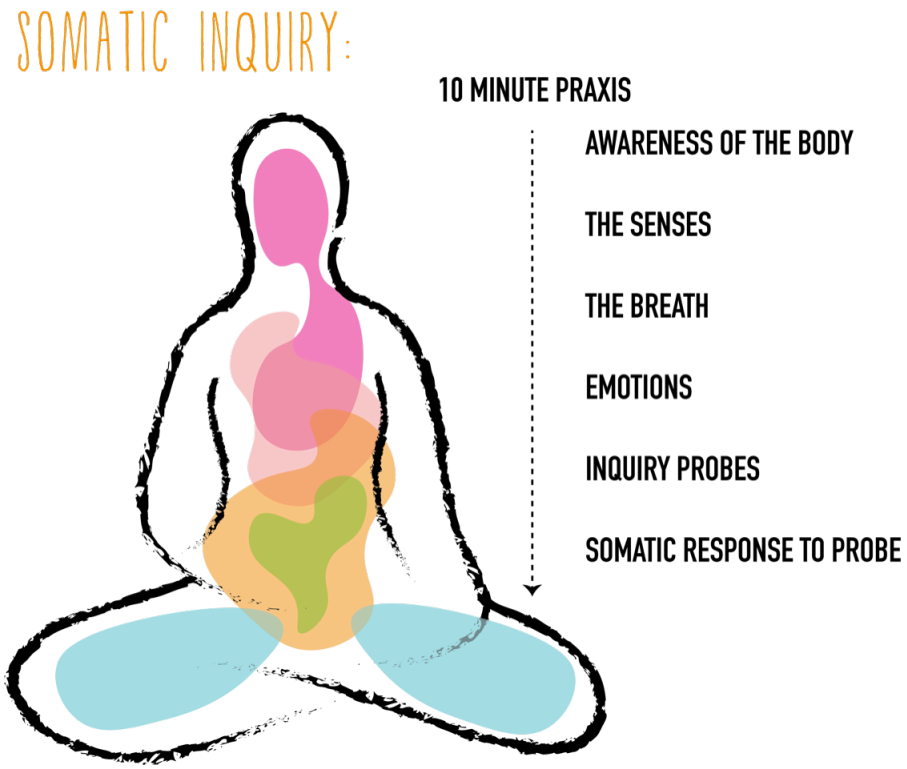


Fig 17 - Illustration of awareness praxis, body, senses, breath. Source: Authors Own.

Findings:

These observations suggest that in order to support an ADHD group in Mindfulness praxis issues of acceptance, sensory regulation and decision-making may require accommodation.

Acceptance: Perceptions of struggle can arise when our expectations meet our reality. The antidote to this is acceptance, which is a teaching point in mindfulness. Tensions may have arisen around what the group thought mindfulness should be, and their present experience of it. Sea Bloom overcomes this beautifully by visualising herself sitting in 'observer' mode.

Sensory Regulation: Two participants described somatic praxis, as a heightened sensory experience, this appeared to be their source of struggle -

> *Scarlett Crane "mindfulness … turns up the volume on everything. My skin itches … aches … joints … pain becomes really apparent all over my body. So it's really difficult."*

Indigo Nature "I struggle from intense understimulation like quiet time was like a punishment (in school) … you touch your hair, you have a drink … it's such a funny thing"

This finding may point to the origins of phenomenological overwhelm and ADHD and can assist in the design of future mindfulness praxes.

Decision Making: During Workshop #2, struggle appeared in relation to labelling relationships.

Snow Harp "it was difficult to stay on task… for every person … relationship I could identify a positive … negative experience"

This finding suggests that participants may require some assistance with making decisions in preparation for praxis.

Loving Kindness:

Praxis imaginatively offered words of loving kindness to self, others and all.

"Offer these words of loving kindness

MAY YOU BE WELL
MAY YOU BE HAPPY
MAY YOU LIVE WITH EASE

Check-in with the heart centre, just noticing
How does it feel to offer these words of loving kindness?"

Observations:

The most profound somatic response came from the phrase "may you live with ease." Described as a pending drum, and a yearning for ease.

Sea Bloom "I know it sounds trite and maybe trivial but to be honest, it's just it sounded like a drum pounding in my heart when we when we were saying it, may you live with ease I found It just really was very, very poignant"

Snow Harp " I think the phrase that you're using, I hope you are well. And I hope you're basically I hope, I hope you will live at ease. And it's just like, all you can think about is the one thing that ADHD people have is it's not easy, Nothing's easy."

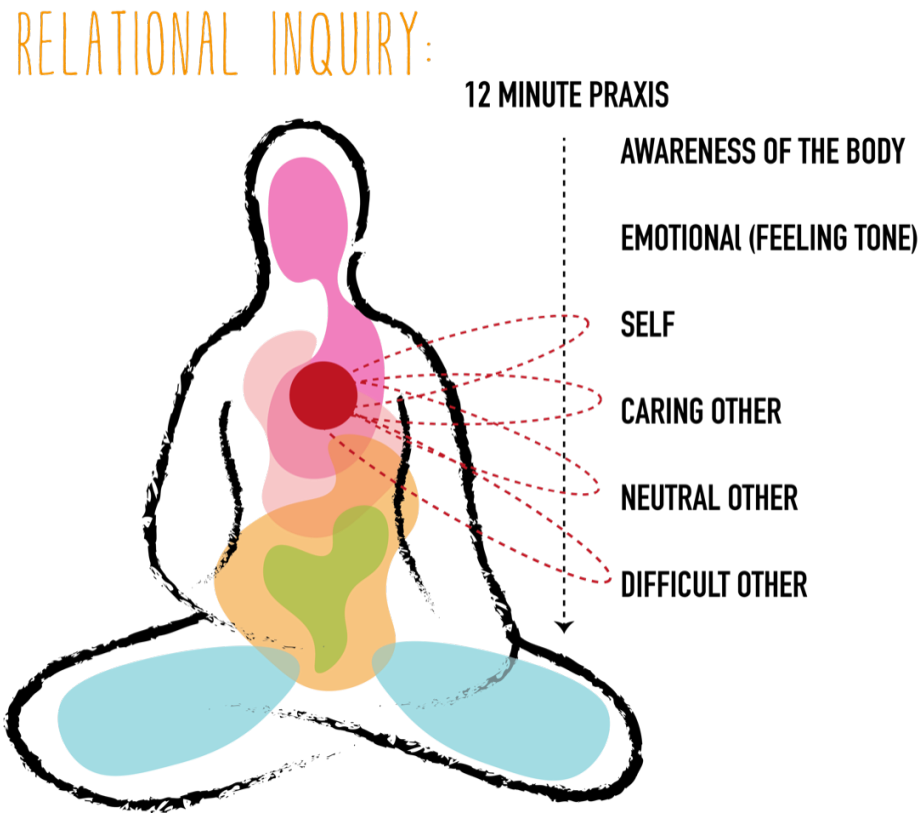


Fig 18 - Anchoring awareness in the 'Heart Centre" Source: Author

Findings:

Emotions: Somatically and phenomenologically the loving-kindness praxis was positively experienced. Strong positive emotions were felt such as gratitude, and privilege that were described as 'healing' and felt somatically.

Soma: No overwhelm was reported in loving-kindness praxis, despite the somatic element of anchoring in the "heart centre." This suggests that the heart centre was experienced as an emotional centre rather than a physical organ.

These findings suggest a strong link between emotions and their somatic experience in the body. It illustrates the capacity to generate positive emotions and feel physical sensations of release and healing.

5.1.3 Mindfulness As Transformation

In seeking to platform current diagnostic 'lived experiences', the utility of mindfulness was explored as a tool for transforming memory perceptions. To understand how healthcare design may be mindfully encoded with their results.

Q1. How were the group's perceptions of diagnosis transformed using mindfulness?

Observations from Sharing Sessions #2: Accounts of Diagnosis

During the workshops, the study group engaged in two praxes, one focused on somatic tensions and energies that arose from the word diagnosis, while the other focused on cultivating kindness towards diagnostic relationships and interactions. Themes that emerged from praxis are as follows:

Participant Observations:

Diagnosis And The Body: Q. Where Am I Holding Diagnosis?

The group communicated the location in the body, the emotion associated with it, and the memory that arose. This created emotional and metaphorical descriptions:

Heart

Snow Harp "In my heart … hope was one of the biggest things I felt"

Mind

Sea Bloom "I saw fireworks in my mind … popping in every which direction in a multitude of colours … I'm not crazy … it all makes sense."

Head and Stomach

Scarlett Crane " a jaggy stone in my gut that still kind of churns a lot." "It seems to be head stuff and very little about … feelings. There's no space to discuss feelings, because they don't fit into little boxes."

Shoulders

White Grass "frozen with the horror of it."

Indigo Nature "in winter … you keep yourself (huddled) to stay warm … then the first summers day your like (rolls shoulders) … you didn't realise how much it was aching."

All of the participants easily identified areas of the body, where there was a sense of holding, releasing and energetic responses to the word diagnosis. These were described metaphorically and poetically as a *"summer's day", "stone churning"* and *"fireworks."* These are linked to emotional labelling of *"hope", "grace"* and *"horror."* These words appear linked to memories of specific diagnostic events or peak experiences:

Cognitive Response : Q. Did a diagnostic situation come to mind?

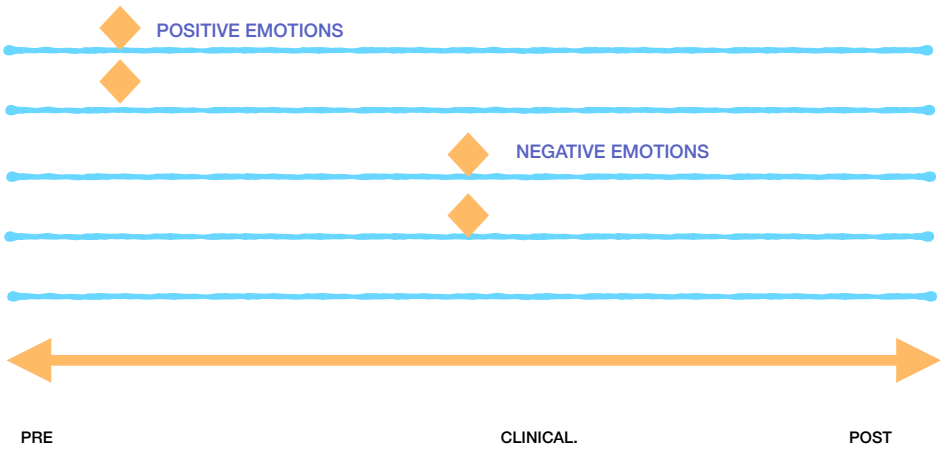


Fig 19 - Cognitive Time travel Source: author

Peak Emotional Experience: Each participant had a unique response to the word DIAGNOSIS. Two travelled to the actual point of clinical diagnosis as a peak negative experience, and two travelled to the point of self-identifying with ADHD as a peak positive experience, Snow Harp gained a present-moment peak experience of recognising the emotional journey she had been on, and the unseen transformation that had occurred. They were afforded an emotional perspective:

Scarlett Crane "lots of things that I perhaps wasn't quite aware … hadn't named … about diagnostic experience and how I genuinely feel about it did become apparent through doing that. So mindfulness works I suppose."

Snow Harp "it really opened up to me how I felt about what I expected from diagnosis and where I am now … the feelings I have bouncing around … I am actually aware of them, which is a big step forward for me… something I didn't have before"

Sea Bloom's strong emotions were met with "negative self-talk", and "underplaying" them from years of being told she is too "dramatic."

Scarlett Crane, observed that diagnosis does not accommodate emotions in its administrative process *"there is no room for emotions in the little boxes."*

Somatic Response: Q. How did you respond to a sense of care?

The group unanimously struggled with the invitation to put a caring hand on their heart. This finding requires further investigation to draw a generalised conclusion.

Snow Harp "I was hesitant, I'm uncomfortable with it and I hoped that I maybe would have moved forward with that."

Participants either had no response or omitted it in their sharing. These findings may suggest that the group struggles with self-care (an aspect of ADHD.) Or the method of inviting care through physical touch may move inquiry from an imaginative into a sensory sphere, which may link to sensory issues and ADHD.

Findings:

Somatic inquiry clearly illustrated a link between the body, emotions and memory. As such diagnosis was unanimously relabelled an emotional journey.

Relational Findings In Response To Loving Kindness Praxis:

Participant Observations:

Gratitude: There was a tangible sense of positive emotion expressed within the group after praxis. Participants were able to both feel the emotion itself and direct well wishes toward a person or thing in response to the phrases.

> *White Grass "made me aware of my gratitude (for best friend) … her unflinching support … incredible listening skills and kindness."*
>
> *"I wrote a big post (social) … literally 100 people responded in 20 minutes … the outpouring of kindness … and practical help."*
>
> *"Im grateful to my Dad for agreeing to that (conversation with psychiatrist)"*

For White Grass the practice allowed her to thank people that she could never hope to in real life, either because it was impossible or the relationship was difficult.

> *Snow Harp "This little exercise has allowed me to examine my positives … being grateful that I've got him around understanding everything I'm going through."*

Snow Harp described being able to "ease and release" all the negative emotions that she has towards herself through this praxis, cultivating a sense of self-compassion.

> *Sea Bloom "this mindfulness exercise … I feel a strong kind of healing sensation … connectedness … intense gratitude … I feel valid … I am connected."*

Sea Bloom evoked a sense of the transformative nature of gratitude to provoke an embodied sense of "healing" and acceptance through "embracing" her emotions. The felt sense was almost beyond her capacity to express.

An Appreciative View: The relational view of diagnosis revealed new actors, positive aspects of old actors and emotions that hadn't previously been uncovered in conversations or somatic inquiry.

New Actors:

White Grass spoke - best friend - described her support and qualities as a skilled listener and unflinching.

Snow Harp - partner - who has ADHD had been at her side throughout, and she felt privileged to have his understanding and compassionate support.

Sea Bloom - work colleagues - some who had been "curious" about her diagnosis, and without whom she would not be able to carry on working.

Old Actors:

A kinder view was revealed through praxis offering a fresh perspective. A difficult psychiatrist was generously reframed as a *"woman going about her business"*, a neutral partner relabelled as *"compassionate and understanding"*, work colleagues revealed the insight "you have to meet people where they are."

White Grass exclaimed *"I'm still angry though"*, suggesting that gratitude hadn't completely overshadowed the difficulties.

Participants appeared to somatically experience the generosity and support they received from others with Sea Bloom exclaiming that she felt the energy of "healing.

5.2 Summary Of Mindfulness In The Field

Facilitating communication

Mindful communication is an ongoing praxis, as such it takes time to develop capacities to share and receive from a place of "aliveness." As a practice, it seeks to cultivate authentic human exchanges, rather than habitual responses. As a mindful method of facilitation, it appeared to cultivate:

- **group connection in a short timeframe**
- **authenticity, and acceptance around issues of social "unmasking"**
- **illustrated links between anxiety and personal coping responses**
- **a framework that is easily derailed by emotions**

Mode Of Inquiry

Somatic praxes, typically anchor awareness in the body as a means of establishing a quality of presence. As a tool of inquiry, it aimed to investigate the relationships between mind, body and memory perceptions. As a mode of design inquiry, it appeared to create insights that established:

- **links between memory and peak emotions**
- **tensions around sensory dysregulation**
- **increase emotional awareness, as a component of a narrative**

Mode Of Transformation

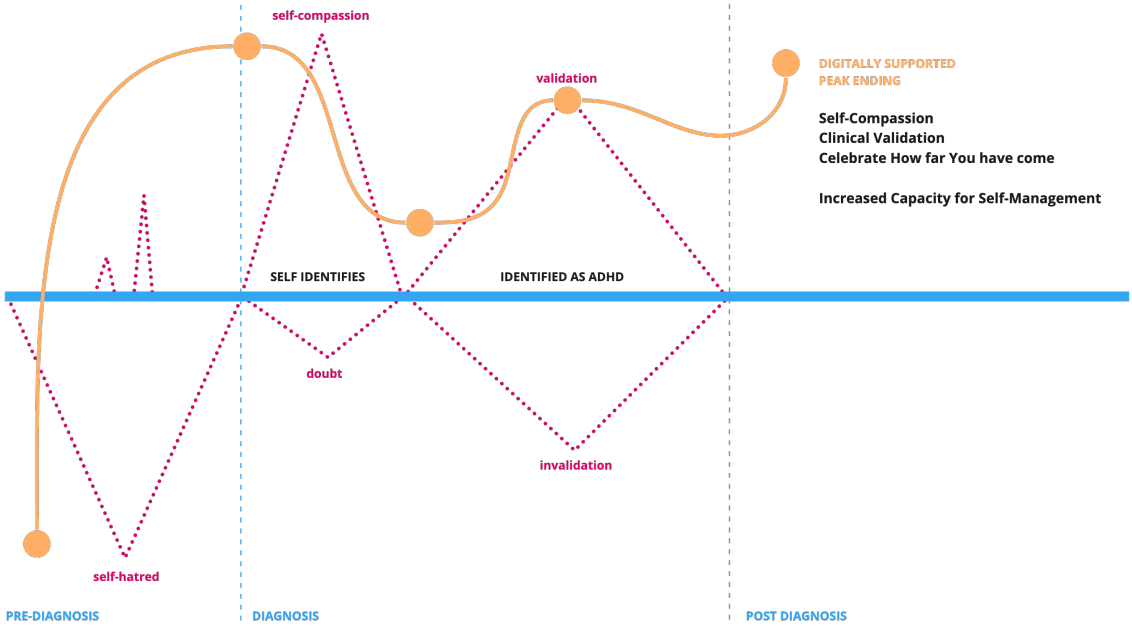
Relational praxes, set out to cultivate positive emotions towards all beings equally, to create connection and kind regard. As a tool of design inquiry, it aimed to reveal positive aspects of the diagnostic experience:

- **the connection between cognitive labelling and memory**
- **the capacity for memory to be positively transformed**
- **cultivated a somatic sense of 'healing'**

5.3 Towards UX Design Artefacts

The research framed 'lived experience' as a foundational element of healthcare and UX design, and enfolded within this, participatory elements to its methodology. It sought to then create artefacts as a further layer of analysis and evidence utility as a bridge towards future healthcare solutions.

Mapping Peak Experiences Chronologically



How to read the diagram - The dotted pink line plots variability in peak emotional reports, negative values are situated below the blue line and positive are above. The orange line offers a vision of UX design's potential to support emotions - recognising the potential starting position to be a place of extreme emotional lows - towards cultivating positive states such as self-compassion, clinical validation and celebration of achieving a diagnostic journey with its highs and lows.

Fig 20 - Peak Emotional Experiences, And Designing A Peak Ending Source: Author

Somatic Inquiry: by mapping peak emotions we can understand the emotional journey of the ADHD Woman. This can begin in a deep emotionally negative state, which includes severe depression and suicidal ideation, this affords us a view of extreme vulnerability in the pre-diagnostic phase.

Self-identification: this phase has the potential to propel ADHD women towards compassion and “grace”. Here there can be undercurrents of self-doubt, which causes them to pause and reflect before taking action. This pause can last as long as a decade until a life catalyst occurs. The action taken in each scenario is very different.

Clinical diagnosis: has the potential to be a validating or invalidating experience largely dependent on the tone of the clinician and the transparency of the clinical process.

Peak ending theory: this theory (Kahneman., 2000) suggests that lengthy events may be remembered positively or painlessly by the quality of their ending. In this context, seeking to design a peek ending we can learn from the participants’ experiences.

- Indigo Nature’s experience of peak self-compassion, affords her strategies for “talking herself off a cliff”
- Sea Bloom’s peak self-advocacy and “taking no prisoners” attitude
- White Grass’s peak preparedness for the clinical process
- Scarlet Crane’s peak curiosity and interaction in questioning the healthcare team, and validating the clinical process
- Snow Harp’s peak reflection on her “wee journey”, seeing how far she'd come

Despite the peak experiences evidenced, peak self-compassion or capacity for self-advocacy in and of themselves are not enough to ensure participants achieve a “peak ending.” However, these qualities can aim to be supported by design, to ensure that the end user is brought to a place where they have the capacity to tackle the next stages of the clinical process, towards supporting ongoing self-management strategies.

Fig 21 - Emotional Mapping of Peak Experiences. Words are abridged versions of actual participants' words. Source: Author (The map is read in a clockwise direction beginning in the top left-hand quadrant).

Emotions And Empathy Mapping

UX empathy maps afford us a view of chains of thought, feelings and actions. They recognise the unique individual's response to stimuli. Figures 21 through 23 map verbal feedback from peak moments of self-diagnosis, clinical diagnosis and post-diagnostic. Each colour Post-it note represents a different speaker and the resulting action they take to progress toward diagnosis. As a method of analysis, it sought to preserve the unique experiences of the study group.

Self-Diagnosis: In mapping participants' responses, we can see that the emotionally positive peak event, has a great capacity for emotional transformation. Although a universally life-redefining moment, it does not produce a stereotypical "ADHD" response, such as the assumption that the participants rush to immediately request a diagnosis.

Actions: Sea Bloom takes the time to write a list of all her symptoms and gather evidence, Indigo Nature waits 18 months as she's not confident, her assertion may be a "passing fad", whilst White Grass joins support groups and waits for almost a decade until concerns about her career and menopause become an issue. Each response is uniquely valid and demands different design responses.

Clinical Diagnosis: is variably a negative or positively "validating" peak experience. Which is largely dependent on the clinical process itself and influenced by the clinicians' tone. In this study group, it was selected by two participants as an overwhelmingly peak negative experience. The lack of attendance to the clinical process results in Scarlett Crane invalidating herself and the diagnostic result, and clinical inaccuracy prompts White Grass to request amendments to healthcare records. Although both are successful self-advocates powerful emotions such as anger and frustration are expressed and actions accordingly taken.

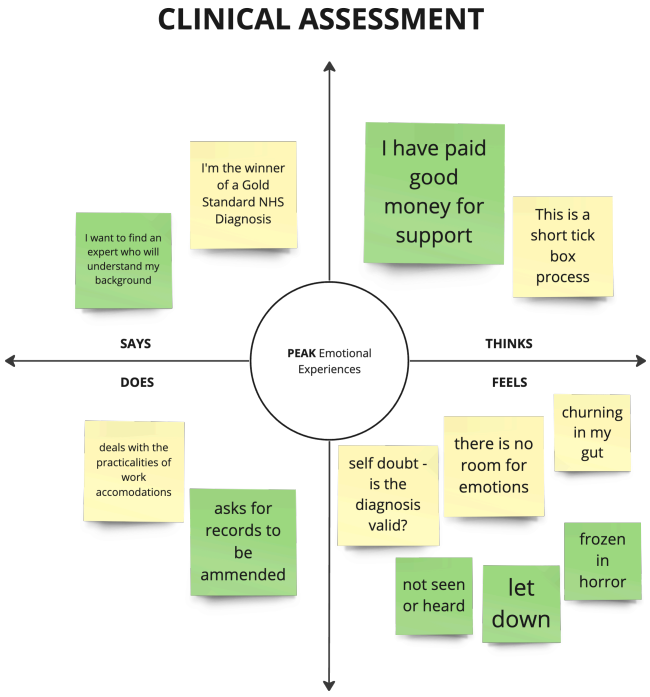


Fig 22 - Clinical Empathy Mapping Towards Action. Words are abridged versions of actual participants' words. Source: Author (The map is read in a clockwise direction beginning in the top left-hand quadrant).

In creating the empathy map, we can observe that although appropriate action was taken, the emotional 'feels' quadrant is still causing anger and frustration to arise during Mindful Inquiry. Here we can observe that the emotion of anger is being held onto and activated in the body, despite the completion of the necessary actions. In noticing this, we can perhaps guide users from external action taking, towards internal activity of emotionally processing and cognitively integrating their experience.

Post Diagnosis: One participant expressed the present moment workshop experience as her emotional peak moment. This occurred through recognising the “wee journey” she has been on, it allowed a retrospective view and opportunity for celebration. In noting her words onto the empathy map we can see that she is occupying a space in which past, present and hope for the future meet. It shows us the components that make up this hope, that she has seen her emotional progress from chaos to now coping, and sees no reason why further improvement in the future cannot be made. This speaks to themes of ADHD diagnosis as a transformative life event and memory issues that may prevent the capacity for self-reflection, which impacts a sense of self as diagnostically fixed or deficient. Healthcare may be designed to recognise this milestone and the resilience and strength required to see the process through. This speaks back to the “peak ending theory”.

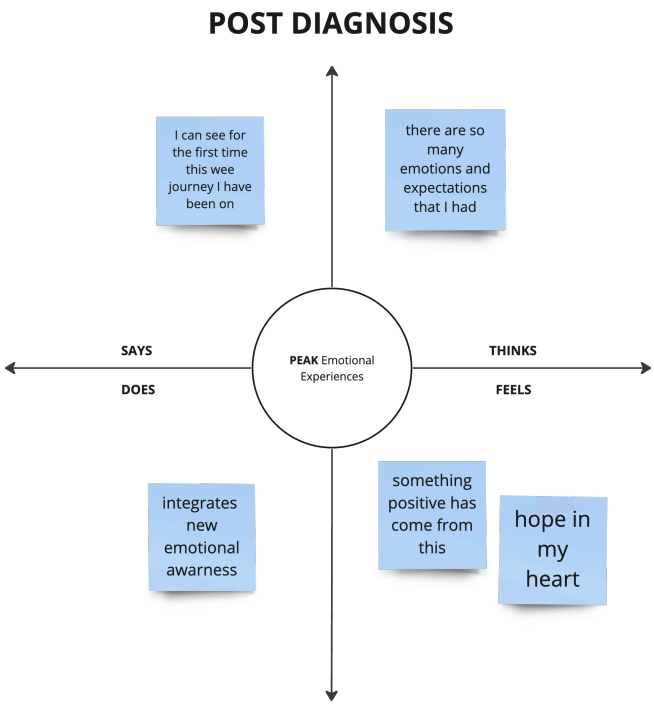


Fig 23- Post Diagnosis Empathy Mapping Towards Action. Words are abridged versions of actual participant’s words. Source: Author’s Own (The map is read in a clockwise direction beginning in the top left-hand quadrant).

Empathy Maps And Relationships

An ADHD diagnosis often involves family members, partners and disclosing your diagnosis to friends and workplace colleagues which can have mixed results. The Loving Kindness mindfulness praxis uncovered some positive transformations in relationships, that may go

some way to understanding the therapeutic support needs in this area. By creating UX emotional maps further findings were revealed:

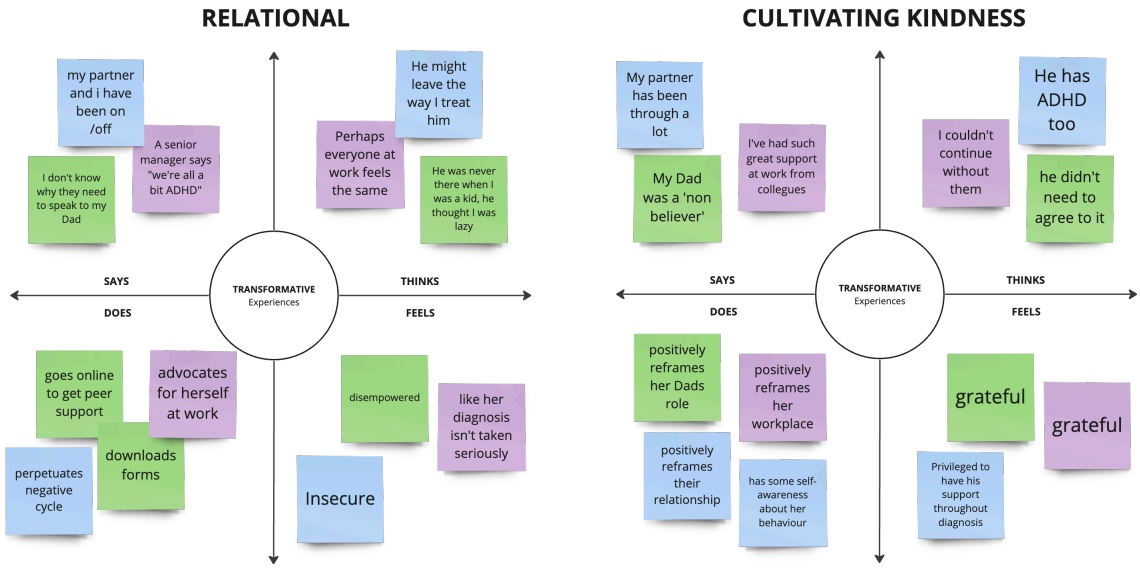


Fig 24- Relational Empathy Mapping Towards Action. Words are abridged versions of actual participants' words. Source: Author's Own (The map is read in a clockwise direction beginning in the top left-hand quadrant).

Cognitive Labelling: By comparing the notes taken in relational mapping, to the ones after cultivating loving kindness praxis, the findings suggest that a more positive reframing is afforded. The utility of this points towards moving away from "Black-And-White Thinking" styles. In mapping the example below, of a senior colleague saying "We're all a bit ADHD", this creates a sense of doubt and energetic workplace advocacy. After praxis, she feels grateful for all the support that she currently receives and can now re-label the workplace as supportive, this changes her internal emotional state and her external actions.

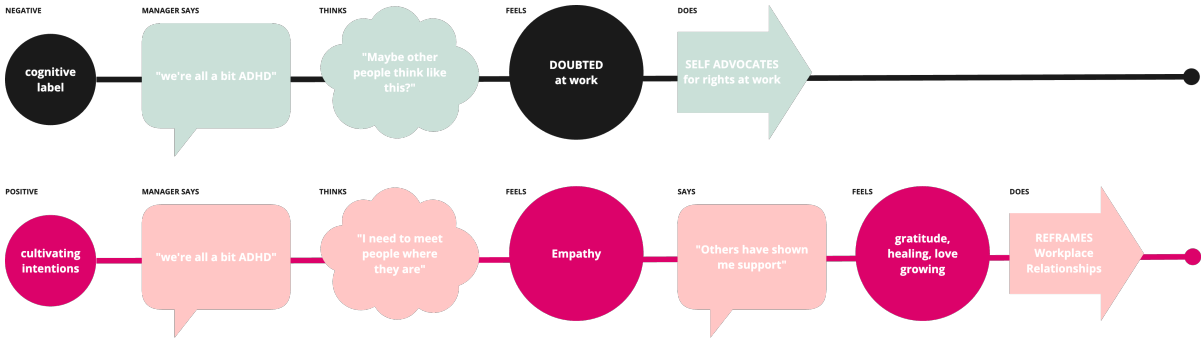


Fig 25 - Sea Bloom, Emotional Transformation, An Abridged Version of Words Spoken, Source: Author (illustration is read from left to right, the top string illustrates thinking style before, the bottom string after loving-kindness mindful praxis)

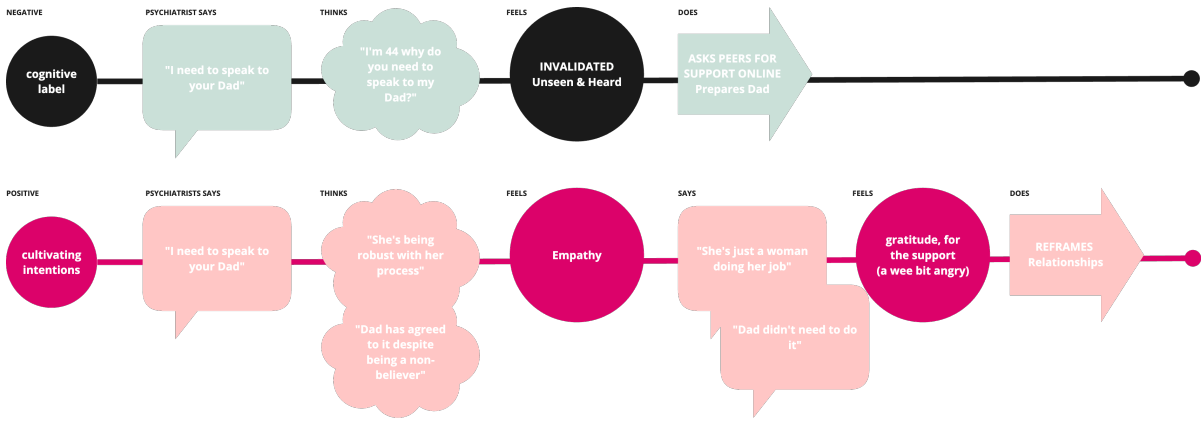


Fig 26 - White Grass Emotional Transformation, An Abridged version of words spoken Source: Author (illustration is read from left to right, the top string illustrates thinking style before, the bottom string after loving-kindness mindful praxis)

These findings go some way to illustrating how mindfulness may be an appropriate therapeutic digital tool, allowing emotions to be revealed, reframed and processed. In mapping participants' statements we are afforded valid responses, prior to praxis external action is taken for self-advocacy and peer support. Post-praxis internal action has been taken towards cultivating an emotionally healing response. This again speaks to the utility of anger and frustration as externally motivating, and kindness as an internally integrating experience. This suggests that emotions may functionally support memory.

Synthesis: Healthcare Vignettes

5.4 Healthcare Vignettes

The healthcare vignette sought to convey key elements of the diagnostic story, that had been briefly communicated in the sharing circle after mindful praxis. This pertained to the journey, and peak emotions, and sought to use a female lens on the narrative shared.

Two somatic vignettes were created, illustrating the emotional journey.

Three Somatic and relational vignettes were created, illustrating the journey and actors.

In illustrating the vignettes as a foundational UX element, the findings revealed are:

Functionality

Diagnostic process

- transparent process, to set user expectations
- support relationships and family reporting
- Interactive process, feedback, service improvement and the ability to offer peer support

Emotions

- recognise emotional variability in pre-diagnostic women
- reframe personal “shameful behaviour” as maladaptive coping strategies

Sensory

- understand sensory challenges and the diagnostic context

Cognitive

- decision-making and planning
- reminders to take action

- support medical understanding of the condition
- health planning, hormones and ageing

Each discrete area can have impacts on the other, in not supporting cognitive issues, emotional issues may arise, and in not supporting emotions cognitive challenges may be felt more acutely.

Vignette: Scarlett Crane

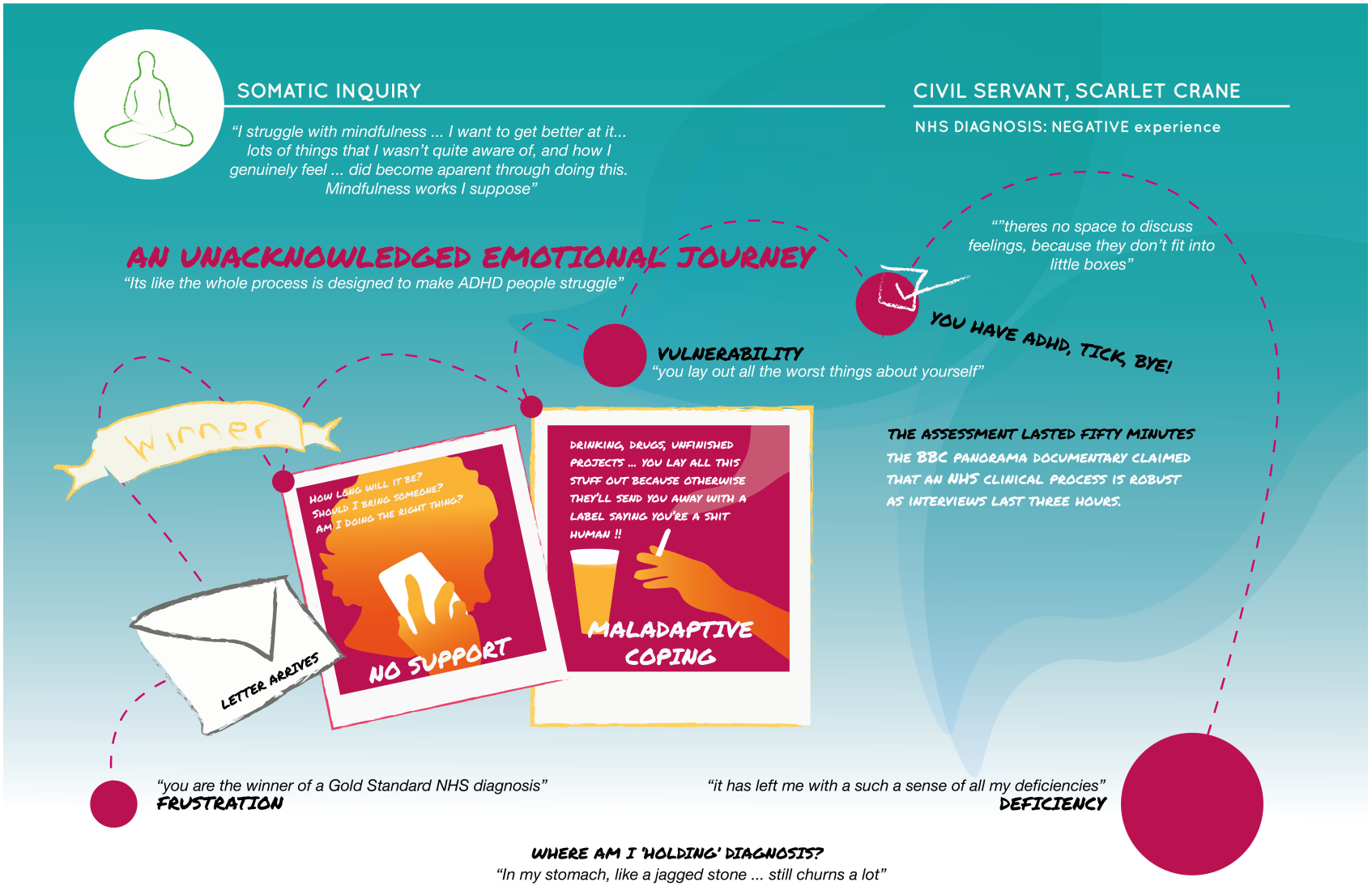


Fig 27 - Somatic Inquiry, Scarlett Crane, Source: Author

SCARLETT CRANE:

Mindful Somatic Inquiry: Deficiency

SC overcame her sensory overwhelm, to uncover a sense of “gut-churning” that she described as a “jagged stone.” This was a visceral response to her short clinical interview, which she felt wasn’t thorough enough.

Peak Emotional Experience: Clinical Diagnosis

The diagnostic setting created a sense of vulnerability by not knowing what was going to happen, and being asked to “lay out all the worst things about myself.” Leaving her with self-doubt.

Individual Factors: Media Coverage

A recent BBC documentary had gone undercover to expose private diagnoses as a scam. It proposed that the NHS had a clinical “gold standard.” This had not been SC’s experience, she scathingly remarked “I am the winner of an NHS diagnosis”, this spoke to long waiting lists and barriers to securing an NHS diagnosis.

FUTURE
DIGITAL
TRANSFORMATIONS

What can healthcare design learn?

SC was very proactive in questioning her healthcare team. Although she queries the validity of her assessment she successfully made workplace accommodation requests. This shows a capacity to engage in self-management strategies.

To mindfully support women like SC, future healthcare can:

- Set user expectations with a transparent process
- Positively reframe personal challenges as “maladaptive coping strategies” to cultivate a capacity for self-compassion
- Actively offer support for heightened emotions that may be present during the diagnostic process
- Offer mindfulness strategies to support sensory processing difficulties during diagnosis

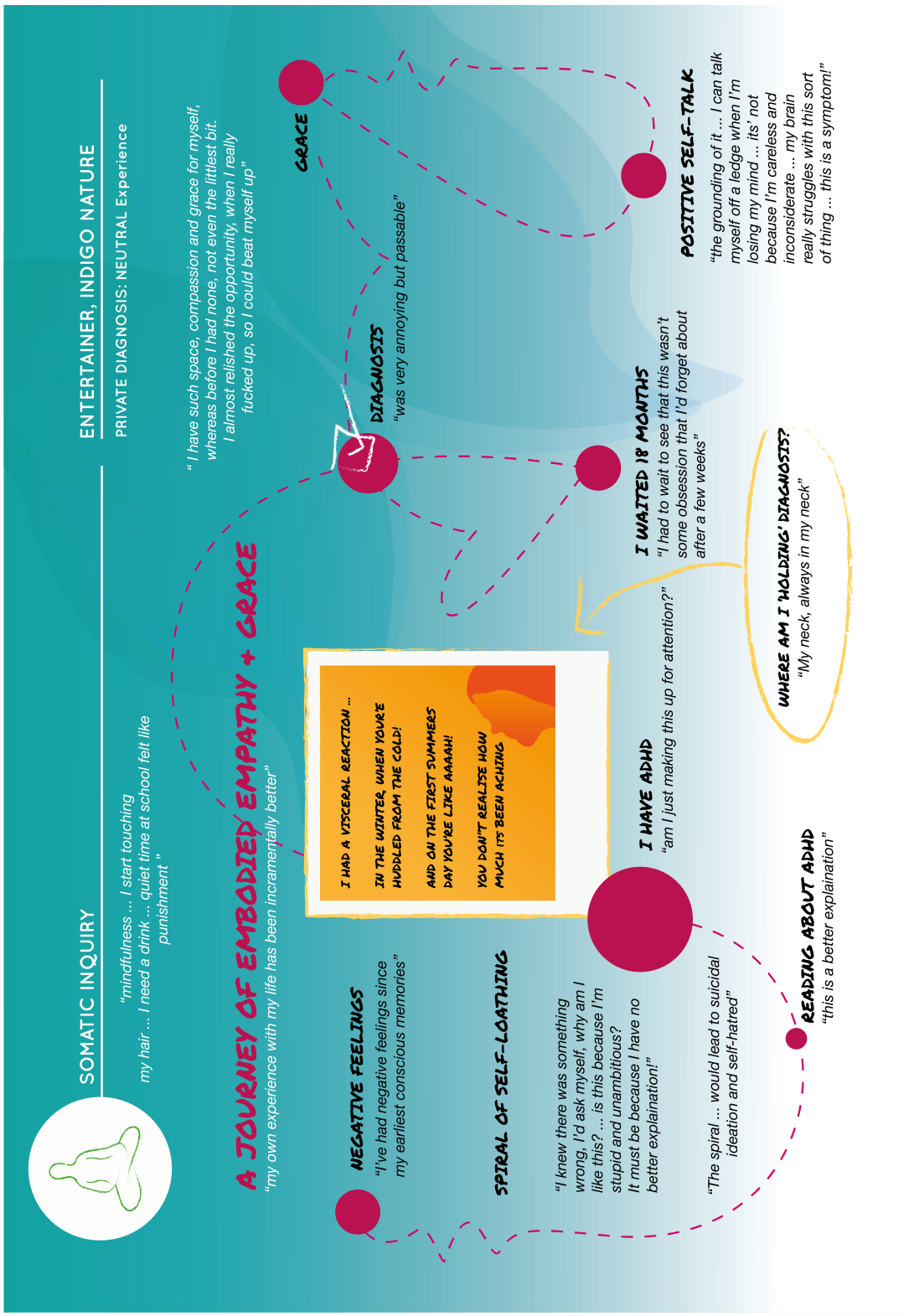


Fig 28 - Somatic Inquiry, Indigo Nature, Source: Author

Vignette: Indigo Nature

INDIGO NATURE

Mindful Somatic Inquiry: Grace

IN overcame feelings of wanting to fidget and move, to reveal an embodied sense of release in her shoulders. This was metaphorically described as the warmth of the first sunshine after a long winter.

Peak Emotional Experience: Self-Diagnosis

IN described being full of self-loathing since her earliest memories, which could spiral into suicidal thoughts. She was now afforded a sense of grace and self-compassion, this had improved her quality of life and allowed her to engage in positive 'self-talk".

Individual Factors: Clinical Diagnosis

The process of diagnosis itself was described as "very annoying, but passible." The labelling of herself as having a disability did not faze her, it allowed her to understand that her brain is "not so good at certain things."

What can healthcare learn?

IN has a healthy-minded approach towards herself, despite "not doing that well" with regard to the daily challenges of ADHD. She has a high degree of self-awareness, allowing 18 months to see whether ADHD was a "passing fad."

To mindfully support women like IN, future healthcare can:

- Recognise the potential for emotional extremes in pre-diagnostic women
- Support the uncertainty and vulnerability of self-diagnosis
- Support ongoing cognitive challenges of prioritising tasks, decision-making, and taking action

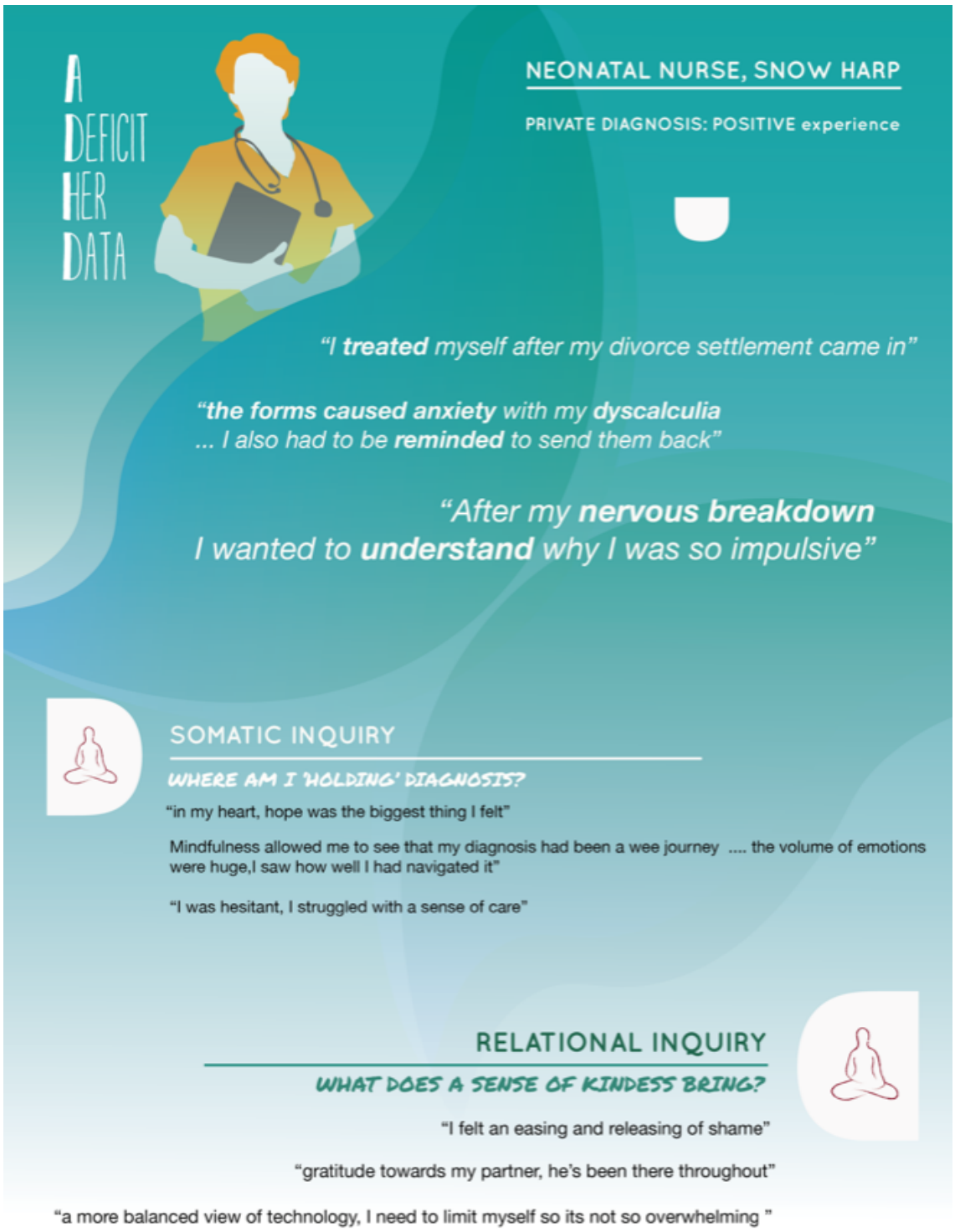


Fig 29 - Vignette, Snow Harp, Source: Author

Vignette: Snow Harp

SNOW HARP

Mindful Somatic Inquiry: Hope

SH overcame her “Roomba Mind”, and thoughts “bouncing around”, to experience hope in her heart. This sat alongside an array of emotions, which she was able to see for the first time.

Peak Emotional Experience: Somatic Workshop

SH saw the emotional “wee journey” that she had been on. This had began in confusion, and chaos, and progressed to the heart-felt hope she had for her diagnosis and beyond.

Individual Factors: Self Understanding

SH experienced a nervous breakdown and a suicide attempt. She has a strong desire for self-understanding, she’s working towards self-compassion and self-care.

Mindful Relational Inquiry

SH experienced an embodied sense of easing and releasing of shame, in relation to her partner, this culminated in a deep sense of gratitude towards him and a greater degree of self-understanding towards her behavioural patterns.

FUTURE
DIGITAL
TRANSFORMATIONS

What can healthcare learn?

SH can get anxious when presented with paperwork and new things to learn, despite her high academic achievements. Her coping strategy is “research mode” online, she has found peer support to be helpful and at times “toxic”.

To mindfully support women like IN, future healthcare can:

- Offer opportunities to mindfully and positively reframe past life events
- Support cognitive processing, medical research dyscalculia and task reminders
- Support relationships that may be strained during this time

Fig 30- Vignette, White Grass, Source: Author

Vignette: White Grass

WHITE GRASS VIGNETTE:

Mindful Somatic Inquiry: Horror

WG overcame initially being “frozen in horror” by the memory of the diagnosis, and experienced as tension in her shoulders. She used the map to appreciate the emotional journey that she’d been on.

Peak Emotional Experience: Clinical Assessment

Her negative response related to her Psychiatrist and the inclusion of her Father. The Psychiatrist had said “I can’t just believe you”, and had made administrative errors which were received as dismissive and uncaring.

Individual Factors: Career And Health Planning

WG was previously given an intermittent MS diagnosis. She self-identified as ADHD and waited almost a decade to pursue assessment. Concerns surrounding the impact of menopause and ageing on her impaired cognitive function grew, which undermined her self-confidence in her ability to take on more senior roles.

Mindful Relational Inquiry

WG experienced a sense of gratitude to everyone who had supported her diagnosis, even her Psychiatrist who was reframed as “robust” in what was a “difficult diagnosis”.

FUTURE DIGITAL TRANSFORMATIONS

What can healthcare learn?

SH had an empowered and engaged approach, from researching her private Psychiatrist (an adoption specialist), to asking for medical data to be amended.

To mindfully support women like IN, future healthcare can:

- Offer opportunities to mindfully and positively support family relationships
- Support the review of medical information
- Support Health planning strategies

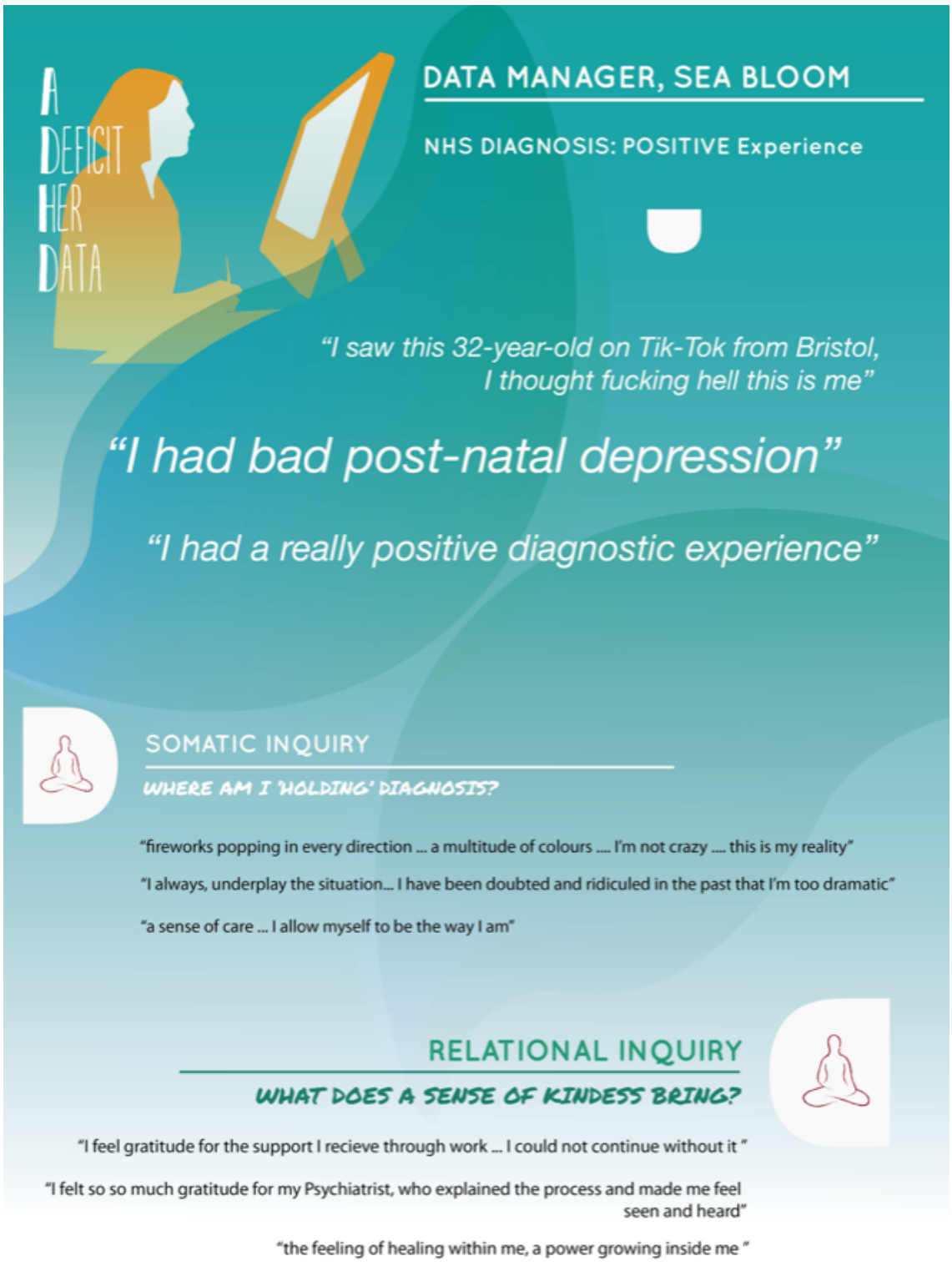


Fig 31- Vignette, Sea Bloom, Source: Author

Vignette: Sea Bloom

SEA BLOOM VIGNETTE:

Mindful Somatic Inquiry: A Still Core

SB described herself in an observational mode, away from the noise of the “50 lanes of traffic in her head.” She energetically experiences fireworks in her heart as an “explosion of colour.”

Peak Emotional Experience: Self-Diagnosis

SB identified herself as ADHD via “TikTok”. It helped her explain her life experiences and mental health challenges. She energetically wrote down three pages of symptoms for her GP who supported her application for clinical assessment.

Individual Factors: Underplaying Emotions

She described a lifetime of being told that she is too “dramatic”, and as a consequence underplays the enormity of her emotions. She has a strong sense of injustice around the diagnostic process and the invalidation of the disorder itself.

Mindful Relational Inquiry

SB experienced an embodied sense of “healing” as her gratitude grew in the practice. A clinician “made me feel seen and heard.” And a negative remark in the workplace was transformed, she saw that this was the comment of one person and that there were many more who supported her. At work

FUTURE DIGITAL TRANSFORMATIONS

What can healthcare learn?

SB is an empowered and highly effective self-advocate, she describes herself as “taking no prisoners.” She passionately would like to advocate for others whose experience she feels can often be invalidated.

To mindfully support women like IN, future healthcare can:

- Offer opportunities to feedback, improve services, and support others
- Mindfully support the processing of powerful emotions
- Support the process of disclosing ADHD in the workplace

Chapter Summary

5.5 Findings

Fieldwork set out on an empathetic pathway, to better understand ADHD Women and their diagnostic experiences. It used mindful praxes to explore the perception of diagnosis and generate insights for healthcare design.

The Empathetic Research Pathway: An adapted UX design pathway was used to incrementally build empathy for the user group, facilitation and realising UX artefacts. The findings suggest mindfulness created an acceptance towards ADHD inclusion in the design space.

- degrees of 'unmasking' and self-acceptance in the participant group
- the observation of ADHD symptoms as coping strategies

Dynamic Memory Perceptions: Two traditional mindful praxes were adapted for the design workshop, these chose to focus on somatic design inquiry and relational design inquiry. The findings suggest that mindfulness can transform memories.

- somatic inquiry increases emotional awareness
- relational inquiry cultivated positive emotions to reveal new facets of the diagnostic experience and was somatically experienced as healing

Both praxes created an opportunity to unpack diagnostic memory perceptions, and view them in a fresh way, this appeared to offer the capacity to positively revisit experiences, beyond simple cognitive reframing or relabelling of exercises

Towards UX Design: design insights suggest that context and methods of inquiry may influence the data retrieved, and ultimately the solutions designed. The workshop outputs largely fell into the broad area of emotional and appreciative data.

> **Peak Experience:** The artefacts created, illustrated points of experiential extremes such as "horror" and "grace." It suggests a link between cognitive labelling, and memory perception as a fixed point, which is somatically held. This offers design the capacity to positively influence and encourage users' emotional valence towards creating capacity for self-management.

Emotional Mapping: By illustrating pre and post-praxis data we are afforded a view of thought and actions. Findings suggest black-and-white thinking styles can motivate external positive action, whilst the appreciative view appears to promote internal emotional healing. This can impact design strategies seeking to encourage actions towards well-being.

Vignettes: The vignettes serve to capture the individual diagnostic experiences and ask “What can healthcare learn?” from these empowered and engaged “health seekers.” Through their creation, the functionality of future healthcare UX design is revealed around themes of supporting cognition, emotion and healthcare planning.

Chapter Six: Discussion And Conclusion

USER TEXT PROMPT:
A Designer Discusses Findings From Mindful Inquiry Fieldwork

MACHINE LEARNING IMAGE GENERATION:
Rendered by Microsoft BING.com 27.11.23

Chapter 6: Discussion & Conclusion

6.0 Introduction

Research aimed to mindfully enter into a mental healthcare design research space in the service of the "user group," ADHD Women. Fieldwork sought to understand how the application of mindfulness praxes may support methods of inquiry, to support the subsequent encoding and design of future digital technologies. This chapter aims to explore the meaning derived from the research address and fieldwork findings. The discussion begins by revisiting contextual themes at the project's outset and moves on to the research findings and approaches to the address. It concludes with future research in this design space.

The study sought to address two main questions:

Q1. What can the **mindfulness paradigm** contribute to **healthcare research** for and with **ADHD Women?**

Q2. How does **mindful inquiry** impact the perceptions of the **diagnostic experience** of **ADHD Women?**

(See **Appendix F** for the evolution of the research question)

In aiming to address the first question, I looked at mindfulness, and its utility in a healthcare design context, the findings from which, speak back to design praxes. The second question aimed to be directly answered by the participant group through their own phenomenological accounts.

Design Research ‘Problem Space’

6.1 Addressing The Healthcare “Problem Space”

At the outset the address sought to investigate the themes of perceived gender deficits in diagnostic criteria, and medical research with ADHD Women. It was understood that there would be many challenges facing design seeking to incorporate ADHD Women in a design process towards digitally supported self-management tools. ADHD Women's symptoms were initially understood as mental health concerns, alongside challenges of attention, focus and engagement.

The research proposition aimed to utilise mindfulness in the design space to enhance the participant's research experience and to evidence the utility of mindfulness as a tool of facilitation, inquiry and transformation. In doing so, it sought to uncover rich phenomenological perceptions of diagnostic experiences, via mindful praxes and mapping techniques. By doing this, the online design space was transformed in many ways into a therapeutic design domain. Research themes surfaced data concerning:

1. **Holistic Data**: BodyMind As An Emotional Entanglement
2. **Design Engagement Data:** The Mindful Design Space
3. **‘Mental Healthcare’ Data:** Mindfully Encoding UX

Participant findings straddled issues of inattention as a coping strategy and thinking styles were transformed to embody a more healing or therapeutic mode.

6.2 A Bodymind View Of Mental Healthcare Design

In seeking to establish a mindful approach to design research, this demanded reflection on the disembodied views on mental health and UX design, which may not typically view the body as a relevant site for inquiry. By drawing on Feminist and Buddhist principles we arrive at a more holistic view of experience as a lively entanglement of bodymind, culture, and gender roles that animate our human experience, and our interpretations of it. Resisting the temptation to be drawn into rich existential realms, fieldwork itself evidenced the utility of embodiment in the field.

FEMALE 'LIVED EXPERIENCE': AS FOUNDATIONAL UX DESIGN

Introducing The Female Body Into Mental Healthcare:

Omitting the body from mental health appears to draw a firm line between mind and body. The study has shown that female biology, hormones, pregnancy and menopause were often catalysts for seeking a diagnosis. Clinicians' psychiatric profession, saw them clearly express female biology as a firm boundary that demarks their area of expertise. In fieldwork, participants were asked to survey somatic tensions and sensations. Each participant experienced a widening awareness that afforded them a new emotional perspective on their diagnostic memory perceptions. They reported embodied "releasing" and "healing" emotions suggesting a strong link between the body, emotions and memory perception. These unseen emotions appeared held somatically, through praxis they were identified, felt, and reprocessed as part of a new emotional diagnostic narrative.

What does this mean for UX design praxes?

Visceral Empathy & The Designer: the embodied approach to design inquiry created visceral descriptions of human experience. "Gut-churning" and explosions of "fireworks in the heart" that may be more universally understood, beyond barriers of gender or cultural identities, that can stand in the way of empathetic

understanding of complex clinical experiences. As such, this additional layer of user experience data may support the empathetic praxes of the designer.

Embodied "Experience" And User Reporting: Embodiment drew inquiry into an interesting and lively space, where memory perceptions are dynamic and subject to influence by the means and mode of inquiry. By cultivating positive emotional regard for self and others, diagnostic perceptions were transformed towards therapeutic modalities and extended into somewhat ineffable emotional and spiritual domains. Retrieving data from this domain elevated descriptions of emotional positivity and appreciation which can provide useful information for strength-based design approaches that seek positive reports.

Future Design Methodologies: UX design research can often reflect this disembodied approach, through its investigation of the byproducts of the bodymind, such as cognitive and emotional labelling. Some work has been done in the field of Somaesthetics to advance design research praxes beyond screen-based interactions, towards a more embodied experience of being in the world (Hook, 2018.) This sets out to anticipate ubiquitous future technologies such as the Internet of Things (ibid). The insights derived in fieldwork not only speak to the utility of embodiment in the design field but align it firmly with the broad field of Neuroscience that places mental health, memory and perceptions of self within the physical body (Riva., 2018.) This speaks to themes of embodied interactions between emotional and mental health, that interaction designers may unwittingly have influence over through the technologies they create.

6.3 Mindfulness, Towards A Therapeutic Design Space

The research proposition assumed that engaging in mindfulness praxes helps down-regulate the nervous system, producing a calming "side effect."(Kestly, 2016.) As a component of "mind training" it asserts itself as a form of discipline, to strengthen the mind's capacity towards focus and paying attention through sustained effort and practice (Rahl, et al., 2017.) The proposal to engage ADHD Women with apparent attention and focus issues, in short 10-minute praxes, to evidence impacts felt extremely ambitious. At the same time, fitting for a design context which sought to circumvent a prolonged training programme, whilst realising the benefits of mindful praxis.

MINDFULNESS AND DESIGN ENGAGEMENT

Crafting Inclusion And Acceptance: At the project's outset, Mindfulness was tasked with facilitating issues of anxiety, attention, and memory by cultivating the qualities of calm, focus and awareness in praxis. As empathy towards the study group deepened through research activities, I came to appreciate that this approach may not be experienced as inclusive by the participant group. Although the apparatus of inquiry remained, the facilitation script and invitational tone spoke directly to the value of showing up "authentically" and allowing symptoms to be experienced.

What does this mean for future ADHD design engagement?

Facilitating emotions: The participant group appeared adept at linking somatic sensations to peak emotional experiences. This can be an issue for those on the Autistic spectrum (Mul et al., 2018) and may need to be considered for those with Au-ADHD. Relational inquiry findings suggest there may be a link between our current emotional state and our cognitive labelling of past experiences. Previous studies have evidenced this, and suggest there are some effects on the details remembered (Talarico, Berntsen, Rubin., 2009.) Loving-kindness praxis evidenced that positively changing the present state of the group, allowed participants to unpack memories and positively reconstruct them. I observed the results of this

praxis as exceptional, this may suggest that ADHD Women have a greater capacity to positively impact their emotional valence. This finding may suggest further investigation into facilitation techniques to discourage dissociative traits (Forner, C., 2019), which can be active coping strategies in ADHD groups (Kulacaoglu, et al., 2017) Overall, this appears to be a rich site for further investigation and implies that trauma-informed mindful modalities may be integrated to support the facilitation of insights (Duane, et al., 2021.)

Accommodating The Senses: Some sensory overwhelm was reported in the group, during sharing and Somatic praxis. This may suggest that the social nature of the online group setting and the sensory processing involved may be challenging. Further investigation of ADHD participants' online support needs is necessary, as it appeared that few participants knew what their requirements would be before the workshop.

Acceptance And Inattention: a key finding suggests that emotions appeared to make a significant contribution to undermining attention and staying on topic. This finding suggests that rather than ascribing symptoms such as doodling, fidgeting and distraction as an inability to control or direct one's attention, they were observed to be coping strategies during periods of emotional overwhelm and sensory over/under stimulation. This aligns with research that speaks to the role of ADHD symptoms as maladaptive coping strategies towards stress responses which increase the likelihood of not progressing with an assigned task (Barra, 2021). Participants made good use of the pads, pens and post-it provided, however, more work can be done to understand the themes of ADHD acceptance, symptoms and unmasking in the online design space.

6.4 Turning Lived Experiences Into UX Design

Research Inquiry began with the basic assertion that women's experiences of adult diagnosis have not been fully understood or articulated, to usefully inform the design of future healthcare initiatives. Fieldwork revealed a more nuanced understanding of diagnosis as an embodied human experience, which through methods of inquiry were revealed to be deeply emotional and relational experiences. In seeking to encode and translate these experiences towards the digital healthcare domain, the study used existing UX modes of emotional and relational mapping.

MINDFULLY MAPPING EXPERIENCE

Mindful Inquiry And UX Tools: By using foundational tools the study demonstrated that mindful inquiry can reveal a rich emotional landscape, which can be directly translated and mapped using emotional design tools. This can contribute towards a bigger UX design piece, which would then enfold interface design accommodations and empathetic design principles.

The loving-kindness praxis set out to capture positive reports, and appreciative data on the diagnostic experience. In using empathy maps to model pre and post-praxis responses we are afforded an illustration of the transformation of cognitive labelling and the resulting actions taken. This led to the observation of a model of ‘black and white’ thinking, which created energetic responses such as anger and frustration, that led to self-advocacy and practical steps to move the diagnostic process forward. The model of “black and white” thinking styles has been attributed as an Autistic trait (Embark Behavioural Health, 2023). This suggests that psychological heuristics are an important component of modelling design interactions with ND groups. Post-praxis reports not only evidenced a more kindly or mindful mindset but also their therapeutic capacities which were somatically felt as ‘easing’ and ‘healing’. The mindful mindset appeared to promote internal action-taking, where anger and frustration are transformed and emotionally integrated during praxis. In mapping these participants’ reports we can evidence a mindful mindset which demonstrates that by extending kindness

towards others we can release and ease emotions such as anger, which although having previously served a purpose, can be integrated and experienced as the action of kindness towards ourselves. This praxis can inform design by understanding when to support more ‘black and white’ models of thinking to encourage decision-taking, and when to support mindful models of thinking to support the integration of emotions. Practically this may be used to progress the administrative process in self-reporting and rating ADHD behaviours and traits, then mindfully processing emotions that arise in response to difficult memories that may be evoked.

As an informant of the female UX design, mapping provided the bridge towards establishing a case for user support needs during diagnosis:

Cognitive needs

- overthinking and lack of decision-taking
- ’black and white’ thinking on impulsive action, and cognitive labelling recall

Emotional needs

- self-diagnostic compassion and self-understanding
- diagnostic extremes, ’horror’ to ‘validation’
- post-diagnostic review

Right Action: During scoping conversations, both participants and clinicians expressed the perception that Women may be broadly discriminated against in Mental Healthcare and clinical diagnostic domains. Mindful praxes aimed to elevate aspects of the diagnostic experience that offered critical and appreciative perspectives toward a more holistic view. This view demonstrated the group as highly proactive in engaging in Medical research, undertaking educational programmes, joining peer support groups and advocating for their rights and those of others. Through mindful praxes, more introspective qualities of action were revealed that may require scaffolding, such as self-compassion and understanding. Mindfulness, it would seem revealed a pathway to enabling these internal qualities of “right action” through its praxis. Therefore in seeking to map a

path of design ‘right action’, we may be drawn into this internalised human domain. The group were profoundly impacted by the phrase “may you live with ease” which deeply resonated with them. To set ‘ease’ as a digital goal we can acknowledge the entanglement of mind, body, and spirit throughout the diagnostic process.

Research Address

6.5 Q1. The Utility Of The Mindful Paradigm

The research study set out to address the primary question of how healthcare research may be designed to incorporate mindfulness for the benefit of ADHD Women, concerning diagnosis. It asked:

Q1. What can the **mindfulness paradigm** contribute to **healthcare research** for and with **ADHD Women?**

The Research Proposition:

A Mindful Approach to Healthcare Design Research Inquiry

The Address: Research inquiry built on pre-existing empathetic user experience research frameworks (Young, 2015) that additionally aimed to integrate and align mindful praxes. The context for mindful praxes was conducted in an online group setting, to establish a community and collaborative design feel in its approach. Traditional mindful and healthcare design tools and praxes were adapted to investigate somatic and relational aspects of the diagnostic experience, which were then mapped using UX design tools.

Guiding “Short-Form" Mindfulness Praxes:

Teaching points were kept to a minimum and backed up by the guidance during praxes. This maintained the workshop's focus on design inquiry, and underscored that it was not a mindfulness training programme. Findings suggest that this approach worked to a good degree, with all participants reporting varying levels of attainment of the qualities of mindfulness such as achieving a “witness” perspective and de-centreing of experience away from more automatic thought responses (Vago, 2014.)

Future considerations: Findings revealed that the majority of participants had prior negative experiences with mindfulness. This detail hadn’t surfaced in our short interviews in preparation for the fieldwork but in the sharing circles. Each participant expressed a desire to engage with mindfulness to improve at it.

Scarlett Crane painfully expressed

“I want to get better at it, so … I put myself through it time and time again.”

Apprehensions and escalating anxieties may have had the potential to impact research data, and the participants’ sense of “getting it wrong.“ These issues were not reflected in the relational workshop, as the workshop necessitated an orientation towards a need to further unpack attitudinal qualities and expectations of praxis. These findings may be incorporated in future design considerations.

Mindfulness As Facilitator Of Communication:

Within the group design context, the mindfulness model of communication sought to encourage deep listening and authentic responses in a restricted time frame in order to maintain group attention and focus. As a mode of facilitation, it worked well for the group sensory “check-in”, beyond this it was challenged by the emotional content shared. This method shows promise in allowing participants to identify key points or “peak emotions” of diagnostic memory in under 10 minutes and showed utility in informing emotional UX mapping tools.

Future Considerations: this may benefit from additional educational points and encouragement to return to it as a mode of praxis. Its utility would be best investigated in a standalone engagement in order to observe impacts outside of additional methods of inquiry used in this study.

Mindfulness As Inquiry

Praxes and mapping demonstrated good utility in realising insights and information on the diagnostic experience that had not been covered in the scoping conversations. Somatic praxes focused the participant group on their present-moment experience of diagnostic perception, this created visceral responses and uncovered peak emotional experiences, enabling rich retelling and increased self-awareness. During the loving-kindness praxis, participants were guided in the cultivation of kindly intentions as a method of transformative inquiry. This created an appreciative view and cognitive insights that spoke to therapeutics and design.

Future Considerations: it may be useful to further investigate the utility of praxis with individuals outside of a group setting, to focus on the transformative qualities of an individual's narrative.

Transforming Research Roles

Mindfulness appeared to offer the participants a more empowered role and transitioned study participants into a space beyond the passivity of their clinical assessment and research inquiry itself. It designated the study group as the site of embodied personal transformational and sense-making beyond a simple intellectual positive reframing of their experience towards an experience of deep emotional knowing.

Snow Harp remarked that inquiry had felt organic and likened it to "an archaeological dig."

Future Considerations: The ambition of this project had been to advance the role of the participant group towards a position of co-inquirers, by providing collaborative tools for interpretation and analysis. Although these components were designed into the study it was not achieved. The lack of participant

ownership and engagement in the digital space and collaborative inquiry appears to demand further investigation.

6.6 Q2. The Utility Of Mindful Inquiry

Fieldwork set out to design mindfulness and mapping praxes that would complement healthcare UX design research. Two methods were selected and adapted for fieldwork engagement. They asked:

Q2. How does **mindful inquiry** impact the perceptions of the **diagnostic experience** of **ADHD Women?**

The Research Proposition:

Mindfulness As A Transformative Tool Of Design Inquiry Research

The Address: In seeking to answer the secondary question, research assumed that Mindfulness may offer a lens through which the diagnostic experience may be reviewed and potentially transformed. This drew on my own experience of Buddhist meditation praxis, and teaching Mindfulness. I was curious to explore ten-minute praxes with a group identifying with disorders of attention, focus and mental health. Given that meditation praxes aim to cultivate personal insights and the development of well-being over an extended time frame, the challenge for the design space would be to deliver and evidence results in a short time frame. This proposition felt extremely ambitious.

Validation of Methods

Emotional Awareness: The somatic praxis was designed to anchor attention in the present moment, then drop in design probes - the word diagnosis and sense of care. In testing these praxes personally, I had identified my own diagnostic experience as being cognitively overwhelming and the invitation of care had allowed a sense of acceptance around this difficulty. Fieldwork findings saw the

group experience an unseen field of emotional awareness and the inability or reluctance to receive a sense of care. In mapping this onto UX tools, we are afforded more details on emotions and little on a caring response.

The relational praxis was designed to create a somatic anchor in the heart centre to create a sense of presence that avoids participants' attentional focus drifting off into the imagination. Returning to the heart centre at the end of each round of phrases, allowed participants to observe somatic changes in energy and tension. This appeared to work well, as observations were made such as "easing and releasing" of shame that was felt somatically.

Future Considerations: Both praxes appeared to have a good level of impact. The theme of self-care warrants further investigation as does the sensory issues at the start of praxis, which could see the design of praxis begin with aiming to cultivate self-care before embarking on the rest of the praxis. Overall the results were astounding.

Transforming Diagnostic Perceptions: The story of diagnosis, was somatically felt as an unseen emotional journey which had transformed the way that participants viewed themselves. Relabelling themselves as 'deficient' or "disabled", was experienced as negative for some, whilst for others this new label afforded them limitless self-compassion and grace for the first time. The ability to see this new emotional perspective was in and of itself transformative, allowing participants to see and label emotions and understand that they had been holding onto emotional upset or pushing down huge emotions without realising it.

During the relational workshop, the story of diagnosis was this time seen as involving a network of people, who had offered support and help. Feelings of gratitude welled up allowing participants to feel connection and healing.

Future Considerations: The healing and therapeutic potential of praxis, has been identified here but not fully explored or understood in this study. Participants themselves were excited and keen to use these praxes again, to reveal further insights, this validates the power of praxis. More research can be done to evidence perceptions before and after praxis so that a clearer illustration of utility may emerge regarding the more therapeutic qualities of a mindful mindset.

Future Considerations:

Mindfulness within healthcare UX design research is a novel method of inquiry and personally felt like stepping into the unknown. Uncertain of what the project findings would be and how UX could utilise them. The project acts as a starting point for more exploration into how these methods may be further comprehensively integrated into a larger scheme of design inquiry.

User Research: As a method, the study has shed some light on the needs of the participant group concerning engagement in an online group setting. It unexpectedly aligns attentional variability with emotions, and reframes symptoms as coping strategies in dealing with sensory under/overstimulation. This demands further investigation to understand how these needs may be skillfully met.

Although research has made some headway in exposing the emotional, cognitive and therapeutic needs of the study group. Further design research is required to advance findings into the generative innovation space, which would also incorporate the needs of clinicians and healthcare providers to further advance a holistic view of design. Our findings suggest that mindfulness can assist with issues such as RSD, therapeutic tone and reframing of “shameful data”.

Practitioner Reflections:

Including mindfulness in the digital design space was an equally transformative experience for me as a practitioner. I had assumed that the design space and participants would be the beneficiary of praxes, rather than myself. I have taught foundational mindfulness praxes hundreds of times, and rarely get any feedback from participants other than “that was nice”, or “my knees hurt.” I had almost given up on this project as both myself and my Mindfulness Supervisor Lorna had countless conversations about the benefits of training programmes and understanding the core teaching principles before engagement. We had both entertained the notion that the project was overly ambitious and there would be little to no findings, which would amount to my sole finding. My expectations were therefore set extremely low. As participant after participant sharings began with “I really struggle with Mindfulness,” my heart would sink, only then to be buoyed by what came next, typically “saying that though all these emotions came up that I never knew I had.” The most astounding transformations were observed in the relational inquiry, particularly White Grass, whom I had spoken to 18 months earlier about her diagnosis, her story in the somatic workshop hadn’t changed much in all that time. Post ‘loving-kindness’ praxis she spoke of a friend who hadn’t ever previously been mentioned, and her gratitude to her Dad and Psychiatrist I almost wept. Her

positive emotions were palpable in the group, and she spoke immediately about doing the practice again. For me, my understanding and faith in mindfulness have been galvanised as a tool of personal transformation, I feel privileged and overjoyed at being able to realise these insights with this particular group.

Limitations

6.7 Challenges And Limitations

Despite the generation of new knowledge and contributions made, no research project is without its challenges and limitations. This study's key challenges were:

Positioning: investigating and seeking to improve the diagnostic experience for ADHD women. The self-selecting group were successfully recruited from a Facebook support group. This approach may have unintentionally surfaced biases in the participant sample group, who were women aged between 30-60 years. This demographic indicated a less hyperactive subset and an over-representation of negative diagnostic accounts were expressed.

Evidencing impact and steering results: Designing mindful research praxes to demonstrate their impact on diagnostic memory perception, while avoiding undue influence on participant reports appeared challenging. However, the resulting vignettes created, successfully illustrate individualised experiences with little homogenisation. Nonetheless, the dialogical nature of scoping conversations and mindful methods conducted in workshops can create limitations in that they constrain how participants independently express or report on their diagnostic experience.

Sample size and replicability: the small sample size inherently limits capturing the full complexity of diagnostic concerns. This can impact the transferability of insights into broader contexts, reducing variability and the generalisability necessary for a comprehensive understanding of the research domain. My dual role as researcher and mindfulness facilitator may also limit replicability across different contexts and introduce potential concerns of objectivity and interpretation of data and reports.

The nature of mindfulness practice is to be present to "what is" of our present moment experience. As such changes in both external - technology, time of day, participant group - and internal factors - thirst, emotions, pain or discomfort - will serve to influence research outcomes. As such absolute

replicability is impossible. The detailed design process provided by this study serves to act as a guide. The theoretical perspective (section 3.2) discusses this issue further. Replicability of results may be a concern, however, capturing that some form of transformation has occurred is possible.

Researcher Training: As previously stated, I am a qualified and insured Mindfulness Teacher, who adheres to BAMBA (British Association of Mindfulness-Based Approaches) practice guidelines. My experience of meditation practices extends to approximately 25 years and as such, along with my design experience, have informed the design and tone of research inquiry methods.

These bespoke methods, lasting approx. ten minutes require no mindfulness teacher training to successfully follow. That said, limitations may be created by individual instructors' experience of embodying qualities of mindfulness and compassion. Participant safety is paramount, as such, healthcare designers who are not trained in Mental Health first aid, may benefit from specialist support that reflects the range of healthcare experiences - such as mental health, trauma experiences, and developmental challenges - within their study groups.

In recognising the limitations, the study sought to approach concerns with transparency and rigour. Research concepts and frameworks were reviewed by supervisors experienced in both healthcare design research and mindfulness. Participants were encouraged to engage with curiosity akin to a scientific study, where a null result is considered an equally valid contribution to research inquiry. Reflexive writing was used to promote objectivity by seeking to explore biases and their potential impacts.

Conclusions

6.8 Summing Up

The study explored mindfulness in an online healthcare design research context with ADHD Women. To advance our understanding of their diagnostic experiences, mindfulness as a method of inquiry, and research engagement with ADHD Women. In addressing this, the study drew from experimental phenomenology and human-centred design methods, to create a novel proposition for fieldwork. This approach to design, blending mindful praxes and methods of mapping, allowed for a unique representation of human experience to be realised. As such, it is considered a primary research outcome, and one that has utility in wider healthcare design contexts, outside of the UX design domain.

Mindfulness: A Novel Approach to Group Inquiry

Although the utility of mindfulness was not to encourage a sense of calm but instead curiosity, facilitating group inquiry with a mindful approach allowed:

- therapeutic qualities and a sense of spiritual healing to be realised.
- the cultivation of emotional positivity to create opportunities for re-processing and re-framing memory perceptions and emotions.
- a sense of authenticity, self-acceptance and degrees of ‘unmasking’ to be experienced within the group context.
- aspects of inclusion to be created through identifying ADHD symptoms as coping strategies

Mindfulness: A Novel Approach To Healthcare Design Research Inquiry

Through advancing philosophical theories of body/mind and interbeing into fieldwork methodologies, the somatic and relational lenses for inquiry revealed:

- an increased awareness of the emotional terrain and journey taken
- peak emotional experiences to be accurately pinpointed
- interactions between the emotions, the body and cognitive labelling
- a connected and interactive perception of an individual's diagnosis
- positive and caring facets of diagnosis to emerge

The mindful praxes and mapping exercises allowed a form of representation of human experience to emerge that was highly detailed, containing rich descriptions of both the present moment and diagnostic experience to be conveyed. Using scoping conversations as a guide, it is fair to assume that this level of detail cannot typically be achieved in a short time frame with participants who can struggle with memory and focus. Although communication challenges did occur in the group context due to heightened emotions, this methodological framework ensured that pertinent information that informed design considerations was captured. This led to the second research outcome which sought to understand the potential of how fieldwork data or ‘mindful transformational insights’ may begin to inform or be coded into UX design. Foundational artefacts

such as emotional maps were crafted from participants' reports to reveal an additional layer of insights.

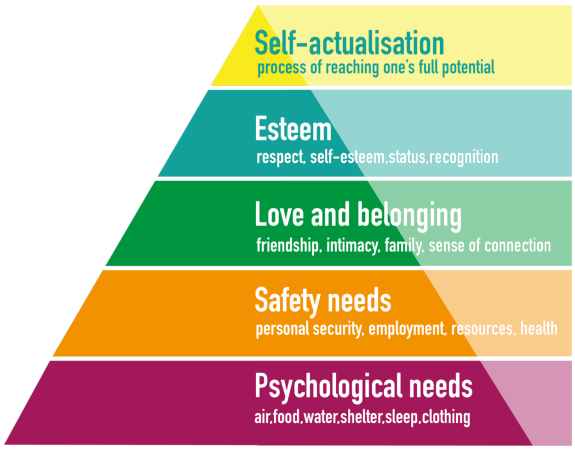
Mindfulness: A Novel Approach Towards UX Design Artefacts

Research outputs derived from the synthesis of reports into design artefacts illustrated that the findings from the study's mindful approach to inquiry can:

- Inform the mapping of heightened emotional events to reveal where users may need bespoke emotional guidance and support
- define the composition of guiding UX design experiences towards a "peak ending" such as a greater capacity for self-management and emotional and psychological self-acceptance
- acknowledge the utility of 'black & white' thinking styles to support action-taking and decision-making
- identify where mindful thinking styles can support healing and therapeutic modalities

These outcomes serve to craft a bridge towards how UX design may seek to advance the well-being of ADHD Women during diagnosis.

Future Considerations: Towards Right Action



Although the research did not speak directly to how to attend to the titular dilemma 'A Deficit Her Data', it has steered us towards a clearer vision of how we may do this. Our understanding of the diagnostic 'lived experience' of ADHD Women is now more nuanced, reaching far beyond mere corrections of historical biases and concepts of lack.

Fig 32- Maslow's Hierarchy Of Needs Source: Author's Own

It suggests that we must understand how to navigate a divergent "hierarchy of human needs", that may be dichotomous for ADHD Women. Although high levels of personal self-achievement

and intellect may be abundant, basic competencies such as a capacity for self-care and administration may not. The experiences of our participant group substantiate this; there was the Clinical Psychologist who lost her diagnostic forms for four years in the chaos of a poorly organised home; and the events planner who meticulously prepared for her diagnosis only to be "blind-sighted" and emotionally upset by the need to corroborate reports with her Dad.

The diagnostic process is neither straightforward nor emotionally easy. A positive result can be validating, reassuring individuals that they are not inherently flawed. However laying out "all the worst things about yourself," which can include substance misuse and maladaptive coping strategies can evoke feelings of shame that may be more acutely felt in the context of societal gender expectations. An internalised self-view of being a "shit human being" therefor becomes ascribed to a poor representative of your gender. The study demonstrated that by adopting an appreciative lens, the strengths of the women are plain to see. All were highly proactive in progressing their diagnosis, be that through undertaking medical research, joining online support groups, securing funds for private diagnosis, seeking recommendations, requesting a mental health advocate and waiting until the time felt right for diagnosis. Further than this, the study demonstrated that by adopting a mindful lens more ineffable qualities of experience were revealed, in which emotions were somatically experienced and difficult memory perceptions were positively reintegrated to offer a sense of healing. It would appear that these same qualities can be the aspirational right action that healthcare UX design can seek to take. Fostering true self-actualisation as a human right and a component of right action.

As champions and facilitators of right action, our role and ethical obligations as healthcare designers have been brought into sharp relief through the deployment of mindfulness in fieldwork. We are now privy to the complex entanglements of body and mind, and realise that we as designers have direct influence on these interconnected relationships. This study serves as a real-world example of how we can influence health and well-being in the research domain so that we can understand how healthcare UX design may seek to embody similar outcomes to that of our research findings.

"We can consider how humans make and remake digital data, and how these data make and remake humans"

Deborah Lupton, (Lupton, 2020)

When invited to investigate the body, we were drawn into the heart of emotions, when asked to cultivate positive emotions we were drawn into cognitive labelling and memory perception, this appeared to drop us back into the sensations of transformative emotional and spiritual healing, and a sense of easing in the body. It is this profound insight that the mindfully informed design approach has surfaced and serves to underscore the crucial role of mindful and therapeutic data in this complex gendered domain. To take 'right action' is to turn our attentional focus towards ADHD Women, to recognise that cognitively labelling, the 'lack of female data' resonates deeply with women's varying degrees of historical, medical and societal invisibility. It proposes we similarly cultivate positive regard to surface achievements, progress made and qualities of care that have been experienced by women so that we can heal our collective pain body and mind towards restoring a sense of healing and ease in the diagnostic context.

Participants themselves embodied a similar will to collective action. They came forward and although at times having to revisit their pain and vulnerability, did so to improve the diagnostic experience for others. The methods used during the research process have left participants changed, through their experiences and the personal insights they achieved. Somatic inquiry can assist the capacity to investigate and find words to describe experience.

"Most of the neurodivergent people that I have spoken to (say) I don't know what I am feeling! I can't find the words to describe what I am feeling. If you go into the body, the answers come out a bit easier." *Sea Bloom*

"It was probably better than any therapy session because you don't have to stop and think about answering questions, you are answering your own questions ... It gives you a lot more clarity. You are doing the analysis yourself" *Snow Harp*

The loving-kindness praxis similarly created lasting therapeutic benefits and fresh perspectives.

"Reframing and healing has been a big lesson for me in 2023… the ability to revisit black and white thinking, which I have very much, and say where is the love? And hold space for yourself. It's really powerful" *Sea Bloom*

"It's a tricky one … mindfulness has two sides … you need a level of support especially when you have neurological issues and trauma … we have a lot to work through in our minds and bodies … you feel the pain but you are able to process it with kindness and self-love … my experience has been a hugely positive one" *Snow Harp*

During our reflexive sessions, the phrase that resonated the most was “may you live with ease”. One participant emotionally responded “Nothing is easy with ADHD”, it is this sentiment that must drive us towards taking meaningful right action. As a collective aim, our goal is not to make female diagnosis easier but may all those who engage in the diagnostic process experience a sense of ease. This can have the potential to empower those embarking on the more challenging task of reframing and rebuilding their lives with their newfound identity as an ADHD Woman, and to embrace all that it entails!

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