WELLBEING IS NO OBJECT

Exploring the role of object-based practices to support conversations for mental health and wellbeing

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THESIS COMPONENT

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DECLARATION

I, Catriona (Cat) Doyle declare that this thesis component of my submission of my By Research Project for the degree of Master of Research meets the regulations stated in the Student Handbook 2023.

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

Catriona Doyle
School of Innovation and Technology
The Glasgow School of Art
15th April 2024

DEDICATION

For Dad, who will always “brighten my Northern Sky”

(Nick Drake, 1971)

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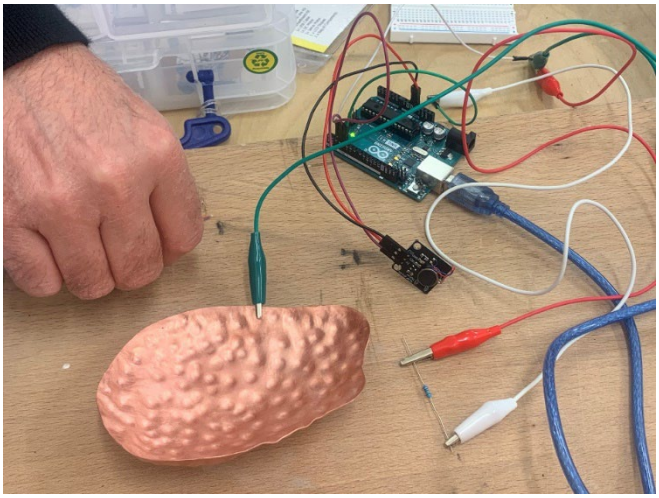
MODE OF SUBMISSION

This is a by-project Master of Research and this thesis is complemented by a portfolio of practice. The portfolio should be thought of as an accompanying sketchbook or progress journal, documenting the journey of reflexive practice step by step. A series of handling boxes also support the portfolio component.

Referrals to the portfolio will be made throughout the thesis through the use of **bold red text like this**. Please consult the requested pages and accompanying handling boxes when prompted to by the thesis text.




LIST OF KEY TERMS

ENTICATYPES

Unrefined objects produced as crafted artefacts in their own right for the purposes of eliciting conversation.

HAPTIC TECHNOLOGY

The use of tactile sensation in digital interfaces.

HCI

Acronym for "Human Computer Interaction".

GLABOROUS SKIN

"Non-hairy" skin found on some bodily sites, including the palms.

NON-GLABOROUS SKIN

"Hairy" skin found in more abundance on the body.

OBJECT-BASED PRACTICES

Sensory and communicative engagement with physical objects as a way to elicit a variety of benefits for mental health and wellbeing.

VIBROTACTILES

A type of haptic technology using sound to produce haptic feedback felt as a touch sensation. The word "vibrotactiles" does not strictly exist, however it has been used in some places in this study in place of the phrase "vibrotactile technology".

LIST OF FIGURES

ABSTRACT

The growing challenges presented by the current mental health crisis provide opportunities for alternative interventions to support social and community healthcare practices. One such example is engagement with physical objects, which has been found to be beneficial in a variety of these contexts. These "object-based practices" elicit sensory experience and provide a stimulus for communication, both of which can effectively support mental health and wellbeing.

Despite the multisensory potential of materiality and the impact of this on affective response, few examples exist of object-based practices which incorporate deliberately crafted objects. Concurrently, the concept of "hybrid craft" is developing, whilst a variety of digitally enhanced vibrotactile objects continue to show promising implications for mental health and wellbeing across a variety of HCI contexts.

This project employed a Participatory Action Research (PAR) methodology underpinned by Creative Reflective Practice to create newly crafted objects which were used as "enticatypes" to open up conversation around the potential for handcrafted and digitally enhanced objects to contribute to further development of object-based practices. A series of non-digital artefacts were created in the first phase, which were used in activity-based interviews with professional participants working in a variety of mental health and wellbeing contexts within Scotland. Digitally enhanced cultural probes were produced in the second phase for the same participants to reflect on individually. The research culminated in a focus group where a series of recommendations were co-produced between participants and the researcher.

Findings showed that handcrafted objects could be more successful in these contexts than those traditionally used in object-based practices. Value was also found in the creation of diverse object-based "communities of practice", and the possibilities for handcrafted objects to facilitate difficult conversations in other areas of social research.

Keywords: craft, conversation, community, enticatypes, haptic, mental health, object-based, vibrotactile, wellbeing

Chapter One

1. INTRODUCTION

Mental ill health currently affects one third of the Scottish population per year (Scottish Government Mental Health Policy) with the most recent estimate putting the annual economic burden of this at approximately 8.8 billion (McDaid & Park, 2022). At a national level, the future of mental health and wellbeing research calls for broader, multidisciplinary approaches which approach the complexity of the crisis in novel ways (Wykes et al, 2021).

This shift in approach is reflected in the increasing diversification of the mental health services workforce to include non-clinical roles which empower, encourage and support patients (Casey & Webb, 2021). A significant part of what these individuals do involves supporting patient access to community activities, with the subsequent increased social connection being shown to promote recovery, self-efficacy and empowerment (Casey & Webb, 2021, Verbeek et al, 2018, Wilberforce et al, 2017).

This move towards "social prescribing" (CentreForum, 2014) has led to a recent surge in socially engaged object-based practices for mental health and wellbeing in museums (Chatterjee & Kador, 2020, Willcocks, 2020). However, found and everyday objects have also been shown to support a number of other individual and group mental health and wellbeing contexts, including talk therapy (Solway, 2016, Camic, 2011, Camic et al, 2010, Romano, 2012), art therapy (Jay et al, 2022, Brooker, 2010) and storytelling (Mozeley et al, 2022, Gupta & Mitali Jha, 2022, Cummings, 2021, Phillips & Bunda, 2018). Engaging with such objects in this way has been found to facilitate a wealth of social and psychological benefits, including providing a focal point for strengthened communication, and therefore social connection, in groups (Camic, 2011).

This raises a question around whether the deliberate creation of handcrafted objects can feed into these practices and to what extent this has been explored. Existing examples of such objects, crafted in a wide variety of materials show promise (Hahn, 2021, Hahn, 2019, Morby 2016 A). Meanwhile an increasing shift towards objects enhanced with digital haptic technology to support mental health and wellbeing has been evident in recent years (McDaniel and Panchanathan, 2020). Such objects can regulate breathing and ease anxiety (Alonzo et al, 2012), facilitate connection (Huisman, 2017), and even transfer feelings of awe and wonder from one person to another (Neidlinger et al, 2017). Despite this, haptic technology remains underutilised in mental health compared to physical health contexts (McDaniel and Panchanathan, 2020).

This project will bring these areas together to explore how they can holistically influence the development of object-based practices which support the current landscape of mental health and wellbeing interventions. Particular focus will be given to the potential implications this has from a community support perspective.

A practice-based approach (Candy, 2020) will be used to create newly crafted objects. This will be combined with a Participatory Action Research methodology to open up conversations and draw out insights from participants during fieldwork. This will create a reciprocal relationship between my craft practice and the multiple layers of the research context, as shown in Fig. 1.

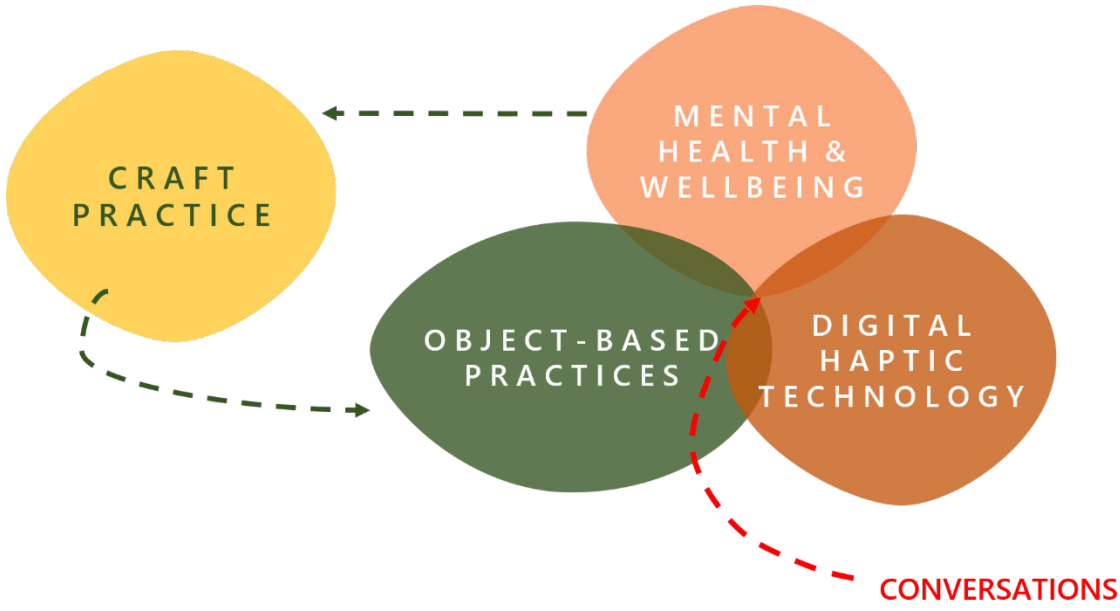


Fig.1: Diagram showing reciprocal relationship between my 3D making practice and the research context.

1.1 RESEARCH QUESTIONS, AIM AND OBJECTIVES

This research aims to answer the following research questions:

1. What role can craft play in the development of objects which open up conversations around object-based practices in community mental health and wellbeing settings?
2. In what ways can the scope of this be broadened by digital haptic technology?

3. How can these newly crafted objects contribute towards further conversation around object-based practices?

In doing so, the research aims to build on current knowledge and explore new possibilities for handcrafted, digitally enhanced objects to be used in the mental health and wellbeing space.

The research objectives are:

- To use 3D making practice to design and make a series of digitally enhanced and non-digitally enhanced objects.
- To use these objects to engage a range of non-clinical mental health and wellbeing professionals in critical dialogue around the role and potential of objects within mental health and wellbeing support.
- To develop recommendations for how craft can feed into object-based practices in future research.

Please now refer to Pages 2-5 of the Portfolio at this point to set the practice element of this project in context.

1.2 SCOPE OF CONTEXT

This chapter has outlined the context this research wishes to explore, including the questions, aims and objectives the project intends to meet. The next chapter will demonstrate a broader scope of the research context by framing it within the existing literature.

Chapter Two

2. LITERATURE REVIEW

The range of mental health and wellbeing benefits that object-based practices can facilitate indicates further opportunities for intervention design (Solway, 2016). This chapter will provide examples of existing object-based practices in the space, and where craft, including digital craft, can play a role. It will conclude by identifying the research gap that this project aims to address by drawing on these practices holistically.

2.1 CURRENT OBJECT-BASED PRACTICES

Professional roles in mental health and wellbeing have diversified in recent years with a variety of support workers coming to the forefront (Casey & Webb, 2021). The impact of such individuals should not be underestimated (Oates et al, 2021), particularly from a community perspective. They can play a significant role in mental illness recovery in these social contexts, fostering resilience, empowerment, self-belief and social inclusion (Verbeek et al, 2018, Wilberforce et al, 2017).

It should be acknowledged that these findings are grounded in clinical mental healthcare contexts. However, similar benefits have also been found in non-clinical contexts. The following sections will outline findings from qualitative research studies which have explored the impact of object-based practices in four different mental health and wellbeing settings.

2.1.1 MUSEUM "OBJECT-BASED WELLBEING"

Object Based Learning (OBL) is a learning technique in museums practice (Chatterjee & Kador, 2020, Cook et al, 2010, Chatterjee 2008). It involves presenting participants with a series of historical objects for selection and analysis, often using a framework as a guide. Popular frameworks include Prown's "Material Culture Theory and Method" (Prown, 1982) and Mida & Kim's "Dress Detective" (Mida & Kim, 2015). OBL benefits mental health in a similar way to creative activity (Willcocks, 2020, Ander, 2013), facilitating a wealth of outcomes, including enhanced creativity, self-esteem, motivation and cognitive ability (Doyle, 2019, Parton et al, 2017). More recently, such practices are being developed into "Object Based Wellbeing" interventions in a socially prescribed capacity (Chatterjee & Kador, 2020). Using objects in this way has been found to minimise anxiety and foster identity (Chatterjee and Noble, 2013), improve autonomy (Morse et al, 2016), Ander et al, 2013)

improve problem-solving (Morse et al, 2016), minimise mental health stigma (Willcocks, 2020) and ease loneliness (Koebner et al, 2018) (Figs. 2A & 2B).

Fig. 2A & 2B: Object-Based Learning practices at Central St Martins Museum and Study Collection. Stills from video "Museum & Study Collection: Judy Willcocks Copenhagen Presentation", (Willcocks, 2018).

2.1.2 OBJECTS IN TALK THERAPY

Material objects have been shown to have several positive benefits in clinical talk therapy (Solway, 2016, Camic, 2011, Brooker, 2010, Camic et al, 2010). They can represent elements of a person's experience, such as personal values, strengths and challenges (Romano, 2012), offering them an embodied way to make sense of these, and in turn themselves, which can play a fundamental role in their therapeutic development and help them to manage difficult emotions (Camic et al, 2010). Objects can also be used to provide a tangible psychological link for patients between themselves, their therapist and the therapeutic work and may be used to facilitate transition both between therapy sessions and when therapy ends (Solway, 2016, Camic, 2011). Using objects in this way has been found to encourage more effective engagement in the therapeutic process (Camic, 2011).

2.1.3 OBJECT-BASED STORYTELLING

As an emergent research practice in itself, recommendations for using storytelling effectively include providing space for relational meaning making and nourishing "thought, body and soul" (Phillips & Bunda, 2018). Storytelling has been found to have positive impact on the shaping of identity and understanding of experiences (Gupta & Mitali Jha, 2022, Cummings,

2021). Combined with material objects, storytelling has been shown to help people with mental illness to redefine their illness narrative and re-construct their self-image, crucial aspects of recovery (Romano, 2012). The literature demonstrates examples of where a variety of self-chosen objects have elicited this deeper self-awareness (Mozeley et al, 2022, Romano, 2012).

2.1.4 OBJECT-BASED ART THERAPY

In art therapy, found objects foraged for by clients as part of their therapeutic journey have been used in previous studies to connect the client's internal and external experience, building a psychological "bridge" between these and enabling them to process their feelings (Brooker, 2010, Figs. 3). A significant part of this is the symbolic representation that the client places on the object which offers them a new way to connect with their thoughts, feelings and memories (Brooker, 2010). Indeed, symbolism in any form of creative expression can help mental health patients to formulate a dialogue around their illness (Jay et al, 2022).

Fig. 3A & 3B: Object-based Practices in art therapy, facilitated by Julie Brooker (Brooker, 2010)

2.2 HANDMADE OBJECT-BASED PRACTICES

The section above demonstrated the range of roles that object-based practices are

successfully playing in a variety of mental health and wellbeing contexts. However, most practices outlined took place with every day, found or historical objects.

Crafted objects can provide a point of intersubjective connection (Bell & Vachhani, 2020) facilitating a deep connection between the object, who produced it and who engages with it (Luckman, 2015) This uncovers further possibilities to expand object-based practices by using handmade objects in conjunction with elements from the practices above, exploring how these could contribute to qualitative research around object-based practices for mental health and wellbeing. This section will therefore explore the potential role of craft, including digital craft, in object making for these practices.

2.2.1 THE ROLE OF THE DESIGNER/MAKER

Makers are usually driven by what materials can do rather than what they are (Bell & Vachhani, 2020, Korn, 2013, Ingold 2013), providing an opportunity for emerging designers to create multisensory, interactive object-based artwork, which is exactly what has taken place internationally in recent years.

Spanish designer Ariadna Sala Nadal collaborated with psychologists and survivors of sexual abuse to create a series of objects of different colours, weights and textures. Named “Balisa”, these were designed to be used during the therapeutic process to represent feelings, understand abstract concepts and improve communication between patient and psychologist (Hahn, 2021, Fig. 4) Similarly, Israeli designer Yaara Nusboim worked with child psychologists to design a set of wooden dolls to be used in play therapy (Hahn, 2019, Fig. 5), while Dutch designer Nicolette Bodewes created two object “toolkits” for use in psychotherapy to provide a sensory way for patients to explore their thoughts (Morby, 2016 A, Fig. 6).

These beautifully refined examples incorporate a range of sensory materials and demonstrate the value of the designer in mental health interventions. Although the designers worked with professionals and participants in the production of these objects, it is unclear whether they remained concepts or were eventually tested in the field. This raises questions around the purpose of such novel design ideas if they are not able to be integrated into the contexts that need them.

Figs. 4-6: Products designed by Ariadna Sala Nadal (Hahn, 2021), Nicolette Bodewes (Hahn, 2019) and Yaara Nusboim (Morby, 2016 A) which explore different concepts for handmade object practices in mental health and wellbeing

2.2.2 THE ROLE OF CRAFT

David Pye defines craft as a risk-taking process where the outcome should not be predetermined (Pye, 2010) a definition that contracts with the engrained but limited notion of design to "solve a problem" (Barrett & Bolt, 2010). Craft relies on knowledge held in the body

(Sodhi, 2008) producing an embodied practical and technical skill set within the maker (Spatz, 2014). It could therefore be said that, the more material exploration a maker does, the

wider their knowledge of material approaches to their craft. Furthermore, the affective quality of materiality in craft (Bell & Vachhani, 2020) is particularly conducive to mental health and wellbeing, with the potential to facilitate a broad range of affective responses in the creation of multisensory artefacts.

2.2.3 DIGITAL CRAFT

Digital craft is increasingly being credited with the same status as hand craft, with the recognition that it is subject to the same risks and failures and still reflects the skill level, perspectives and values of its creators (Zoran & Buechley, 2013, McCullough, 1996).

In design research, the term "Hybrid Craft" often describes artefacts created by a combination of physical and digital craft processes (Zoran & Buechley, 2013). Constraints in incorporating these digital and analogue processes (Golsteijn et al, 2014) have led to the expansion of the definition to include physically crafted objects enhanced by digital technology to produce "differing dimensions of experience" (Devendorf & Rosner, 2017), as well as recommendations for how creative practitioners should approach this (Golsteijn et al, 2014). One way is through the lens of "co-production" (Devendorf & Rosner, 2017, Haraway, 2016), allowing for multiple nuances to develop from reflection on the analogue and digital elements in tandem (Figs 7).

Fig. 7A & 7B: Jayne Wallace, "Refind" (A) and "Remember" (B) hybrid craft artefacts from her online portfolio of practice.

Combining these findings with the variety of HCI studies in the next section opens up further possibilities for hybrid-craft to play a role in producing artefacts for object-based practices in

mental health and wellbeing.

2.3 DIGITAL OBJECTS FOR MENTAL HEALTH AND WELLBEING

A wealth of potential exists for use of haptic technology to support mental health and wellbeing (McDaniel & Panchanathan, 2020). This section will highlight existing studies where haptic technology has been incorporated into objects to support mental health and wellbeing in HCI research.

2.3.1 EMOTIONAL REGULATION TOOLS

Emotional regulation is an essential skill in promoting good mental health and wellbeing and biofeedback detecting haptics have been found to support it in three distinctive ways (Miri et al, 2017). These include; cuing emotional re-appraisal, aiding change in physiological response and gamification to distract from emotional distress,

Many HCI studies exploring haptic technology for mental health and wellbeing focus on the first two categories, often through wearable devices with built in bio-sensors to detect and make the user aware of physiological responses (Williams et al, 2015, Costa et al, 2016) Examples of such objects can be seen below (Neidlinger et al, 2017, Frey et al, 2018, Fig. 8 and 9).

Fig. 8: "AweElectric" - uses textiles embedded with biosensors that respond to the physiological response of awe by inflating on the skin. Two compatible wearable devices allow the feelings of awe to be shared between two people (Neidlinger et al, 2017), Fig. 9: "Breeze" – uses a wearable pendent with embedded biosensors to help the wearer to notice and regulate breathing (Frey et al, 2018).

Other studies use object-based methods to do this. A series of three such objects co-

designed with patients with Borderline Personality Disorder were found to help them to recognise and self-regulate distress, cope with loneliness and boredom and provide self-reassurance and escapism (Thieme, 2015). One of these objects used biofeedback to pick up corporeal responses to stress when it was handled, indicating this to the user through different coloured LEDs (Fig. 10).

Fig. 10: "Mindfulness Spheres" one of a series of digitally enhanced objects co-designed by Ana Thieme and her participants to support their mental health (Thieme, 2015).

2.3.2 VIBROTACTILE TECHNOLOGY

Vibrotactile technology is another emergent area of haptic technology for emotional regulation (Hasegawa et al, 2019). This can also be enhanced by other haptic stimuli, such as texture, shape and temperature (MacDonald, 2023), making it ideal for incorporation into artefacts. Despite this, emotional response to vibrotactile stimuli remains relatively under-researched (McDonald, 2023).

Objects produced by Alonso etc al recognise stress by the way they are manipulated by the user, indicating the change from stressed to relaxed state through both LED and vibrotactile feedback (Alonso et al, 2012, Figs. 11). These artefacts were produced in an iterative process with a "research through design" methodology (Frayling, 1993), which encapsulated experiential prototyping. A more marketable product, the aesthetically pleasing "Calmingstone", was launched in 2016, which uses light and vibrotactile pulsing to mimic user heartrate, becoming softer and slower as they relax (Morby, 2016B, Figs. 12).

Figs. 11 A-C: Vibrotactile objects "Wigo" (a), "Marmoro" (b) and "Squeeze It" (c) to support regulation of stress response (Alonso et al, 2012), Figs. 12A & 12B: "Calmingstone" marketable digitally enhanced object used to regulate anxiety (Morby, 2016B).

More recent studies explore how vibrotactiles can be more subtly manipulated to facilitate emotional resonance (MacDonald, 2023, Shim & Tan, 2020). One of these measured participants physiological response during engagement with vibrotactile objects (MacDonald, 2023). Most participants reported that the objects made them calmer, even when this was not reflected in their physiological responses. This finds merit in the experiential as well as the physiological element of how vibrotactile objects can support mental health.

2.4 A SPACE FOR CRAFT

As Section 2.2 shows, object-based practices are being used effectively to open up conversation in a variety of contexts to support mental health and wellbeing. This has been shown to be effective in both individual and group contexts across various studies in the four key areas of museums, talk therapy, storytelling and art therapy. However, most studies appear to exist within these defined areas of expertise, leading to broadly similar results within individual contexts. There is also little evidence of the inclusion of handcrafted objects being used in these practices.

Meanwhile, Section 2.3 demonstrates examples from some craft practitioners who have produced objects intended for such activities. Despite this, there is limited evidence of such objects being tested and developed in the field. Concurrently, increasing HCI studies demonstrated by Section 2.4 explore the production of a range of vibrotactile digital objects to support mental health and wellbeing. Like the studies outlined in Section 2.1 however, these have produced highly commendable yet very similar outcomes.

Woven through this chapter is the explorative potential for object-based, craft and digital practices to encourage conversation, explore nuance and induce affective response, all of which have promising implications for community mental health and wellbeing contexts. Combining this with the identified gaps in the literature outlined above provides a starting point for this project to explore more holistic approaches to object-based practices for these purposes, incorporating elements from all three areas.

The next chapter will outline the Participatory Action Research methodology underpinning this project, which is strongly supported by Creative Reflective Practice.

Chapter Three

3. METHODOLOGY

This chapter will outline the methodological positioning of this project in the context of Participatory Action Research and the methods used to collect data, all of which were underpinned by Creative Reflective Practice (Candy, 2020). It will also demonstrate the ethical considerations, recruitment process and mode of analysis used.

I will begin by situating the emergence of New Materialism as the most appropriate scaffolding to encapsulate the ontological, epistemological and theoretical perspectives of this project.

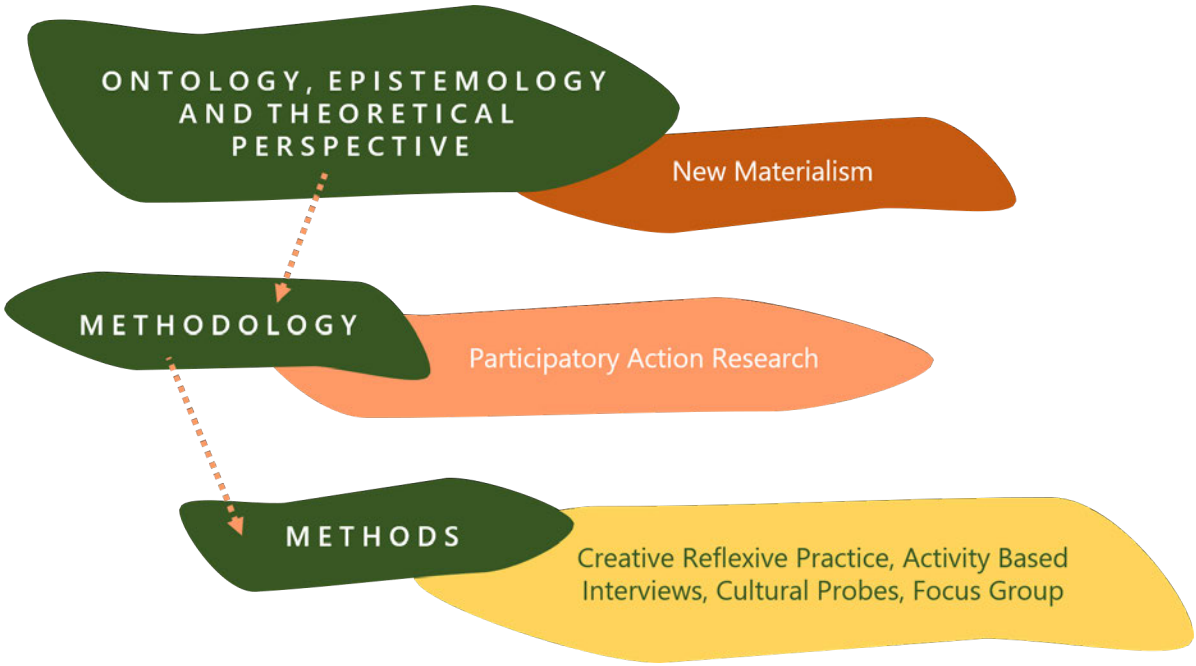


Fig. 13: Diagram showing my methodological approach, adapted from Crotty, 1998.

3.1 ONTOLOGICAL, EPISTEMOLOGICAL AND THEORETICAL PERSPECTIVE: NEW MATERIALISM

In qualitative research, New Materialism focuses on the affective relationship and knowledge exchange between human and non-human elements (Higgins, 2020). It believes they have equal importance, co-existing as a "continuum of materiality" (Bell & Vachhani, 2020, Fox and Alldred, 2017) allowing the dismissal of engrained social structures.

New Materialism is thought to demonstrate a unique relationality between the object of inquiry and the data (Bell & Vachhani, 2020, Fox & Alldred, 2017), leading it to be considered an enmeshment of ontology and epistemology (Higgins, 2020, Barad, 2007). Many New Materialist scholars advocate its use in addressing larger social issues (Fox and Alldred, 2017, Stewart, 2007) such as the mental health crisis.

New Materialism also provides this project's Theoretical Perspective. Focus on affective qualities provides potential applications for practice-based research which attempts to gain new knowledge through the researcher's creative practice and participant engagement with outcomes from that practice (Candy, 2006). "Embodied Knowing" describes how such artefacts contain knowledge from their creator's body (Sodhi, 2008). Through the lens of New Materialism, this knowledge is transferred to participants who corporally engage with the artefact (Bell & Vachhani, 2020). These affective engagements encourage insights to emerge more organically than would be possible under other theoretical perspectives (Anderson & Ash, 2015). This is appropriate for the open and explorative nature of the research questions in this inquiry.

3.2 METHODOLOGY

A final recommendation in New Materialism is that the action of engagement with matter should be iterative, a "process in motion" (Gamble et al, 2019). This correlates with a Participatory Action Research (PAR) methodology with elements of creative reflective practice to shape the research methods.

3.2.1 PARTICIPATORY ACTION RESEARCH (PAR)

Action Research stems from a problem or ambiguity faced by the researcher (Swann, 2002) and an attempt to make this situation better (Wadsworth, 1998) though an iterative process of cyclical loops of reflecting, planning, acting and observing (Burns, 2016, Zuber-Skerritt 1993). Its significance in design research is particularly notable since the design process itself is often iterative towards change (Swann, 2002).

PAR takes either a "practical" or a "participatory" approach (Denscombe, 2010), with participatory applications existing when the researcher and their participants embark on

interventions together to co-create knowledge (McIntyre, 2007). Scaled up, PAR can potentially contribute to transformational social change at local, national and global levels (Kindon et al, 2007), making it anappropriate methodology for examining growing societal concerns around mental health and wellbeing. PAR is seen as a democratic process, valuing the knowledge and skills from different people and places, including the community the research intends to serve (Kindon et al, 2007). This appreciation can foster greater autonomy and agency amongst participants, encouraging them to take further action and advocacy for change (McAra, 2017, McIntyre, 2007, Reason and Bradbury 2001, Gatenby and Hume 2004). Using a PAR methodology in this project will encourage participants to reflect on and develop their current approaches and provide a starting point for the building of an object-based "community of practice" (Lave & Wenger, 1991). This is intended to influence the way participants continue to apply object-based practices in their work, with the potential for the community of practice to return for future cycles of PAR.

3.2.2 CREATIVE REFLECTIVE PRACTICE

Creative Reflective Practice positions creative practice at the forefront of new theories (Schön, 1991). The reflective aspect increases practitioner self-awareness, helping them to see their practice in context with other practitioners and the wider world (Candy, 2020). Like PAR, this has potential for systemic change, making them ideal methodological companions for this project. To facilitate successful Practice Based Research, a communication piece must be available alongside the work to provide a framework for engaging with the artefacts and eliciting the knowledge (Candy, 2020). Reflective sketchbooks will be kept to document the practice journey, which will subsequently become part of the portfolio complementing the research thesis. Through this process, this project will demonstrate a dual process of reflecting in and reflecting on practice (Schön, 1991). The portfolio will document the former, providing evidence of the intuitive decision making that took place during the practice element. The thesis will document the subsequent reflections on the practice, in context with additional research data collected.

My 3D making practice will be employed to create a series of "design artefacts" - methodological tools for enticing interaction and experience in the research methods (Johnson et al, 2017, Binder et al, 2011). These will be artefacts in their own right or "enticatypes",

intended to "entice" conversation within the research context rather than being refined in further stages of research (Vannucci et al, 2019, Hickman, 1990) as prototypes or "provotypes" might (Mogensen, 1992).

3.3 METHODS

Typical to its PAR methodology, the methods in this project will be concerned with dialogue, storytelling and cohesive action (Kindon et al, 2007). Creative Reflective Practice will be used to enhance knowledge production by encouraging experiential reflection (Candy, 2020). The following section describes the research methods that will therefore be employed in this project, each underpinned by Creative Reflective Practice.

3.3.1 PHASE 1: PRACTICE AS METHOD

A series of "analogue" objects without digital haptic functionality will be produced in Phase 1 of making. These will encourage uninterrupted exploration of potential affective object qualities, including reflections on the relationship between affect and materiality (Bell & Vachhani, 2019) and how this can feed into object-based practices. A broad range of materials, techniques and creative processes will therefore be explored, speaking to the fact that improved therapeutic sensory outcomes can elicit richer responses from participants (Bell & Vachhani, 2020). A "thinking through craft" approach (Adamson, 2007) will be employed to complement the iterative PAR methodology. Findings will influence Phase 2 of making.

3.3.2 PHASE ONE: SEMI STRUCTURED INTERVIEWS

Interviews provide insights into lived experiences, giving researchers better understanding of cultural contexts (Pessoa et al, 2019, Rogoff, 2005). Semi-structured interviews offer flexibility of questioning based on the way the conversation takes shape (Kallio, 2016, Polit & Beck, 2010, Rubin & Rubin, 2005, Hardon et al, 2004). These will therefore be used to clarify my contextual understanding and where new object-based practices could potentially fit.

Participants will be asked to select an object from my practice to open up dialogue around object-based practices. This will bring a "hands on" element for knowledge construction, challenging more traditional interview approaches (Kindon et al, 2007) and making the research more explorative, experimental and playful (Huisman, 2017).

In material culture methodology, participants are asked to explore three progressive lines of enquiry around the object; **describing** it, **deducing** what it is and/or how it was used and **hypothesising** about its wider context (Prown, 1982). In practice, this often leads to enhanced lateral thinking and creativity and the co-construction of new ideas and knowledge (Doyle, 2019, Parton et al, 2017, Cook, 2010).

3.3.3 PHASE TWO: PRACTICE AS METHOD

Objects crafted at this stage in the process will be enhanced with digital haptic functionality. This phase of practice will be informed by discussion around "hybrid craft", a term often used interchangeably to describe; 1) finished artefacts crafted by a combination of physical and digital processes 2) the exploration of digital enhancement of (often unresolved) handmade artefacts (Devendorf and Rosner, 2017). This project follows the latter definition, offering a New Materialist perspective of hybrid craft as a "co-productive" method with the potential to combine analogue and digital to offer different dimensions of experience. Digital haptic technology will consequently be incorporated into my making practice during this phase to offer this layered experience and examine the impact this has on therapeutic potential.

3.3.4 PHASE TWO: OBJECTS AS CULTURAL PROBES

The artefacts produced in the second phase of practice outlined above will be used as "Cultural Probes" (Broadley, 2012, Gaver et al, 1999) to help participants to access and articulate their insights and feelings (Graham and Rouncefield, 2008) about the objects by using them as "creative, empathic and interpretive bridges" (Broadley, 2012). This dovetails with object bridging techniques in talk therapy (Brooker, 2010). Written reflections to these cultural probes will be collected from participants to articulate their responses in their own words.

3.3.5 PHASE TWO: FOCUS GROUP

Focus groups effectively capture experiential data (Freitas et al, 1998) and encourage interaction amongst participants which enriches this data (Morgan, 1997). They are particularly effective for explorative research projects, as they welcome a variety of viewpoints (Hennick, Hutter & Bailey, 2011) rather than aiming to come to a final consensus (Hennick & Leavy, 2014).

A focus group will be used to encourage discussion around the whole fieldwork process and the co-development of final recommendations. This will also provide an opportunity to sense check the data collected previously (Hennick & Leavy, 2014).

3.4 MODE OF ANALYSIS

Reflexive Thematic Analysis (Braun & Clarke, 2019) will be used iteratively across PAR cycles in the research. This seeks to support individual and collective engagement with and reflection on the data, allowing me to continually return to the acknowledgement of my own perspective as both researcher and creative practitioner in the construction of new realities (Terry et al, 2017). These will be considered in parallel with the perspectives of my participants and used to produce recommendations for further cycles of PAR. Micro-analysis will also be undertaken between each interview in Phase 1, with learning from the previous interview applied to the next one (Holloway & Wheeler, 2010).

3.5 CONTEXT SCOPING AND RECRUITMENT

Initial desk research and scoping conversations allowed me to identify key areas of non-clinical mental health and wellbeing contexts where object-based approaches could be or were typically practiced, as outlined in Chapter 2 (Fig. 14).

Fig. 14: Hand-drawn diagrams used to map non-clinical mental health and wellbeing contexts where

object-based practices could be or were being practiced in the initial stages of research (image researchers own).

The recruitment inclusion criteria was to select professional participants working within a variety of mental health and wellbeing contexts, particularly those that used object-based and community approaches. Recruitment of people who use such services will potentially be explored in further cycles of PAR, once the professional perspective has provided a starting point in this project.

Seven participants were recruited from six professional contexts, providing a broader range of insights than would have been possible from a singular mental health and wellbeing context. This further strengthened the rationale for a PAR methodology and the community of practice that the project aimed to build (Fig.15, p. 34).

3.6 ETHICS

A research ethics approval process was carried out through the GSA Research Office prior to working with participants. Stage One and Two Ethical Approval Forms and a Risk Assessment were completed in accordance with GSA's Research Ethics Code of Practice (Appendix 1-3). Sample Participant Information Sheet and Consent Forms were also approved to gain appropriate informed consent during recruitment (Appendix 4-6). Participants will be kept anonymous by following GDPR guidelines when handling personal data and through the use of pseudonyms (Fig.15, p.34).

I do not intend to ask participants probing questions about personal or sensitive topics. However, due to nature of the research context, I will make them aware that conversation may inadvertently progress towards such topics and that they can stop the process at any time.

3.7 PLANNING THE RESEARCH DESIGN

This chapter has outlined the qualitative research methodology and methods that will be used to undertake this project, underpinned by a variety of related literature. It has provided a framework for the research design, which will be explored in the next chapter.

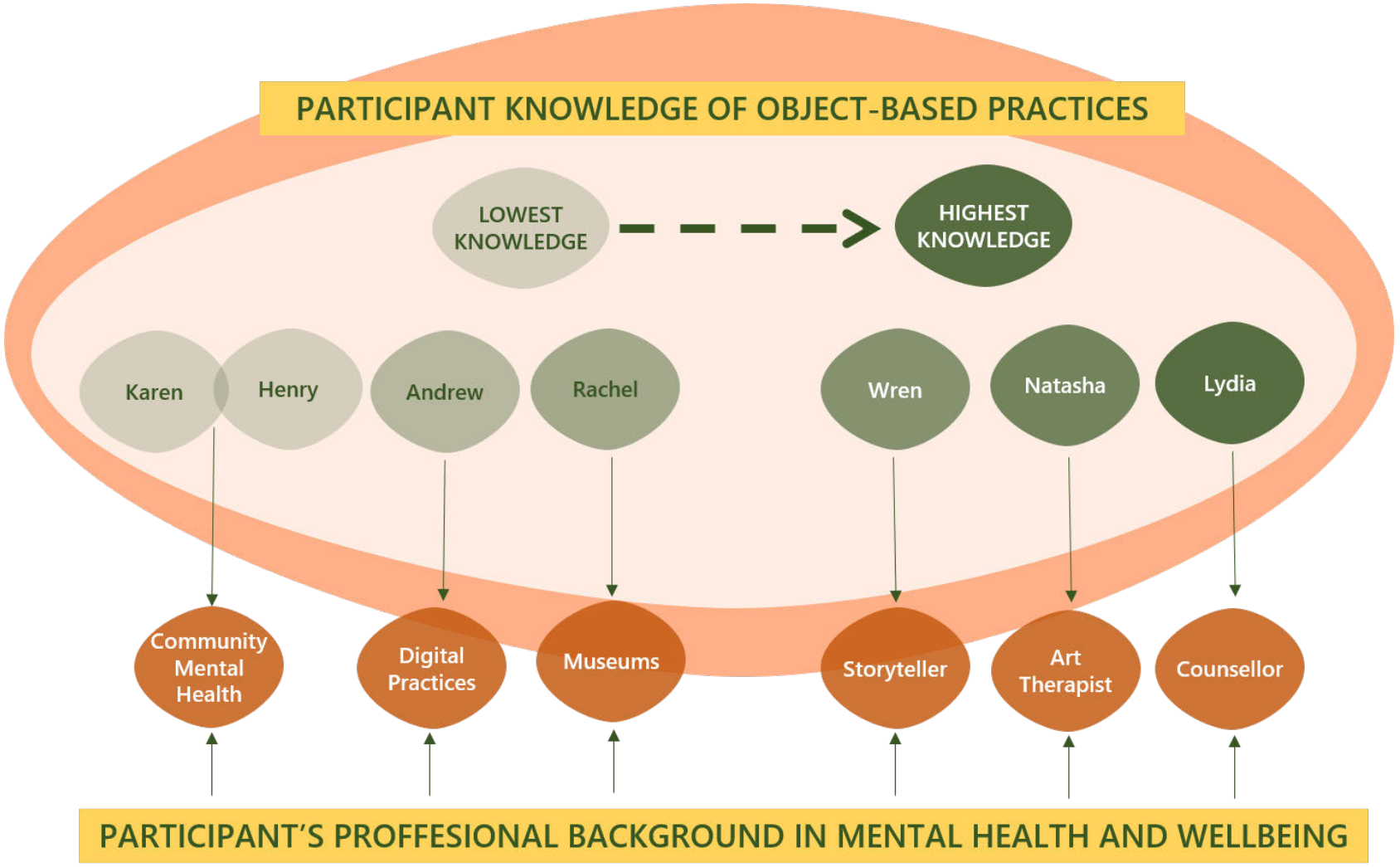


Fig. 15: Diagram representing each participant by their profession and detailing why they were selected. Pseudonyms used to preserve anonymity.

Chapter Four

4. FIELDWORK

This chapter will provide a detailed description of how the research methods were applied across each phase of PAR, including the incorporation of creative practice (Fig.16).

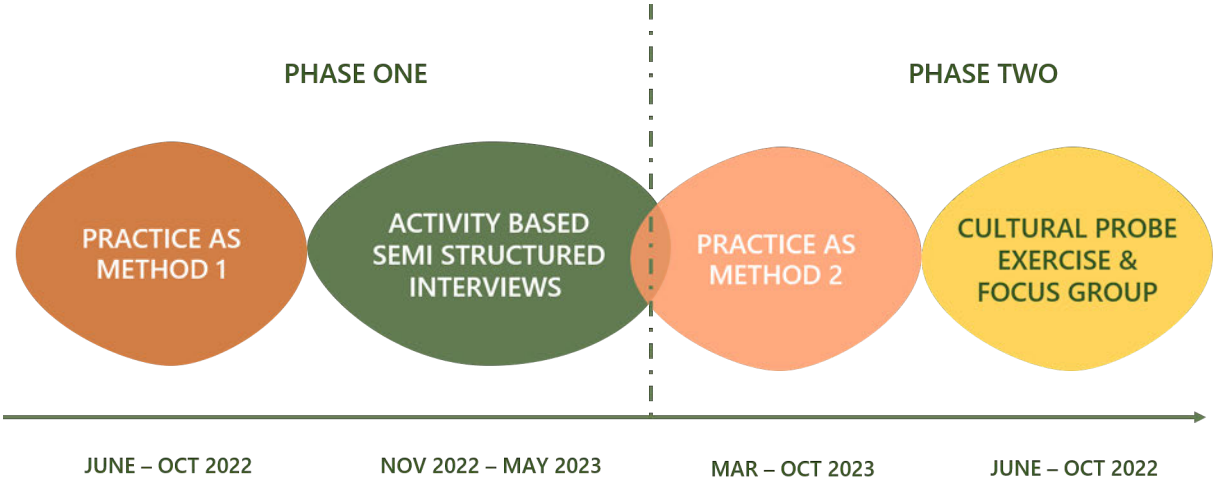


Fig. 16: Diagram showing the research timeline, including incorporation of fieldwork across both phases of making.

4.1 PHASE ONE

Phase 1 making involved the creation of a selection of non-digital enticatypes to be used in semi-structured activity-based interviews. This allowed familiarisation with the research context through facilitation of deeper conversations with participants. This phase provided experiential insights about current object-based practices for mental health and wellbeing and how these had the potential to be developed by handcrafted objects.

4.1.1 PRACTICE AS METHOD

Please refer to pages 6-22 of the portfolio at this point for further detail on the creative practice element of this phase (See Figs. 17 for preview).

In this phase, creative practice was employed to create a series of different 3D handling objects. These were produced as part of my typical creative practice, inspired by mindful engagement with the tiny abstract details in natural forms that often go un-noticed.

The objects created evoked the natural objects that I and many other people feel compelled to collect. This variety facilitated the foraging and selection processes that take place in other object-based practices. The objects were largely left unresolved at this stage, as this has been shown to make them more successful as enticatypes.

Sketchbooks were kept throughout this phase, documenting the process of making and learning in the form of reflective notes and sketches. Drawing was used to process thought, however object making was largely intuitive.

Fig. 17A & 17B: Images of handmade objects from Phase One of practice, please refer to Pages 6-22 of the Portfolio for more information **(images researchers own).**

Scoping conversations with 3D makers and technicians in casting, silversmithing and jewellery and interaction design preceded this phase of making, helping me to identify appropriate making techniques and processes. I used casting as an efficient way of producing objects in a broader range of materials. Some were cast directly from objects I had collected previously, others were fully handmade.

4.1.2 SEMI-STRUCTURED ACTIVITY BASED INTERVIEWS

Interviews took place between December 2022 and May 2023. Contacting and interviewing participants one at a time allowed the interview process itself to follow the iterative approach of PAR (Fig. 18).

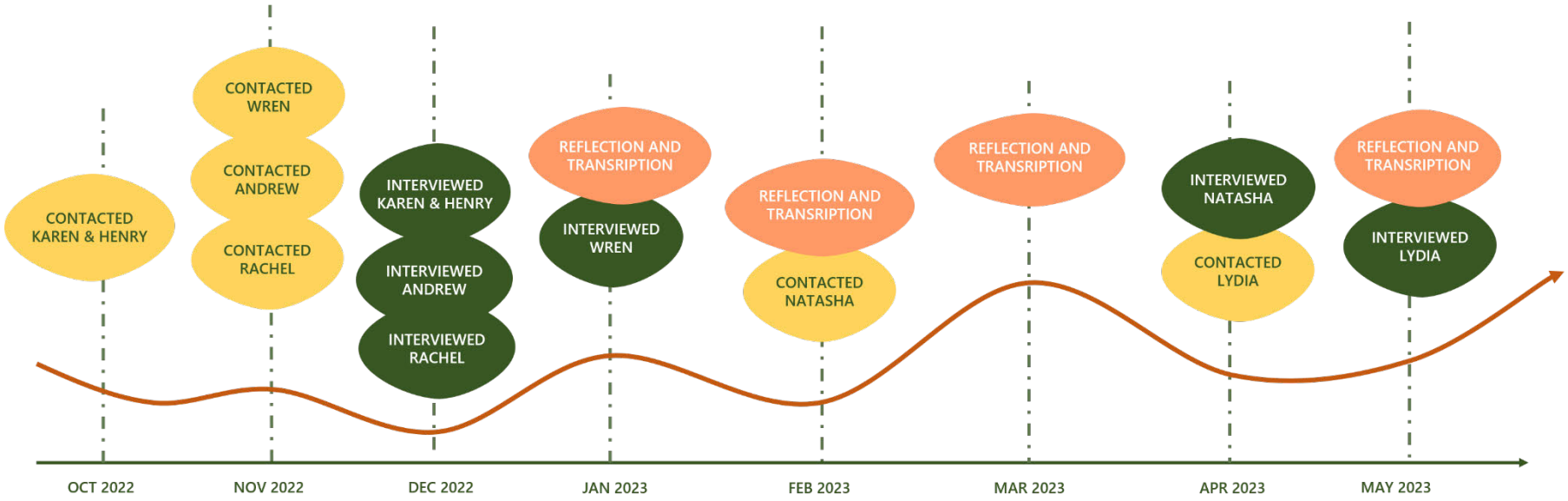


Fig. 18: Diagram showing interview timeline.

Most interviews took place in person to accommodate the activity-based element. The exception was Natasha, whose interview took place on Zoom due to her remote location. Each interview was audio recorded. The discussion was split into two parts and an interview guide was used throughout (Appendix 7).

In Part One, questions in the interview guide gathered participant information about their various backgrounds and lived experiences. In part two, the objects described in section 4.4.1 were presented to the participant. In Natasha's case, the objects were posted to her the week before the interview took place. Each participant was asked to select an object intuitively and a series of questions from a second part of the interview guide were asked.

Questions for part two incorporated my knowledge and experience of museums object-based learning as a starting point. Since the objects used in this project were handmade, questions used in museum object-based learning and material culture approaches (see section 3.3.2) were adapted. Participants **described** the physical characteristics of the object in detail before being asked to look more closely to see if they could identify more subtle details. They then **deduced** what they thought it was made of and what processes had been made to create it. Finally, they were asked to **hypothesise** about what they think made them select it and whether it reminded them of anything, as well as how they might use it in their own practice and their perceived therapeutic potential for such objects. Participants were also asked to consider digital alteration of the objects and to begin to think about how this could add to the therapeutic experience. Following each interview, participants were also sent an online evaluation activity asking them to provide a written reflection.

4.1.3 INSIGHTS INTO CURRENT APPROACHES

Phase 1 analysis revealed that participants generally followed either facilitator or practitioner-based approaches (Fig. 19).

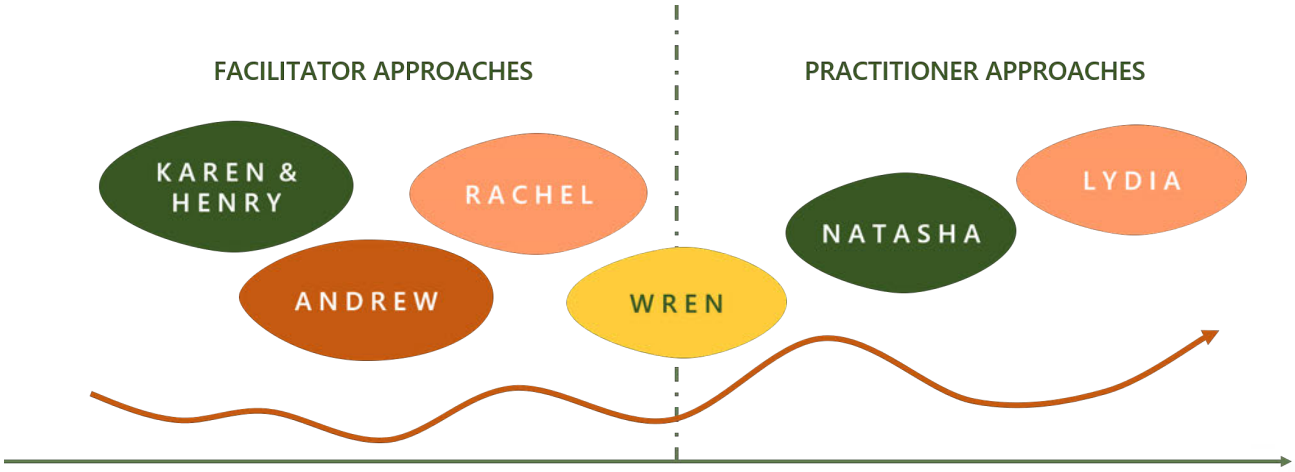


Fig. 19: Diagram mapping where participants sat on the facilitator/practitioner approach spectrum.

Facilitators normally worked across a broader range of approaches, while practitioners tended to tailor their approaches to accommodate varied, dynamic participant needs. Practitioners had also typically had more mental health training and experience of object-based practices. The participants in each group had similar views. They were therefore often grouped together when writing up the findings, as evidenced in Chapter 5.

Phase 1 also determined the participants current knowledge, approaches and experience in intervention design for mental health and wellbeing (Fig. 20).

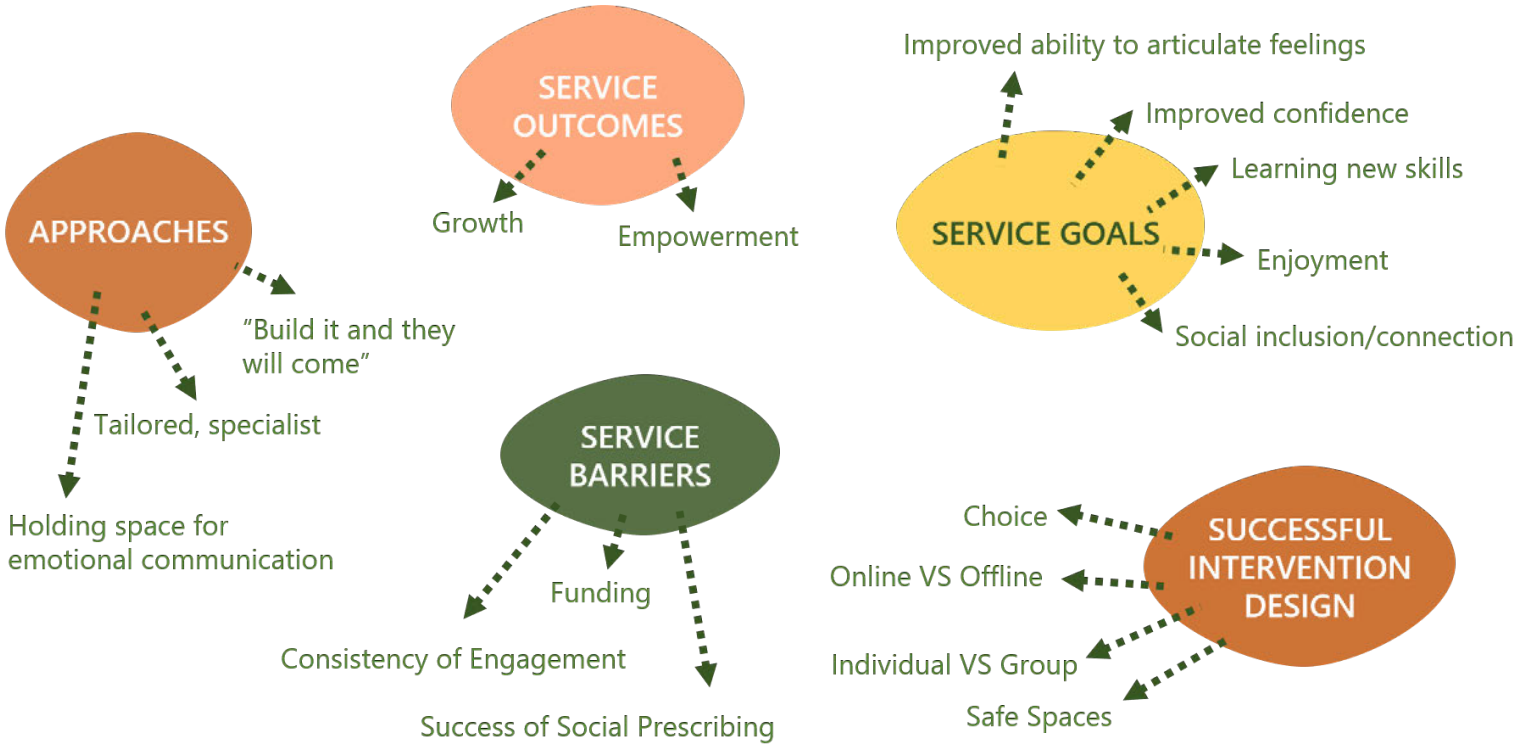


Fig. 20: Participant current knowledge, approaches and experience in intervention design

The insights that emerged from these mapping approaches allowed me to build in opportunities to clarify my assumptions with participants when designing the second cycle of fieldwork.

4.2 PHASE TWO

In the second cycle of PAR, a further series of objects was created which incorporated digital technology to explore how this might expand insights into the different modalities of therapeutic object-based practices from Phase One.

These objects were sent to the participants as cultural probes and they engaged with them in their own time. Both participants then joined me in a focus group, where final recommendations were developed for the potential of hand crafted and digitally enhanced objects to be used in object-based practices for community mental health and wellbeing interventions. Unfortunately, only two participants were available to return for this phase, both practitioners. The decision to work with the same participant group in Phase 2 was made intentionally. By exploring non-digital object-based practices in Phase 1, participants were primed to build on these conversations in Phase 2, when they were introduced to the possibilities for digital haptic technology to enhance crafted objects

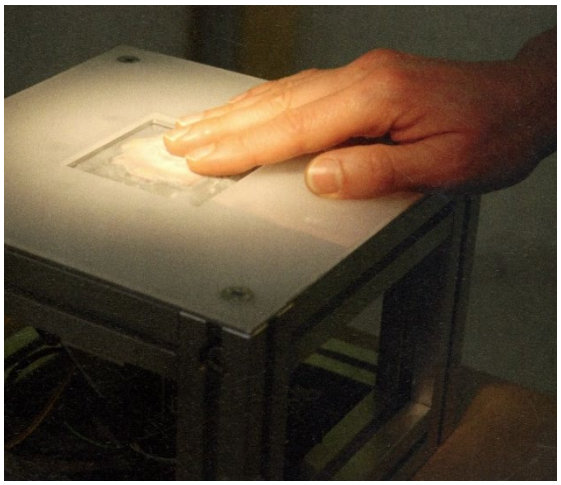
4.2.1 SCOPING ACTIVITY

In Phase 2, scoping conversations focused on the possibilities for incorporating digital technology into analogue objects. With limited digital craft experience, I initially explored the level of design and interaction that would be achievable within the timeframe. Desk research explored how other designers had approached this using different materials (Figs. 21). Scoping conversations also took place with different members of the Digital Health and Care Innovation Centre.

4.2.2 PRACTICE AS METHOD

Please refer to pages 24-47 of the portfolio at this point for further detail on the creative practice element of this phase.

Although the physical and digital elements of the objects were made separately in this phase of fieldwork, they were made in tandem so that decisions could continue to be made around how



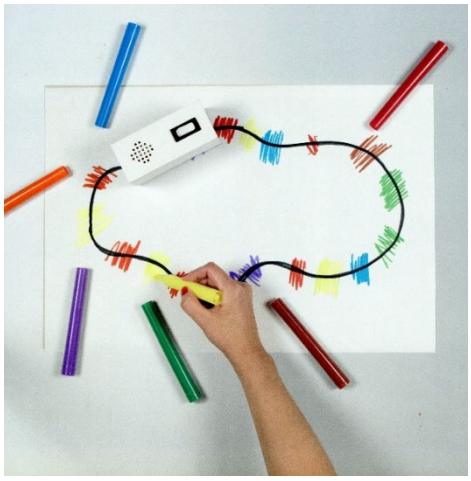


Fig. 21A & 21B: Examples from haptic technology desk research, taken from "A Touch of Code" (Klanten, 2011).

they would eventually be combined. Expertise on vibrotactile technology was sought from digital design staff across GSA. Conversations with tutors on the Interaction Design course led to participation in a beginners Arduino workshop where I learned that conductive objects could facilitate capacitive touch, i.e., touching them would facilitate an action such as turning on an LED.

This led me to explore how capacitive touch could facilitate vibrotactile interaction, and I spent an intensive day with staff from GSA's School of Innovation and Technology in the Highlands and Islands campus, building Arduino circuits and altering code variables for different vibrotactile experiences (Figs. 22).

The circuits incorporated a vibrotactile motor and conductive material functionality. However, it was decided that perhaps the whole object shouldn't be conductive to avoid a constantly "on"

interaction when the object was being touched. Ceramic was chosen as the non-conductive material since it was one of the most favorable materials with participants in Phase One. Copper was chosen as the conductive material since it is extremely versatile. Both materials also suited my own making practice of constructing textural organic shapes.

The initial circuit was built using an electronics breadboard and crocodile clips to test that it worked with the code. Code was written in the Arduino IDE and was adapted from a Capacitive Touch Demo Sketch (Badger, 2008). Once the circuit and the code were finalised, more permanent circuits were soldered together, with support from GSA's Interactive Computing Technician.

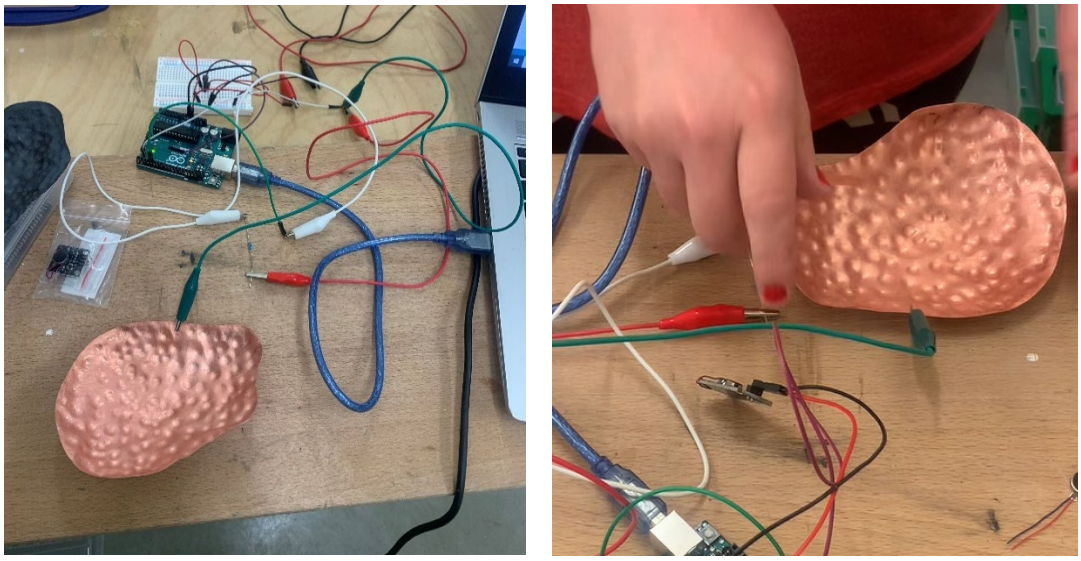


Fig. 22A & 22B: Images of vibrotactile technology development that took place in Forres, please refer to Pages 32-33 of the Portfolio for more information (images researchers own).

The initial circuit was built using an electronics breadboard and crocodile clips to test that it worked with the code. Code was written in the Arduino IDE and was adapted from a Capacitive Touch Demo Sketch (Badger, 2008). Once the circuit and the code were finalised, more permanent circuits were soldered together, with support from GSA's Interactive Computing Technician.

Despite the maximum amount of time and attention possible for this element of the project, the capacitive touch did not work as intended. The conductive wire did not solder to my copper object as intended. An attempt was made to tape it on, but the copper still did not perform its conductive function effectively enough. This meant I had to ask participants to touch the end of the appropriate wire to facilitate the capacitive touch. Furthermore, unfortunately the range of subtleties I had hoped for to vary the vibrotactile experience were also unsuccessful.

Nevertheless, the circuits were incorporated into the physical objects. These were powered by both a battery pack (the vibrating motor) and mains electricity (the capacitive touch element). This aimed to simplify the process of powering the objects when used by participants. Housing was also created for the circuit element to avoid it becoming damaged in transit.

4.2.3 CULTURAL PROBE EXERCISE

Each participant was posted one of the finished objects. Ceramic casting was used to make

the same object multiple times so that each participant had a version of the same probe. This preserved the consistency of findings. Along with the object, they were also sent some instructions, journal pages and a series of instructions (Appendix 8).

Participants were instructed to engage with the object with and without the digital technology before producing written reflections on the potential value of such objects in wider object-based practices (Fig. 23).

Fig. 23: Image of final Cultural Probe (image researchers own).

4.2.4 FOCUS GROUP

A focus group took place on Zoom following the cultural probe exercise. Insights collected from Phase 1 provided grounding for the production of a further topic guide to be used in this session (Appendix 9). Like the interviews in Phase 1, this two-hour session was audio recorded.

Participants were asked to reflect on the task as a group and use their insights to co-produce recommendations for the development of object-based practices in community mental health and wellbeing contexts, including how handmade and digitally enhanced objects can feed into this.

Participant reflections from the cultural probe exercise were the starting point for this discussion and I used digital collaboration tool Miro to collate key insights and experiences. This also provided a visual focus for the whole group during the session as it became

populated with their ideas (Fig. 24). I made notes on here for participants, so that their conversation was not interrupted.

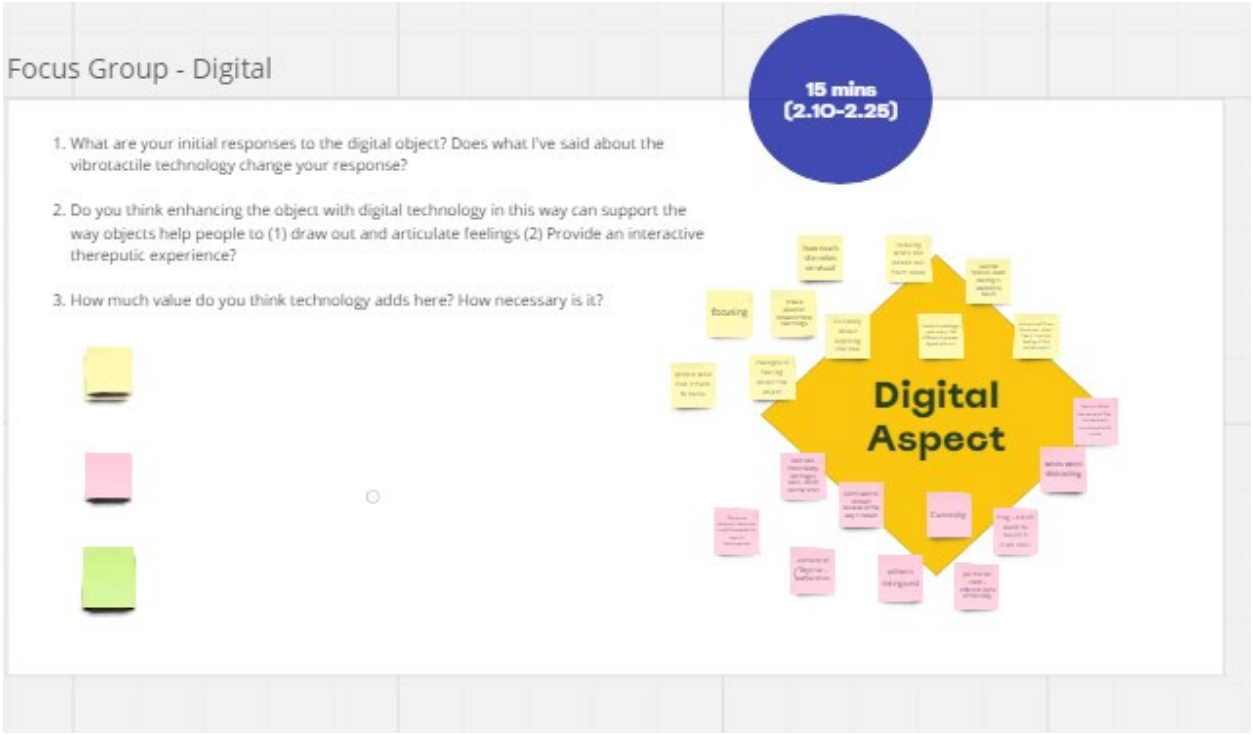


Fig. 24: Example image of Miro mapping that took place during the Focus Group.

4.3 FRAMING THE FINDINGS

This chapter has provided a step by step process through the research design, including detailing how I incorporated my creative practice to support this at two key stages. The key themes that emerged will be outlined in the next chapter, with a comprehensive analysis and discussion of each one.

Chapter Five

5. ANALYSIS & DISCUSSION

This chapter will describe my approach to analysis before detailing the research findings in line with the research questions outlined in section 1.1. Participant background in object-based practices for mental health and wellbeing will be discussed initially to provide context. Findings relating to the role of craft will then be examined, followed by digital vibrotactile technology and it can support the former. Further recommendations will then be explored, and the chapter will end with participant reflections. Analysis and discussion have been combined in this chapter for consistency.

5.1 ANALYSIS PROCESS

All audio recordings were transcribed using Otter ai speech to text transcription software. Transcriptions were used to conduct reflexive thematic analysis in Phase 1 with themes and insights further expanded using the data collected in Phase Two.

The approach to reflexive thematic analysis was adapted from David Byrne's worked example (Byrne, 2022). Familiarisation with the data was achieved by printing and reading through each transcript twice, annotating it by hand with initial insights. All notes and insights made were then transferred to a spreadsheet database, where each participant had a separate sheet and the insights had their own column within each sheet. Reading all the insights again, the data was given initial codes by noting down any themes identified without being restrictive. Themes and subthemes most significant to the research questions were then generated and added in a separate column against each insight. Each theme was then taken in turn and related back to the main data set and research questions. Themes generated from Phase One were reviewed and refined in Phase Two (Fig. 25, p.48)

5.2 INTIAL KNOWLEDGE OF AND ATTITUDES TO OBJECT-BASED INTERVENTIONS

Phase 1 uncovered a variety of knowledge and experience of object-based practices across the participant network (Fig. 26, p.48). General attitudes to these practices were also gauged at this stage, with a noticeable difference between the attitudes of the facilitators and those of the practitioners.

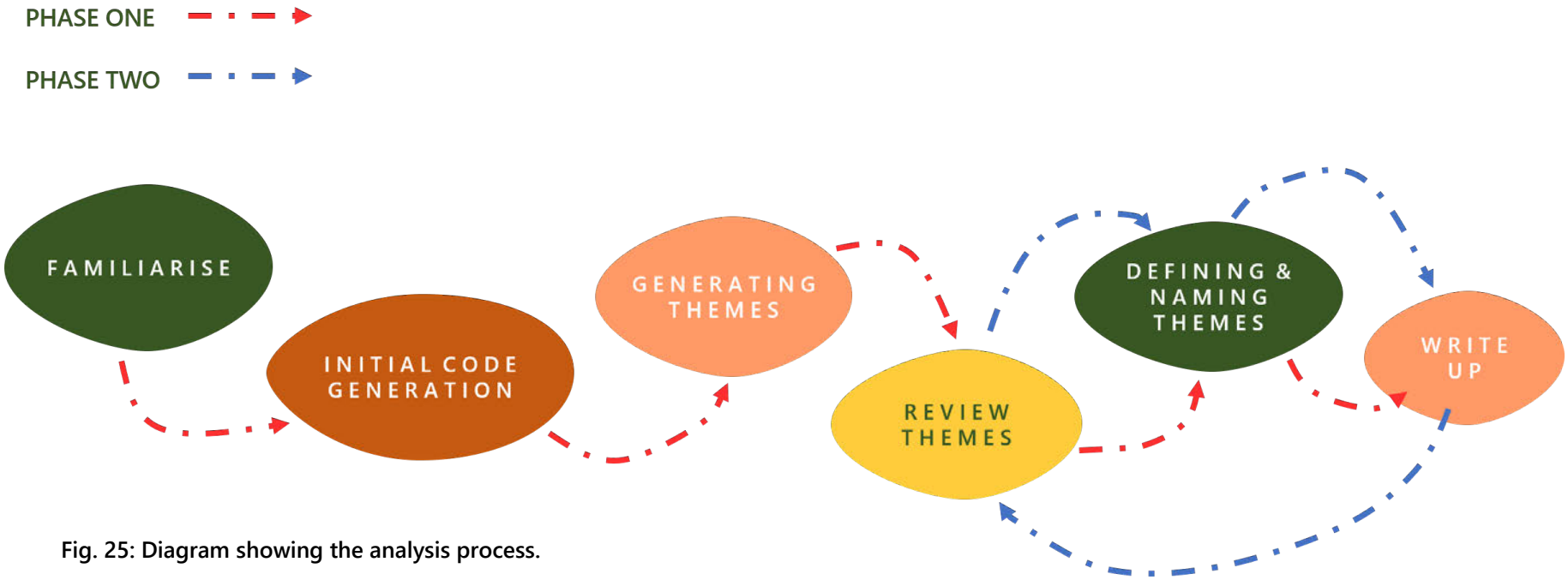


Fig. 25: Diagram showing the analysis process.

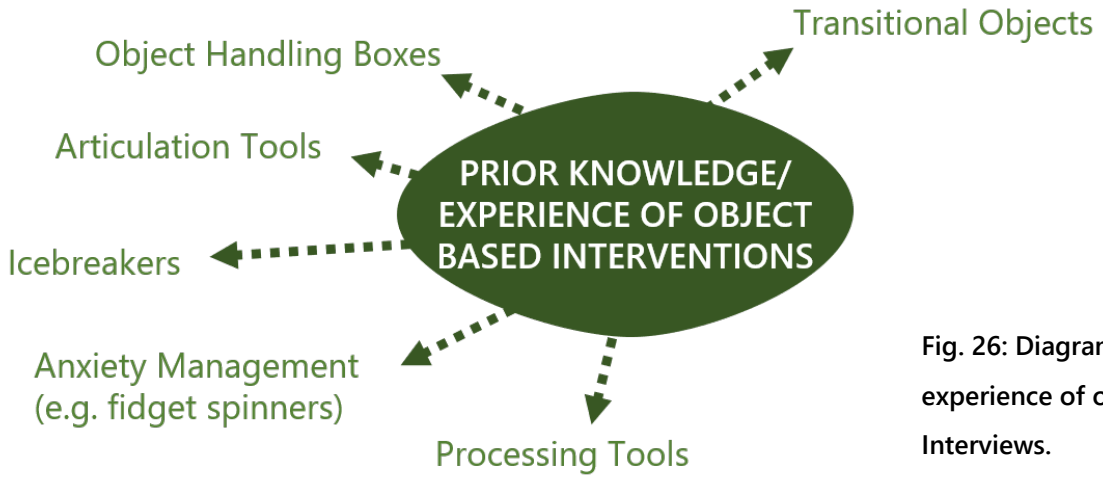


Fig. 26: Diagram showing participant knowledge and experience of object-based practices at the time of Phase One Interviews.

Karen and Henry had limited knowledge and experience, yet expressed interest in further exploration. For Andrew, it was the skills learned in the process of prototyping digital objects that had therapeutic value, the finished objects were less important. Rachel felt similarly, appreciating that therapeutic object-based practices were used successfully in other museums, but did not see the value in this herself.

> "I am so intrigued because all the ways of doing mental health and wellbeing can be so different, but different things work for different people. The curators and archivists are all very excited because they love working with things. I'm interested in people…As a thing…if I came to this, I wouldn't be back."

Contrastingly, practitioners were more enthusiastic. Natasha described a passion for "the power of objects", describing how she used them at the beginning of group sessions to invite participation. Wren described using objects as part of her storytelling practice to help participants process what they had learned, while Lydia described how they could help people to understand and articulate feelings, needs and relationship dynamics. These responses illustrate the use of objects as emotional safe spaces for personal experiences in similar ways as is seen in the literature (Jay et al, 2022, Romano, 2012, Brooker, 2010,).

Although some participant approaches included artefact making activities in their interventions, findings showed that none of them used handmade objects in the object-based practices identified across the network. Instead, they used found, every day, natural or museum objects. This meant they could offer fresh perspectives on the object-based activities described in the following sections.

5.3 HANDMADE OBJECTS

The following section describes key insights from the object activities participants engaged with as part of the fieldwork, and the insights these drew out around how handmade objects could support object-based practices.

5.3.1 DESCRIBING

In Phase One, participants first task during the object activity was to describe their chosen object visually. This elicited a variety of unusual visual responses, such as Karen's featured bellow.

> "It's about the size of a like a large stamp, like a first-class stamp…it's made up of these little sort of ball shaped or like half spheres that have got a bit squished out of them where you can put your thumb and they're all stuck together… a bit like a raspberry, but its blue…"

Laterally, the importance of initial visual response was described by Lydia, who believed this is what elicits the thoughts, feelings and experiences a person brings to and associates with the object. The literature suggests that objects can draw these out of our subconscious, and we are usually more aware of how objects can be used or how they look than how they make us feel (Turkle, 2011, Lebrecht et al, 2012). This is where the link with storytelling described in Section 2.2.3 comes into therapeutic practice. Whatever the intent was behind the object's original creation, story can help in the construction of new narratives (Mozeley et al, 2022). Considered alongside the literature where objects have been used in the re-construction of self-image in mental health recovery (Romano, 2012), this has promising implications for wider use. This initial descriptive step should therefore be considered as a key element in opening up conversations in object-based practices for mental health and wellbeing.

Most of the objects cast from found natural objects were more recognisible, eliciting more general associations and often shallower conversation. There were consistent references to peapods in reference to one of the objects that had been cast in different materials directly from a seedpod. Contrastingly, the more abstract objects seemed to encourage deeper reflection, as Henry's quote suggests:

"I'm starting to get a strange sense of vulnerability from this now, because the association I'm making now is of sort of muscle fibres… like a leg of lamb or a bone protruding through skin…I can't see it as anything but tendons, which is making me feel quite... it's like an open wound or something."

This supported the belief in the following quote from Lydia, which was elicited during further exploration of this theme in Phase 2.

"The more abstract the object is, maybe the more useful it will be because [somebody can] put their own interpretation on it. What do you call it? You know, it's just an object."

This finding provides rigor to my own approach to my craft practice. As outlined in section 4.1.1 the way I work is largely intuitive, and I am drawn to making abstract, irregular artefacts. These findings suggest that the way I naturally approach my creative practice could be a valuable asset to object-based practices for mental health and wellbeing.

Another key insight that emerged during Phase 1 about the descriptive value of handmade objects came from Natasha.

"But these random, if you like, objects, which are maybe not descript…the more I look at them, I try and articulate what are they and why have they been made. It's really hard. But I think actually, that helps you then to develop a closer connection with them…more in depth maybe and less superficially actually."

This quote suggests that, although these objects are perhaps harder to make connections and associations with than some of the other objects outlined in section 2.2, they are possibly more successful for provoking insights and framing deeper conversations. This relates to a consistent finding across Phase 1, that the objects evoked **"curiosity"** and **"intrigue"** from participants.

Aside from this describing element, the museums object-based frameworks (Mida & Kim, 2015, Prown, 1982) were largely unsuccessful with handmade objects, and it was quickly realised that more valuable insights could be gleaned from more organic conversation led by the objects themselves rather than a framework. The practitioners believed that it was possible that facilitators felt more comfortable with a framework because their approaches were more **"task focused".** This was discussed further in the focus group, where participants acknowledged that a framework could be a helpful tool for delivering handmade object-based practices in some but not all cases. This could potentially be explored further in future research.

5.3.2 MATERIALITY AND SHAPE

Perhaps unsurprisingly, the range of materials that casting afforded led to a variety of materiality choices in Phase 1. Most participants commented on how the sensory material aspects influenced their choices and how this combined with their shape could facilitate a variety of therapeutic bodily interactions. This finding is illustrated in the following quote from Wren.

> "It's got texture, it's got bumps so I can feel those bumps, and underneath, I can rub it on the back as well, it's got nice bumps…But it's nice that one side is shiny and smooth. And one side is…untreated, unglazed…And that gives me a nice contrasted texture"

Some of these interactions were captured in photographs where they were demonstrated by participants (Figs. 27, p.53). **Please find more of these on page 23 of the portfolio.**

Fig. 27: Images showing some of the participant bodily interactions with the objects, please refer to Page 23 of the Portfolio for others **(image researchers own).**

It was observed that affective feelings around the objects were perhaps easier for participants to access in relation to materiality, which Wren demonstrated by actively putting some objects back in the box in disgust.

Reflection on material choice and shape in Phase 1 influenced materiality decisions for the cultural probes, and I chose materials that I felt more comfortable working with. I thought these would elicit more positive responses from participants since they might embody more "affective traces" from me as the maker, which could be transferred to participants (Bell and Vachhani, 2020) While this may have been the case for Natasha, a craftsperson herself who "loved" the probe as an object, Lydia made a negative association with it, as outlined below.

"When I looked at the object at first, it reminded me of the back of a frog. And because I saw it as a frog, I didn't feel drawn to touch it."

The insights from this theme demonstrate how the same materials can elicit different affective responses. They call previous findings into question which declare that smooth

textures are more therapeutic (Etzi et al, 2014), especially since these are based on flat, everyday materials such as tinfoil, cotton and sandpaper. More recent beliefs that the relationship between materiality and affect is influenced by a variety of form factors (MacDonald, 2023, see section 2.4.2) are much more pertinent to my own findings.

Russell's Circumplex Model of Affect (Russell, 1980, Fig. 28) is cited often in the HCI literature as a way to measure the relationship between haptic technology and affect. Findings on materiality in this study suggest that this model could potentially be employed in future cycles of PAR to further explore the relationship between materiality and affect. Returning to my creative practice, this finding also provides evidence for a continued exploratory approach in relation to materials, techniques and processes.

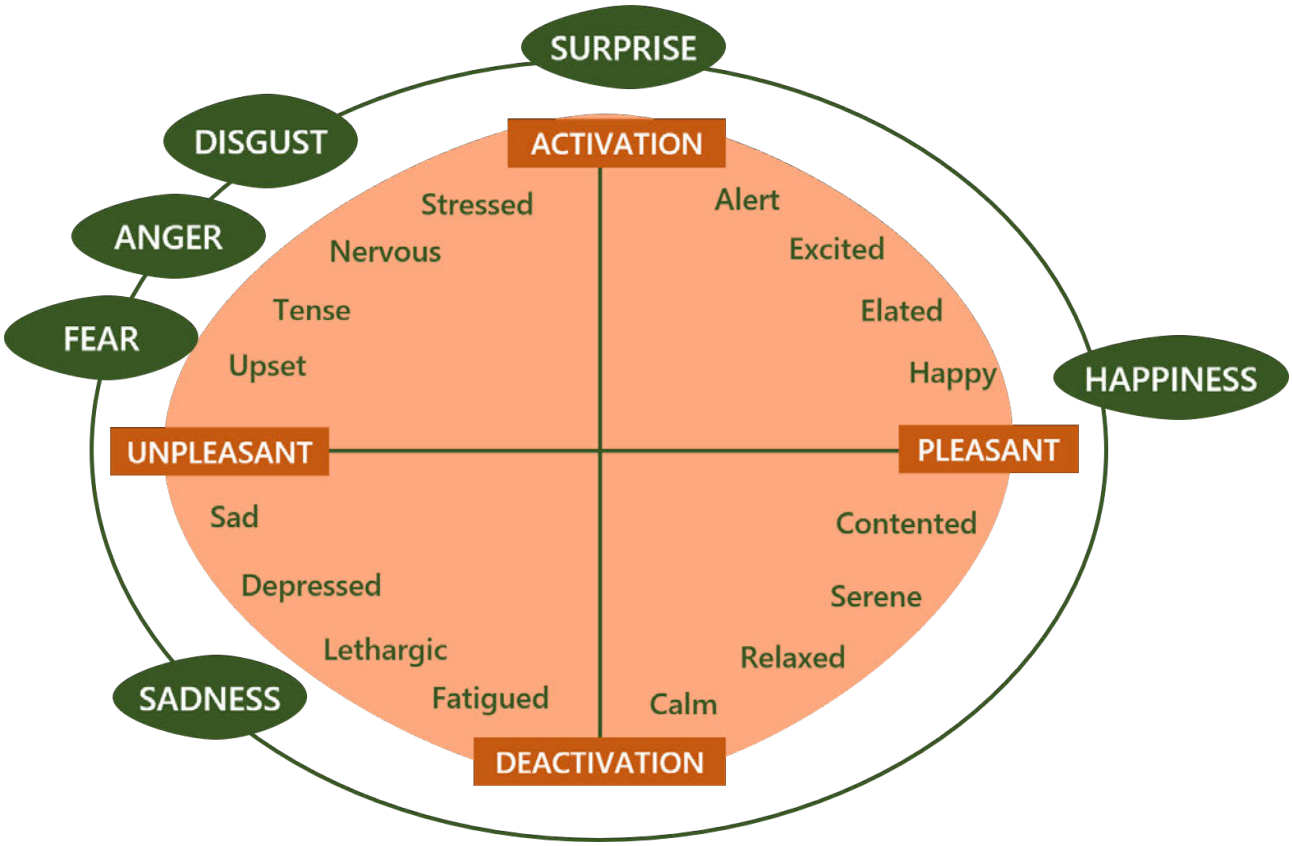


Fig. 28: Reproduced diagram of Circumplex Model of Affect (Russell, 1980)

5.3.3 CHOICE

The next sub-theme related to the importance of object choice and how materiality and shape, among other factors, play into this. This was best summed up by Lydia after she engaged with the initial objects in Phase 1.

> "It really [doesn't] matter what the object is, you know, it's about the interpretation that is put on the object, I think is the important thing. But what's, what's good about this wee box is that there's variety of size, shape, texture, weight. And all of that, I think, is important. To be able to have a variety of things."

Lydia's insight was particularly useful here, as she was the participant with the most varied experience of object-based practices for mental health and wellbeing. It should be acknowledged here that she is also suggesting that any object can be therapeutic if interpreted as such, a sentiment she expressed in both phases of research. However, her comment also suggests value in handmaking objects to produce wider variety and therefore choice.

Choice around participation in interventions also emerged as a theme. Rachel's strong opinion on object-based practices in section 5.2 led me to consider whether people who were unsure of object-based practices could still be encouraged to engage. Natasha believed that they could:

> "You don't want to alienate that person, if they're the only person who's not choosing something…that can leave an uncomfortable position for them…I sometimes say, rather than necessarily finding someone you connect with, is there something in that box that you really just looked and think I really don't like that…it almost gives permission…"

In relation to this, Lydia stressed the importance of not making assumptions about participant object preferences:

> "People will have individual preferences to objects as well, [so this] needs to be taken into consideration. If somebody's had a traumatic experience with a fluffy blanket, then they're not going to like the feel at all of that sensation".

This suggests that negative reactions can still open up a dialogue and should not be a deterrent in the development of object-based practices for mental health and wellbeing. However, it was also acknowledged that desired therapeutic outcome should be considered in line with this.

5.4 VIBROTACTILE OBJECTS

The following sections relate to themes which emerged in relation to the vibrotactile technology element of the research which was facilitated through the cultural probes.

5.4.1 GATHERING INITIAL INSIGHTS

Phase 1 was used to gather insights into participant perception of the therapeutic value of digitally enhanced haptic objects. Karen and Henry believed this would "overcomplicate" them, however they appeared to have misunderstood what was meant by digital enhancement. With his digital technology background, Andrew saw more potential, although he mainly described how the objects could become existing products, such as fidget toys and breathing regulation tools. His comments reflected the well documented HCI attitudes to object-based practices for mental health and wellbeing demonstrated in the literature review.

Separately, Lydia described an activity she does, asking her participants to push objects into sand after they had made therapeutic connections with them, facilitating a "powerful" interactive experience. This suggested potential for further exploration of a combined object engagement experience involving interpretation and interaction, and how handmade and digital practices could facilitate this. This finding was combined with the earlier insight about

the curiosity that the Phase 1 objects evoked (see p.52). The cultural probe objects and focus group questions were subsequently developed to explore whether there was therapeutic purpose in facilitating digitally enhanced interaction and curiosity.

5.4.2 RESPONSE TO CULTURAL PROBES

Both participants had different initial responses to the cultural probes. As outlined on page 53,, Lydia did not like the object. Contrastingly, Natasha was drawn to it right away, perhaps due to her own ceramic practice background:

> "When I first took it out…I immediately wanted to hold it in my hand and it felt really just safe holding it [I] wanted to immediately sort of touch it and stroke it… I just felt really comfortable with it really quickly."

Although she was aware of the digital element, she described ignoring the wires at this point and a temptation to remove them, suggesting she found them superfluous to the object.

As soon as Natasha turned on the vibrotactile technology, her feelings **"changed completely"** and she felt frightened of the object. Lydia on the other hand, expressed a more disgusted response:

> "The noise that it made, I just wanted to disengage with it immediately. Because it, it sounded like a swarm of flies. I just wanted to get these blue bottles and get them out my window, you know?"

These responses correlate with the upper left quadrant of Russell's Circumplex Model of Emotion, the opposite to the recommended state of high valance and low arousal for therapeutic intervention (Russell, 1980, Fig. 28) This correlates with the following comment from Lydia about the current therapeutic value of the object

"It might be stimulating for a discussion…but therapeutically? No, I think I think therapeutically, you want to create safety, comfort, reliability, you know?"

Despite these findings, one of Lydia's family members found therapeutic value in applying it to other bodily sites, such as the neck. Vibrotactile technology has been shown to have different therapeutic effects on glabourous and non-glabourous skin (MacDonald, 2023, Feher, 2012). These findings show the potential for vibrotactile objects to allow more non-specific exploration in therapeutic bodily interaction than many of the more functional examples seen in the literature. This could also be taken in context with a further comment from Natasha, about the value in allowing non-directive engagement in object-based practices, which she believed could facilitate a sense of therapeutic curiosity. She saw value in objects which could facilitate different experiential interpretations in line with this, showing promise for further exploration on how vibrotactiles could feed into this.

5.4.3 PARTICIPANT RECOMMENDATIONS

Lydia recommended that more predictable object-based practices were safer in mental health and wellbeing contexts, stressing that there should be careful consideration around the use of vibrotactiles with potentially vulnerable individuals. Natasha agreed, however she also believed a priming exercise could potentially prepare participants to approach vibrotactile objects with intrigue rather than anxiety.

Returning to her engagement with the probe, she described a willingness to concentrate on the potential for it to be therapeutic, leading to her initial fear dissipating as she became curious about it again. Natasha was then able to make a positive association between the therapeutic
value of the technology in her hands and an experience from her past, a documented response found in other object-based practices for mental health and wellbeing (Romano, 2012, Brooker, 2010). She stressed however, that this approach should still be carefully considered however in line with the needs of the participants and the environment the intervention was taking place in.

These findings resonate with some of the ways vibrotactile objects can facilitate emotional

regulation outlined in section 2.4.1. Furthermore, Natasha's demonstrated technique of "sitting with" feelings of discomfort is used in some psychotherapeutic practices, including Acceptance and Commitment Therapy (Harris, 2007, Zettle & Hayes, 1986).

Previous HCI research shows the value of personal devices for emotional regulation, however Natasha's comments relate to her experience as a group practitioner. In addition to the benefits they offer individually, she believed that objects could make group participation more inviting, permitting people to share their newfound self-awareness in a connective and supportive environment. Taken in context with the interactive experience that vibrotactile objects can facilitate, this potentially uncovers new opportunities for HCI research to explore how vibrotactile objects can help people tolerate difficult emotions in group contexts, as this is a neglected area of the literature (Hansson & Skog, 2001).

Although neither participant was comfortable with vibrotactile technology, they also recognised that it could potentially be more inviting for some people. Natasha believed there was therapeutic potential in anything that enables people to reflect and draw parallels to other experiences, and could see potential for digitally enhanced objects as an alternative way to do this. Both participants gave examples of people who may prefer this modality of object engagement, such as visually impaired people, non-verbal people and children. Developments in this area can be found in relatively recent HCI research (Güldenpfennig et al, 2020) and show potential for vibrotactile to make object-based practices more inclusive.

The fact that the vibrotactile technology element of the cultural probes did not work as expected, see section 4.2.2, impacted participant response. When asked about whether subtleties in the technology would have changed their response to the object, both participants agreed that it would. If it had worked as intended, both participants believed the capacitive touch technology could potentially have allowed the object to facilitate interaction similar to Lydia's analogue interactive approach of pushing objects into sand. However, the probe
highlighted the fine line between engagement and disengagement dependent on the success of the technology.

Findings across sections 5.2 to 5.4 present further opportunities for HCI and crafts practitioners to collaborate on the development of new vibrotactile enhanced objects for mental health and wellbeing. More recent developments in subtlety and vibration patterns of the technology have produced more pleasant and therapeutic results (Shim & Tan, 2020),

which should be considered in the production of these newly created objects.

The way in which sensors are incorporated into objects should also be taken into consideration. Previous HCI findings show that multiple sensors elicit a greater variety of emotional responses, however, this presents challenges for use in smaller objects (McDonald, 2023). With art school education increasingly moving towards interactive design practices (GSA Archives and Collections website), the definition of hybrid-craft will likely continue to develop, potentially paving the way for further technological advances that allow haptic technology to be incorporated into smaller objects.

5.5 FURTHER CONSIDERATIONS

This section will outline some of the other key considerations that participants highlighted for handmade objects to be used in object-based practices in the mental health and wellbeing space.

5.5.1 OBJECT REFINEMENT

Level of refinement determined some participant's object choices in Phase 1, with several comments about choices made due to object finish level, robustness and fragility. Henry and Andrew both saw the robust objects as more refined and therefore superior, as Henry illustrates:

> "This one...I guess I'm drawn to it. I have made the assumption that this will be longer lasting. And I just quite like that, about it. It feels quite fancy...the other things felt more the sort of things you'd find in a crappy kids toy."

Further discussion about object refinement was therefore encouraged in Phase 2. Lydia questioned the purpose of this unless it served a specific function. Natasha suggested that the more refined objects did not invite the same selection process, which she believed was part of the therapeutic curiosity element which she believed was "something that you are looking for within that therapeutic framework". This calls into question how the more refined therapeutic objects outlined in section 2.3 (Hahn, 2021, Hahn, 2019, Morby, 2016 A) would compare in the field. Again, choice and preference were ultimately recognised however, and

a selection of objects in various stages of finish was recommended.

The conversation around object refinement was also encouraged in relation to vibrotactile objects. Due to my limited digital skills, the objects I made were crude in a digital sense, which is reflected in the negative participant responses to the cultural probes in section 5.3.2. In contrast to comments about the objects themselves, these findings suggested that participants saw the importance of the vibrotactile element being more refined. However, they were critical of existing marketable products such as Calmingstone (Morby, 2016 B). They were both sceptical of the idea of a "one size fits all" device to manage anxiety, and Lydia expressed concerns about financial access to such high-tech, refined objects.

These findings speak to anti-solutionist strategies in design research, which believe insights gathered from imperfect artefacts are more useful than those gathered from perfectly refined ones (Blythe et al, 2016, Dobbins, 2009). Taken in context with Lydia's quote above, these findings show that the objects I created ultimately served their purpose as enticatypes by facilitating conversation around what would be more successful in future cycles of PAR.

5.5.2 IMPROVING EMOTIONAL SAFETY

A number of recommendations were raised around object-based practices in relation to improved participant emotional safety. Firstly, this was in relation to the creation of safe emotional environments. Facilitators made it clear that discussing their attendees' mental health was not within their remit, although some found setting those boundaries challenging. Andrew described his interpretation of his role well:

> "We'd be here for them, we'd chat and joke with them and spend time with them. But you know, we never specifically address anything because we're not trained mental health support workers, you know."

The practitioners agreed that this was the correct approach without psychotherapeutic training. However, Natasha and Wren in particular raised concerns about some facilitators delivering mental health and wellbeing sessions with lack of knowledge and awareness about how to do this safely. Natasha had experienced this herself as an attendee at a

previous workshop. Despite these concerns however, she was pleased about the increasing abundance of arts and object-based practices in the space, recognising the same need for the diversification of professional roles in non-clinical contexts as has been seen in clinical contexts (Oates, 2021, Casey and Webb, 2021). She recommended more integrated approaches going forward, with input from both facilitators and practitioners. The ability to be more flexible was key to this, as was the confidence and ability to tailor approaches to suit dynamic needs.

Natasha also cautioned that object-based practices, like arts-based practices, could elicit powerful emotional responses. Both she and Lydia had experienced conflict as a result of the emotional significance their participants had placed on objects. This is perhaps unsurprising when considered in line with the affective power of objects in evoking reflections, memories and stories (Mozeley et al, 2022). Clearer parameters were therefore recommended for facilitators working with object-based practices, including increased self and participant awareness, preparation and training around handling powerful emotional responses, and effective signposting knowledge. This awareness is demonstrated well in one instance of museums object-based wellbeing (Willcocks, 2020), however this recommendation calls for consistency in this across object-based approaches in the space.

Natasha also raised safety concerns around language for interventions, with particular caution against overuse of the phrase "mental health" as a broad term. This correlates with recommendations outlined by other mental health researchers (Taylor, 2018) as the term covers a wide spectrum of conditions. Natasha advised particular caution when advertising interventions to ensure transparency about intended aims and outcomes, especially since some of these may invite potentially vulnerable audiences. This was in line with concerns that external pressures on facilitators, such as funding and footfall targets, was leading to them offering interventions they were not equipped to deliver.

The building in of "endings", which are used in other therapeutic practices was also recommended to allow participants to process the intervention and take forward what they had learned. It has previously been recognised that objects can help to facilitate this transition (Solway, 2016, Camic, 2011) and both Natasha and Lydia described how they had used objects to do this. Further consideration for using the objects themselves to build in endings in object-based practice sessions should therefore be considered.

5.6 PARTICIPANT REFLECTIONS

The Phase 1 evaluation activity described in section 4.1.3 showed consistently that participants had found the activity a valuable opportunity to reflect on their approaches. This was a welcome finding, suggesting the potential for handmade objects, like other types of objects, to be useful reflection and evaluation tools, further cementing their purpose as enticatypes.

This was unpacked further in Phase 2, when Lydia and Natasha were asked how they might take their involvement in the project further in their own practice. Lydia said it had encouraged her to reflect on how she could be more intentional about her use of objects. She also discussed her ongoing intention to advocate object-based practices within her professional network, including new counsellors she trained and supervised. Natasha said the project had made her reflect on her engrained object-based practices and begin to consider more creative approaches, including the use of handmade objects. She also said the process had caused her to consider the different potential roles of objects in mental health and wellbeing contexts:

> "I've thought ever since we first met, the different roles that objects can play where I think before I'd always had it from sort of my art therapy, but then obviously, seeing that connection bit between people in groups with the objects that becomes it's a drawing point for people to share and swap experiences."

These reflections present opportunities for future cycles of PAR to involve participants in community mental health and wellbeing groups to become involved in object making practices. These objects could then be used in further object-based practices, feeding back into further stages of PAR for the development of this. This aligns with the multidisciplinary, community-based approaches recommended in the next decade of mental health and wellbeing research (Wykes et al, 2021). With her own experience of Participatory Research, Natasha was particularly open to future collaborative opportunities around this.

5.7 A NEW ROLE FOR CRAFT IN OBJECT-BASED PRACTICES

As this chapter demonstrates, a wealth of potential opportunities have been identified for

craft to support object-based practices in the mental health and wellbeing space. The final chapter will bring findings together in response to the three key research questions.

Chapter Six

6. CONCLUSION

To conclude this project, the key findings will be reflected on in line with the research questions. The limitations of the project will also be touched on throughout, and the chapter will culminate with opportunities for future research, including further cycles of PAR.

6.1 ANSWERING THE RESEARCH QUESTIONS

Question 1: What role can craft play in the development of objects which open up conversations around object-based practices in community mental health and wellbeing settings?

Despite the fact that handcrafted objects are currently used very little in object-based practices in general, this study has uncovered significant potential for the role of craft in this space. It has revealed that abstract objects offer more potential for interpretation than objects more commonly used in object-based practices, which could lead to the facilitation of deeper conversations within community mental health and wellbeing settings. Handcrafted objects also allow more conscious variation in material choices, allowing them to offer more conscious modalities of therapeutic engagement. Craft can also allow a variety of objects to be intentionally and consciously produced, with the different shapes, sizes, materials, textures and finishes allowing a wider variety of participant preferences to be catered for and eliciting different emotional responses. These findings show promise for objects like those in section 2.3.1, however findings show less need for such objects to be so refined. Findings also showed that any digital aspects should be more refined however, which leads to the second research question:

Question 2: In what ways can the scope of this be broadened by digital haptic technology?

The vibrotactile cultural probe that was used to answer this question elicited mainly negative responses. However, merit in such objects was uncovered in the conversation that followed. This revealed that there can be as much value in negative responses to object-based practices as positive responses, however this should be carefully considered in line with mental health and wellbeing contexts. Additional findings showed that participants saw therapeutic value in any objects that could facilitate non-directive engagement, and could see the potential for vibrotactile technology to feed into this. They also identified how this could make object-based practices more accessible in terms of equality and diversity. Findings also showed value in the use of these digitally interactive objects to support integration into group settings, suggesting potential for them to be incorporated into community object-based practices for mental health and wellbeing.

Question 3: How can these newly crafted objects contribute towards further conversation around object-based practices?

The newly crafted objects produced for this project fueled a variety of reflective responses and participant insights to examine object-based practices for mental health and wellbeing holistically. In order to do this, the project drew on a broad range of object-based practices, which was noticeably uncomfortable for some participants. However, the role of the objects as enticatypes allowed reflection on new possibilities for these practices to be connected to answer this research question.

The conversations elicited also allowed me to challenging some of my own assumptions around object-based practices for mental health and wellbeing across the cycles of PAR. Following

Phase 1, I assumed that these should only be run by practitioners with more experience of working in these contexts. My own experiences as a museums object-based learning facilitator and in student pastoral care were built into these assumptions. However, Phase 2 revealed that more facilitator insight would have been welcome, as there was a need for more integrated facilitator and practitioner approaches in the space going forward. More awareness and responsibility around participant safety should be at the forefront of this, with the recognition that object-based practices can elicit powerful emotional responses. The lack of facilitator insight in Phase 2 was a recognised by participants as a limitation in this study, which will be taken into consideration in future cycles of PAR. Furthermore, the success of the objects as enticatypes also led me to reflect on their role in future research outside of further cycles of PAR for this project, outlined in section 6.3.

6.2 FUTURE RESEARCH

These findings point towards a number of future research opportunities for further development of objects and object-based approaches. Firstly, despite limitations in retaining participants between fieldwork phases, this project demonstrates a starting point for the development of an object-based community of practice. It has also provided a rationale for growing this community to include mental health and wellbeing service users and other professionals, as well as a variety of craft and HCI practitioners. This has the potential to provide a strong collaborative working group for further cycles of PAR.

In developing new objects, this community could explore how craft can be employed to facilitate different modalities of object making and object-based interventions, encouraging further expansion of these practices in community healthcare practices for mental health and wellbeing. Further research in this area should continue to speak to studies calling for further exploration around materiality and affect (MacDonald, 2023), however it should be recognised that individual preferences cannot always be quantified. Craft practitioners with interests in making objects for these purposes should therefore ensure their objects are as abstract and materially diverse as possible. This should also include collaboration between creative practitioners to develop wider variety of object choice. Collaboration between craft and HCI practitioners should also be explored in line with this, continuing the expansion of the term hybrid-craft outlined in section 2.2.3. Some of the boundaries between craft and HCI practices demonstrated in Chapter 2 will possibly need to be blurred to do this successfully.

Continuing to develop this diverse community of practice will also inform further evolution of the object-based practices that these newly crafted objects are used in. This study has recognised that the integration of facilitator and practitioner approaches through this working group could add particular value in community mental health and wellbeing settings where group approaches take place. Facilitator input would provide broader insight on the variety of activity that is possible in these contexts, while practitioner input would ensure these activities are designed to be adapted in line with dynamic participant needs.

6.3 FINAL REFLECTIONS

Undertaking this project has shaped my identity as a practice-based researcher, including re-framing the purpose of my practice. Findings relating to the success of these objects as enticatypes have shown the potential wider implications for these in opening up dialogue in other social research contexts. This is promising in relation to the difficult conversations needed to shape wider cultural challenges and social issues, including the mental health crisis. The role of practice is therefore intended to be continued in this way in future research to design, produce and reflect on objects and object-based approaches which contribute to more effective conversations around such issues. This changed relationship with my 3D making practice means that I now see move value in using it to provide insight into important questions rather than to offer neatly packaged solutions, and I intend to continue to use it in this way infuture research projects.

Please now refer to Page 48 of the Portfolio for closing remarks on the creative practice element of this project.

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LIST OF APPENDICES

APPENDIX 1

APPLICATION FOR ETHICAL APPROVAL (STAGE 2 FORM FOR PHASE 1)

Please complete all sections unless advised otherwise by Research and Enterprise. Questions highlighted in **bold** and *italicised* are particularly important and answers must be detailed or there will be a delay in obtaining ethical approval.

Upon completion, please email to research@gsa.ac.uk. Your application will then be sent for review by members of the GSA Research Ethics Sub Committee.

1. APPLICANT DETAILS

Name of researcher (Applicant):	Catriona "Cat" Doyle
School:	School of Innovation
Project Title:	*"Sense of Community:* Supporting self-management and empowerment in people with mental health challenges through co-design of tactile digital objects"
Funder:	Digital Heath and Care Innovation Centre (DHI)
Date work is scheduled to begin:[1]	6th October 2022

2. RECRUITMENT

a)

Number of participants required:	Up to 10
Will recruitment be direct (led by the researcher) or indirect (led by an organisation / third party)?	DIRECT

[1] We will endeavor to return a speedy response to applicants but you are advised to send us your application as soon as possible to ensure your research timetable is not compromised

b) If your study involves INDIRECT recruitment, please detail the recruitment plan covering: i) organisation / institution / individual in charge of identifying possible participants; ii) how they will recruit individuals (letters, phone calls etc); iii) any individual who has direct contact with participants; iv) any ethical protocols the third party has in place; v) level of permission that third party has to disseminate information on behalf of the participants (append any documents if necessary)

N/A

c) If your study involves DIRECT recruitment (i.e led by the applicant / research team):

Who is in charge of recruitment:

Myself (the applicant and the researcher)

What is the method of identifying participants:

Four potential participants have been identified through online research, however up to ten participants may be identified as the research progresses.

How will participants be invited to take part: (e.g. letters, phonecalls, door to door):

Approached via email using GSA student email account.

d) Regardless of method of recruitment, what is your exclusion / inclusion criteria for this study:

Inclusion criteria: (1) Professionals who are involved in planning, organising and delivering activity to support mental health, particularly in socially prescriptive contexts (2) Practitioners and researchers who work with digital technology in social contexts.

In all cases, append a copy of i) information sheet for participants; ii) consent form; iii) copies of any other documents distributed to participants

3. CONSENT

a) Give a detailed account of the steps taken by the researcher to obtain informed consent from the participants (regardless of method of recruitment):

A participant information sheet containing full details of the purpose of the project, what will be involved and how the information will be stored and disseminated will be distributed to all potential participants along with a blank consent form. Participants will be asked to indicate on the consent form whether they have read and understood the information sheet and whether they have had the chance to ask any further questions they might have. I will stipulate on the participant information sheet that participants can request an initial meeting (either online or in person) if they would like to meet with me for any reason prior to the interview, including to ask for further information.

b) How will researchers ensure the participant has capacity to consent:

Participants will be asked to indicate their capacity to consent on the consent form, however I will not proceed and will seek further advice if there is any doubt about an individual's capacity to consent at any point in the process.

c) If your work requires participants belonging to vulnerable groups (children under 16, adults unable to give consent, prisoners, individuals in dual relationships), what additional steps will be taken to gain consent:

Not applicable in this phase of the project, however this may apply in further phases. Separate ethical approval will be applied for in this instance.

d) If your work requires the consent of a gatekeeper, please detail the steps you will take to ensure participants are not coerced by their gatekeeper. State also whether you plan to obtain additional signatures from participants and if not, why

Not applicable in this phase of the project, however this may apply in further phases. Separate ethical approval will be applied for in this instance.

e)

How much time will be given for the participant to decide whether or not to take part:	1-2 weeks
By what method will you seek to obtain consent (written, oral, video etc) and why: NB: please be aware of any Data Protection issues here	Written consent by signing a consent form, because the terms of consent and full details of the research project can be outlined clearly and can be obtained as proof of what the participant is consenting to. Completed consent forms will be sent to me via email. I will then check over the form and get back to participants with further clarifications before signing the form myself. A copy of the finalised consent form will then be sent back to participants. These files will contain personal information, therefore will be stored in line with GDPR – see below for more information.
Will copies of consent be given to participants:	YES
For how long will the copies of consent be retained by the researcher and where will the consent form be stored:	I will retain both printed hard copies and encrypted digital copies of completed consent forms for the duration of the project. Printed hard copy consent forms will be stored in a lockable cabinet within the School of Innovation. Digital copies will be stored in an appropriate place on The Glasgow School of Art (GSA) network and back up copies will be made. Upon project completion, printed hard copies will be securely destroyed, however encrypted digital copies will be retained for ten years in line with The Glasgow School of Art's Data Management Policy. This will account for any follow up consent queries. This will be made explicit on the participant information sheet/consent forms. Digital copies of consent forms sent to me as email attachments will be saved to The Glasgow

	School of Art network, password protected and immediately deleted from my emails. Hard copies of the consent forms will also be printed and stored in a dedicated lockable cabinet within the School of Innovation to ensure there is a safe, duplicate form in hard copy in case of digital file corruption.

4. LOCATION

a) If the research activities take place in a third party location (i.e. not on GSA premises), please explain the choice with reference to the study. Append confirmation of permission to use location given by the owner and confirm that all researchers have been made aware of any local rules and regulations (append if necessary).

Where possible, the research activity will take place at each participant's place of work. Where this is not possible (e.g. if participants live too far away or if it is their preference), the research will take place over Zoom. Fieldwork risk assessments will be carried out for each place of work I will be visiting.

Due to the nature of the research activity (i.e. the use of physical object prototypes to aid discussion – see "Methodology and Activities" section) and the fact that it will impact further phases of research, it is essential that the planned research activity should take place in person where possible.

A choice has been made to undertake the research activity at the participant's place of work to allow me to observe each participant's work environment/activities in situ and build a clearer picture of their professional lives. It will also make participants feel more comfortable and easily able to relate conversation to their work environment/activities. This should hopefully lead to more valuable data collection and insights which wouldn't be noted if the interview took place online. Furthermore, I will be able to draw observations and comparisons across the contexts that the participants work in when analysing the data. These could be useful for informing further phases of research as well as informing a series of contextual vignettes in the final write up.

It is not possible to append confirmation of permission to use the locations planned for this study at this stage because participants haven't been approached yet. However, I have included this as part of informed consent, asking participants to confirm that their place of work can be the location for the research to take place (see sample consent form).

As part of my own personal safety, I will let my supervisors know who I am meeting, the location I am meeting them and the time the meeting will take place in advance of meeting each participant. I will also ask each participant in advance about specific health and safety protocols that I should follow in relation to their places of work.

b) If the research activities take place in the participants' home, please CLEARLY explain the choice with reference to the study and why no other location is possible. Detail all measures taken to minimise the risk to both participants and researchers entering the home.

N/A

5. INCENTIVES

a) Reasonable reimbursements for time and travel compensation are acceptable as incentives to participate in a research study. An acceptable level of reimbursement would be no more than £50 (approximately).

Do you plan any of the following:

Travel reimbursement only	NO
Small incentive only (e.g. gift voucher)	NO
Travel and small incentive	NO

b) If the incentive exceeds £50, please state the reasons why (note a large financial incentive, whilst appearing generous, could be deemed unethical on the grounds of coercion. See also, the Bribery Act 2010):

N/A

6. METHODOLOGY AND ACTIVITIES

a) Please state the methodology employed within the study and give references (literature or any previous work by the researcher) to support their use:

Previous research

In a previous study as part of my Postgraduate Certificate (PG Cert) in Learning and Teaching, I investigated the impact of object handling on participant engagement levels in a museum education setting. Participatory Action Research was chosen as a methodology for this study because this methodology aims to investigate how situations can be improved through cyclical loops of reflecting, planning, acting and observing (Burns, 2016). For the first time, this approach provided me with the evidence I needed to design interventions based on knowledge co-constructed between myself and participants rather than based on my own impulses (Doyle, 2019).

Findings from my PG Cert study revealed several benefits of object handling, including enhanced self-esteem, motivation and creativity (Parton et al, 2017, Deci et al, 1991), as well as greater learning enjoyment and an improvement of confidence (Doyle, 2019). All of these things have the potential to improve mental health and wellbeing, therefore these findings supported my lifelong interest in using my creativity to develop innovative ways of improving the mental health crisis. This became the catalyst for this current study as part of my Master of Research project.

How previous research links to this project

I believe that Participatory Action Research is the most appropriate methodology for this study because, although I am looking at object handling in a different context, the research activity for this project will encapsulate a continuation of the methodology employed in my previous object handling based research. Reflections gleaned from data gathered from my participants will inform the next loop of planning, acting and observing in the Participatory Action Research process and will be used to design and deliver further activities in the next phase(s) of research.

One of the things I am most curious about is exploring whether some of the positive bi-products of object engagement (outlined above) can occur with objects specifically designed for therapeutic purposes. I also would like to explore the relationship between the act of object engagement and the act of participatory action research itself and identify which process (if either) is most successful at facilitating these positive bi-products. In relation to this, a 2018 participatory action research project called “Leapfrog” saw, improved confidence as a result of its activity. This project used co-design to engage communities in public sector decision making and got participants thinking about alternative approaches to this. This led to both improved results in public sector decision making, as well as improved participant confidence in their abilities (Johnson et al, 2018). It will be interesting to see the positive bi-products that emerge as part of this study which may have the potential to further enhance the impact that this project has on mental health and wellbeing.

The role of the object

For my PG Cert research, I used ready-made objects from The Glasgow School of Art Archives and Collections to facilitate the object handling aspect of the research. In this activity, I will instead be employing my three-dimensional making practice to produce objects for participants to engage with during the data collection process. These objects will take on the role of “provotypes”, a word used to describe “provocative prototypes”. These artefacts are used in the participatory research field to stimulate conversation around designing something for an improved future outcome (Wild, 2020, Mogensen, 1992). In this case, these physical object provotypes will aid conversation about designing novel object handling experiences to improve quality of life for individuals with mental health challenges. This will in turn facilitate another key aspect of Participatory Action Research - the co-construction of new knowledge between myself as the researcher and my participants (McIntyre, 2007).

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McIntyre, A, 2007, *Participatory Action Research,* Sage Publications Inc.

Parton, A et al, 2017, *The Implementation of Object-Centred Learning through the Visual Arts: Engaging Students in Creative, Problem-Based Learning*, International Journal of Education Through Art, 13, p.147–162.

Wild, C, 2020, *Knitting in the round – Provotyping to explore innovation in Fair Isle knitting*, MRes thesis, The Glasgow School of Art.

b) For each activity employed please detail: i) its purpose; ii) direct correlation to the research outcomes; iii) how any analysis will be performed. **Copies of all material given to participants must be appended to this form wherever possible.**

ACTIVITY 1: (e.g. questionnaire, focus group, interview etc),

Observation will be used for two purposes; (1) To observe how participants interact with my physical object provotypes (see Section 6a for further information) (2) to provide further insight about each participant's professional working environment.

I plan to record written fieldnotes of my observations which will be used to produce vignettes and/or character profiles to further illustrate other research findings and inform further cycles of participatory action research. I also plan to take photographs to illustrate this further. Narrative analysis will be used to turn these observations into a story format.

ACTIVITY 2: (e.g. questionnaire, focus group, interview etc),

Semi-structured interviews will be used for two purposes; (1) to explore participants thoughts about the physical object provotypes (2) to allow me to gain contextual information about other activity undertaken by participants in their professional capacities. Semi structured interviews have been selected as a method because they allow for an explorative approach ideal for the co-construction of knowledge in Participatory Action Research.

I will audio record each interview. Part of the conversation will be aided by the provotype objects (see section 6a for further information) and ideas for how these could be developed/modified and/or incorporated into interventions to support mental health will be discussed. Each interview will be transcribed with the aid of Otter Ai transcription software. Thematic analysis will then be used to uncover key themes from the data and draw comparisons and conclusions.

If there are any further activities, please continue and append to this form.

c) State how harm, distress or anxiety to the participants will be minimised during the study

Although there is a very low risk for the study to cause harm and/or distress to participants, I will keep participation anonymous so that there is no chance of participants being negatively impacted by the study. In addition, data collected will only be reflective of participant's professional lives rather than their personal lives, which should mean that there is very low risk of obtaining sensitive personal information as part of data collection.

As mentioned in Section 4, interviews will be carried out in each participant's workplace environment which should feel familiar and comfortable to them. If participants would like to and where possible, I will provide an opportunity for them to have a brief meeting with me before they take part in the study to manage their expectations of the process and build rapport with them to ensure they feel at ease with me.

Furthermore, although it is not my intention to discuss personal information during this process, participants own personal experiences may be triggered due to the nature of the discussion (i.e around mental health). To mitigate this, I will ensure that participants know they have the power to pause/terminate the interview at any time if they feel uncomfortable. Participants will also have the right to skip any questions that they do not want to answer. This information will be explained to participants as part of the informed consent process (see sample Information Sheet and Consent Form). I will also reiterate this before proceeding with all interviews.

An ice-breaker exercise will be used with the objects to ease initial interview anxiety.

The objects can also be used to play with during the interview to continue to ease any anxiety.

d) Please state the time commitment of the participants and whether you plan repetitive testing as part of the study

Any initial meetings requested by participants will last for 30 minutes. The actual data collection process will last no more than 1 hour 30 minutes. There will be no repetitive testing. Participation will be arranged with participants at a convenient time for them in line with their working pattern.

e) What is the statistical power of the study:

N/A

If you plan to leave participants with information at the close of the study (e.g. leaflets with further information, details of support groups etc), please append to this form.

7. PARTICIPANT DATA

All researchers must abide by the Data Protection Act 1998 and the GSA Data Protection Policy – it is the responsibility of the researcher to familiarise themselves with each.

Here we make the distinction between personal data (anything that identifies a participant such as name, address, phone number) and research data generated by that participant (interview, photos of etc) as each requires a different for handling and storage.

	Personal Data	**Research Data**
Who is the custodian of the data:	The researcher	The researcher
Where will the data be stored:	Hard copy data will be stored in a lockable cabinet in the Innovation School Office in the Haldane. Digital data will be stored in encrypted files and saved to an appropriate location on The Glasgow School of Art Network.	Hard copy data will be stored in a lockable cabinet in the Innovation School Office in the Haldane. Digital data will be stored in encrypted files and saved to an appropriate location on The Glasgow School of Art Network.
Who has access to the data:	The researcher and project supervisors.	The researcher, project supervisors and participants if they wish to see it.
Will permission to identify the participants be sought as part of informed consent	NO	
What methods will be undertaken to guarantee anonymity (e.g. coding, ID numbers, use of pseudonyms)	Use of coded names (e.g. “Participant 1”)	
How will the link be broken between participant details and information given as part of study?	Use of coded names (as above)	Use of coded names (as above)
How long will the data be stored for? (Participants must be made aware of this at point of consent).	Printed hard copy versions of participant consent forms will be retained for the duration of the project and then securely destroyed following completion. Digitally encrypted versions of project consent forms will be kept for ten years in line with GSA’s Research Data Management Policy.	Raw research data will be kept for ten years in line with GSA’s Research Data Management Policy
How will the security of the dataset in its entirety be secured?	Printed hard copy material will be stored together in a named project file and locked away in a dedicated filing cabinet within the Innovation School offices in the Haldane building.	None of this material will contain sensitive personal information. Hard copy material will be stored safely in the researcher’s home. Digital material will be stored on the researcher’s space on The Glasgow School of Art’s

	Digital material will be stored in appropriately named and encrypted files which will be stored in an appropriate location on The Glasgow School of Art network.	network and backed up to an external hard drive.
How will the data generated by analysed and used?	It will be used for the researcher to identify each participant and correlate each participant with their informed consent choices.	It will be coded and analysed using narrative and thematic analysis.
Who will have access to the data beyond the project (if the data is being retained, not destroyed).	The researcher and the project supervisors.	The researcher and the project supervisors.
Does the research funder require the participant data generated be lodged with them upon conclusion? If yes, give details	No	No

8. SAFETY

All researchers must abide by the GSA Health and Safety Policy (http://www.gsa.ac.uk/about-gsa/key-information/occupational-health-and-safety/) – it is the responsibility of the researcher to familiarise themselves with this.

a) How will the safety of the participants be ensured during this study?

Since the data collection is intended to take place in person, the main safety concern for participants is the mitigation of COVID-19. I will get in touch with participants before each session to request that the interview takes place at a 1 metre distance in a well-ventilated space and that any hard surfaces that will be touched (e.g. tables and chairs) will be cleaned. When moving between any spaces, I will request that both myself and the participants wear a face covering. All provotype objects will be quarantined for at least 48 hours before each participant handles them. Each object will be placed in its own plastic tub for transportation and quarantine purposes, and I will ensure the use of hand sanitiser for both myself and each participant before and after handling the boxes. Only the participant involved in the research on a particular day will handle the physical provotype objects. During the making process, I will ensure that there are no sharp edges on the provotype objects on which participants could hurt themselves.

b) If your work requires participants belonging to vulnerable groups (children under 16, adults unable to give consent, prisoners, individuals in dual relationships), what additional steps will be taken to ensure their safety:

N/A

c) If the study involves work on non-GSA premises, how will the safety of researchers working off site be ensured?

I will ask each participant if there are any health and safety issues we should be aware of in their place of work before carrying out data collection. I will also ask them what health and safety procedures they follow and how I can follow these as well (for example signing in to their buildings).

9. DECLARATION

Please ensure you have answered all the questions herein and have appended the following documents:

Consent form: YES Participant Information Sheet: YES

Follow up information: NO Any other relevant documentation (please state): N/A

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS APPLICATION IS ACCURATE. I UNDERSTAND THAT SHOULD I COMMENCE RESEARCH WORK IN ABSENCE OF ETHICAL APPROVAL, SUCH BEHAVIOUR MAY BE SUBJECT TO DISCIPLINARY PROCEDURES.	
NAME OF PRINCIPAL INVESTIGATOR:	CATRIONA DOYLE
SIGNED:	
DATE:	05/08/2022

Please email the completed form and associated documents to Research and Enterprise (research@gsa.ac.uk).

APPENDIX 2

APPLICATION FOR ETHICAL APPROVAL (STAGE 1 EDITED FORM FOR PHASE 2)

Form 1: Preliminary Research Ethics & Risk Form

Introduction GSA has a duty to ensure its research and knowledge exchange projects undergo appropriate ethical review before they start. This includes internally and externally funded projects executed by GSA staff and postgraduate research students. In addition to basic institutional requirements, main research funders (e.g. Research Councils) require assurances that projects have been through appropriate ethical review and that the research will be conducted within a research governance framework which is embedded within the institution.

Who needs to complete this? Any staff or research student: i) beginning a new research or KE project; ii) submitting a research grant application; iii) significantly revising current research activities or introducing new research activity to an existing project.

Research students must review their application with a member of their supervisory team before submitting this form for ethical review.

What happens to this form? Upon completion of PART A *and* PART B, please send to research@gsa.ac.uk for review by Research and Enterprise. It will either be signed off at that stage, returned with feedback for revision or, if the project is more complex or carries higher risk, you may be asked to provide a more detailed assessment of ethical issues and justification of your proposed approach (Form 2).

Do I need to provide anything else? Yes, a description of the research activities the form refers to; this could be a grant application, doctoral studentship application, or a short summary on the following page that places the research activities in context. If research participants are involved, you will subsequently be asked to prepare consent forms, information sheets and other materials as relevant. Covid-19: to minimise risks to research participants, researchers should continue to use online or remote methods if possible. If you intend to undertake face-to-face research, you must provide a justification on page 2.

PART A: Preliminary Research Ethics Assessment

Applicant	Catriona "Cat" Doyle
Project Title	" Wellbeing is No Object" - Opening up conversation around mental health interventions through
School / Research Centre	Innovation School
Collaborators	N/A
Supervisor (if student)	Dr Jay Bradley, Dr Cara Broadley and Madeline Smith
Anticipated project start date:	October 2023

Description of the research activities for which you are seeking ethical approval. Please provide a concise summary of the research activity you intend to undertake below, indicating the nature of the tasks, the objectives, why the proposed methods are appropriate and why (if relevant) you have identified particular participants for involvement. Alternatively, you may provide a funding application, studentship application or similar document that already describes the proposed research activities - in which case, please state the nature of the document you have provided below, and note any adjusted plans, if applicable.

This overall research activity explores the possibilities for combining digital haptic technology with the researcher's creative practice to create digitally enhanced 3D objects which can be brought into the field to open up conversations around therapeutic object handling practices, as well as to explore the potential for using such objects to design new mental health and wellbeing interventions. The research will follow a Participatory Action Research methodology and this will be the second cycle of iterative fieldwork and the final phase for this MRes project.

The first phase of research involved seven participants from a variety of proffesional mental health and wellbeing related contexts participating in individual reflexive activity based interviews. In this second phase, the researcher will invite these same participants back. Each participant will be delivered a digitally enhanced 3D object created by the researcher (either in person or by post depending on participant location), to act as a cultural probe, as well as a blank journal and a series of journal prompts. Participants will be given one week with the object where their task is to handle and engage with it, using the journal and journal prompts to reflect on their experiences of doing so. Participants can use any media they like when making their journal entries and will be asked to record their reflections however they feel comfortable doing so. They will be encouraged to be as creative as they would like (e.g. through drawings or

Covid-19: face-to-face research, justification and risk mitigation. While Covid-19 continues to be a significant public health concern, GSA policy remains that research should still be undertaken online or using remote methods if possible [*last updated August 2021*]. Face-to-face research will only receive ethical approval if: i) the researcher can provide a strong justification for undertaking the research, in the public interest, ii) they demonstrate that sufficient measures will be taken to minimise potential harm to themselves, peers, participants, stakeholders and members of the public, and iii) activities conform with any Government regulations and GSA Safe Campus policies in force when the research takes place. In most cases, anyone proposing face-to-face research will be asked to prepare full ethical assessment materials and fieldwork health and safety plans - sufficient time should be allowed for preparation and review. If you intend to undertake face-to-face research, please briefly summarise below why the proposed research cannot be undertaken remotely, and how you will minimise any risk of harm to those involved.

Phase One of this project took place in person to give the researcher a clearer understanding of participant interaction with the objects during activity-based interviews. As such, various COVID-19 mitigations were put in place, including; 1 metre distancing between researcher and participants, the wearing of masks when moving between spaces, the cleaning down of surfaces and chairs used, use of hand sanitiser and the quarantining of objects before they were handled by participants. Most of this is not necessary for Phase Two, which will take place remotely. The only risk that the researcher can potentially foresee is in the objects, journal and journaling instructions which will be sent out and handled by participants. Everything will therefore be quarantined for at least 48 hours before the participant receives it to mitigate this risk. As well as making it easier for participants in their various locations to meet, facilitating this phase remotely will greatly reduce the risk of transmission of COVID-19 between the researcher and participants.

VULNERABLE GROUPS	YES	NO
Children under 16	☐	☑
Adults unable to give consent under the Adults with Incapacity Act (2000) Scotland	☐	☑
Prisoners (incl those convicted under UK law, detainees or asylum seekers)	☐	☑
Individuals in dual relationships (e.g. students, staff, family members of GSA staff etc)	☐	☑
SPECIAL PERMISSION	**YES**	**NO**
Do you use animals or other organisms covered by the Animals (Scientific Procedures) Act?	☐	☑
Does the research involve the use of human tissue?	☐	☑
RESEARCH IN CLINICAL SETTING	**YES**	**NO**
Will any of your participants have connections to the NHS? (staff, patients etc)	☐	☑
Do you plan to recruit using NHS data or by advertisement on NHS premises?	☐	☑
Does your project qualify under the NHS definition of 'research'?	☐	☑
PARTICIPANTS & CONSENT	**YES**	**NO**
Are your participants member of the public?	☐	☑
Are your participants professional / peer in a similar capacity to the researcher?	☑	☐
If you have answered 'yes' to either of the two preceding questions, will you take informed consent?	☑	☐
Do you need to use a gatekeeper to access or recruit participants to your project?	☐	☑
Is the research covert, deceptive or misleading to participants?	☐	☑
Will participants receive payment for their time (exclude travel / refreshments) ?	☐	☑
METHODS AND DATA	**YES**	**NO**
Does your research involve interviews / workshops / questionnaires at any point?	☑	☐
Will participant responses be kept anonymous at the point of data collection?	☐	☑
Do you plan to use anonymity in reporting of data?	☑	☐
Will you need to store participants' personal information?	☑	☐
Could any data you source / generate / disseminate be deemed security sensitive under Counter Terrorism Security Act) ?	☐	☑
Does your research require you to take photographs of participants, film participants or record their voice?	☑	☐
Will you use a third party to process your research data (e.g transcriber)?	☐	☑
Will your research require you to source data protected by copyright (e.g images, archives)?	☐	☑
Do you require participants to sign over any intellectual property rights to the institution?	☐	☑
Will you alter a participant's contribution (beyond anonymising / blur faces on a photo etc) ?	☐	☑
Are you conducting internet only research or similar, where the identity of participants cannot be verified?	☐	☑
SAFETY & WELLBEING	**YES**	**NO**
Does your research involve access to third party premises (e.g participant's home, community centre) ?	☐	☑
Could the study result in distress to the researcher beyond that which could be reasonably expected?	☐	☑

Will the project involve discussions of sensitive topics that could induce upset, anxiety or harm? If so, state: Although it is not my intention to discuss s	✓	
Does the research involve using any kind of equipment, heavy lifting or sharp objects? (A Health and Safety Assessment must be carried out if 'yes')		✓
Has the researcher considered any impairments participants might have and made adjustments?	✓	
Will the research take place out with the UK? If so, state location:		✓
DISSEMINATION	**YES**	**NO**
Will there be a public exhibition of research outcomes?	✓	
Will you use social media to report on your project while still in progress? (e.g blogging, Facebook page)	✓	
Will there be a de-brief or report sent back to participants?	✓	
RESEARCHER INTEGRITY	**YES**	**NO**
Is there any conflict of interest within the work, from collaborators or sponsors?		✓
Could any issues of conflict arise in the reporting of the results?		✓
Has the project undergone peer review?		✓
Can you remain neutral as a researcher in the pursuit of the project?	✓	
(STUDENTS ONLY – IN CONFIDENCE) Could any element of the supervisor – student relationship adversely affect or undermine the project?		✓

Acknowledgement: This form was developed from work within the Miriad Ethics Research Project, J Spencer, Manchester Metropolitan University and Manchester School of Art, 2015.

Please feel free to add further details on the project relevant to this application:

A public exhibition of research outcomes is not planned at this stage, however I may choose to include this as part of the dissemination of the overall project upon its completion. Photographs from this stage in the research may be included as part of such an exhibition.

Although I may report on my project using social media, I will not tag or name any participants. Any photographs will be kept anonymous (for example, photographs of people's hands handling objects only) - please see sample consent form for more information.

Researcher checklist	Yes	No
I have read each of the following i) GSA Research Ethics Policy; ii) GSA Health and Safety Policy; iii) GSA Data Protection Policy	✓	
For projects that include participants, I have provided i) sample information sheet; ii) sample consent form, I intend to use	✓	

For Research Students only: I confirm that a member of my supervisory team has reviewed this form and approved it for submission.

Yes ✓ — Name of supervisor and date of review: Dr Cara Broadley, June 2023

I certify that the information contained in this application is accurate. I understand that should I commence research work in absence of ethical approval, such behaviour could be subject to disciplinary proceedings.

Signed: [redacted] Date: 5-Jun-20

Confirmation of Approval by Research Ethics Committee (Sign & Date)

If not approved: Full ethical review required ☐ Revisions required ☐

PART B: Insurance Research Risk Assessment

The purpose of this section is to identify any risks early in the research development process such that they can be mitigated for and, if required, additional due diligence can be carried out or additional research insurance can be obtained. With the increase in diversity of research at GSA, it has brought challenges for our research governance processes which this section is attempting to clarify.

Note this section does not draw out all possible risks in a research project only those mist pertinent to our insurance policy. You are strongly encouraged to have a project specific research register to capture all possible risks within your project.

Please answer yes or no to the following questions:

ACTIVITY	YES	NO
Does your research involve the NHS in any way (e.g. access to buildings, staff or records etc)?	☐	☑
Does any of your research involve health or social care in any capacity (e.g working at a care home, interviewing due to health condition or profession etc)?	☑	☐
Does your work involving medical devices or any kind or in any capacity including those commercially available?	☐	☑
Does any aspect of your research involve working with animals or working with human / animal tissue or products (e.g. hair, skin, blood samples or use of animals in artwork etc)?	☐	☑
Will you be operating drones or any aerial devices?	☐	☑
Will you or anyone else be participating in what could be described as extreme activities (e.g. visiting remote locations, working in unsafe environments etc)?	☐	☑
Does the research require you or participants to work alone in any way or at any stage of the project?	☐	☑

If you answered YES to any of the questions above please proceed to the next page

If not, please **Save As** and return to research@gsa.ac.uk

For each activity you have said YES to on the previous page, please outline what you feel are the risk(s) (note there could be more than one risk per activity), what you feel the risk score might be (ie how bad would an outcome be) and what the likelihood of that risk occuring might be. You are also asked what mitigating actions you can put in place to avoid the risk coming to pass.

Risk	Risk score (H / M / L)*	Likelihood (H / M / L)*	Mitigation
e.g. experiment needs to be carried out in participants home without researcher present	M	L	i) Screen participants using inc / excl criteria; ii) give health and safety details incl what is expected vs unexpected; iii) give information about what to do in case of an adverse effect
			Some boxes on this side need fixed, can only put a small amount of text in (or I would have included more detail)
This box needs fixed - duplicates info into next box and won't let you edit it - see >>>			This box needs fixed - duplicates info into next box and won't let you edit it - see >>>
Although it is not the intention to discuss these, personally sensitive topics may be triggered in	L	M	Iterate this on participant information sheet and consent form - participants can terminate interview at any time.
Research is taking place within different professional environments - there may be	L	H	Ask parti. in advance about health and safety protocols
Participants may disclose details about mental health social prescriptive service users.	L	L	All data will be stored securely in line with GDPR and I would not include this information in the final write up.

* H = High; M = Medium; L = Low. We are looking for your best judgment in your perception of any risk(s) identified.

Please **Save As** and return as an attachment to research@gsa.ac.uk

APPENDIX 3

FIELDWORK RISK ASSESSMENT

School/Department	Innovation School	**Overview of activity/event/visit**	My overall research activity aims to explore how object handling and digital technology can be combined to produce therapeutic interventions to suppor condition management and/or empowerment for individuals with mental hea challenges. The research will follow a Participatory Action Research methodology and this will be the first phase. The activity will involve observation and semi-structured interviews with professionals who work in t contexts of (1) social prescribing for metal heath and (2) digital design. Where possible, the fieldwork activity will take place within the participant's place of work.
Location:	Recruitment has recently begun so not all specific locations have been confirmed. Locations currently identified are socially prescriptive contexts for mental health within Glasgow, such as Impact Art and The Deep End at Govanhill Baths. The researcher also plans to recruit digital technology professionals from inside GSA (for example, staff members from the Interaction Design Course). The researcher may also choose to recruit participants from elsewhere in Scotland and/or the UK (for example Judy Willcocks of the Museum and Study Collection at Central St Martins who specializes in Object Handling for Mental Health. Any interviews taking place in a location which is unsuitable to travel to and back from within a day will be conducted remotely via Zoom. In this instance, the	**Assessment carried out by:**	Catriona "Cat" Doyle (the Researcher)

	researcher may send physical objects to participants by courier.				
Date(s) of fieldwork:	October 2022 to January 2023	**Fieldwork Leader Name:**	Catriona "Cat" Doyle (the Researcher)	**Assessment date:**	02/09/2022
				Review Dates:	To be completed by reviewer
Accommodation Address and Telephone Number:	N/A – I do not plan to stay in accommodation.	**British Consulate Address and Telephone :**	The Glasgow School of Art, 167 Renfrew Street, Glasgow, G3 6RQ 0141 353 4500	**Home Departmental Contact During Visit:**	Jay Bradley: [redacted] Madeline Smith [redacted]

*Refer to the RISK MATRIX at end of form to establish the risk rating

Risk assessments for fieldwork must be completed before the start of the activity and the following must be considered:

- Consider/Seek relevant advice from USHA/ UCEA guidance and the FCO if planning trips outside the UK.
- Location of local medical facilities including qualified first aiders and supplies.
- Emergency contacts, either physical persons or telephone numbers and including local emergency services e.g. Police, Fire Stations, Base camps, home contact.
- Next of Kin and GSA home contact.
- Mobile phone signal coverage in intended location.
- Transport issues, travel arrangements to and from the location including contingency plans in case of normal service disruption and journey duration.
- Food and water supplies and specific dietary requirements.
- Power supplies including adaptors, batteries, chargers and torches.
- Lone working, if relevant.
- Personal health matters and assurances of fitness to travel, known allergies and issues relative to medical confidentiality and Data protection
- A contingency plan and emergency plan which should address all foreseeable risks.

Information on the nature of the hazards identified and the control measures to be adopted must be communicated appropriately to all participants. Dynamic risk assessment is commonly required in the field as unexpected conditions emerge, including active management of incidents and emergencies.

The below is a non-exhaustive list of hazards to be considered.

SPECIFIC ASPECT OF ACTIVITY/EVENT/VISIT:

What are the hazards?	Who might be harmed?	What is the risk level?*	What are the existing measures to manage the risk effectively?	Is any further action or information required?	Action by:		
					Who	When	Completed
Transport and Travel To and from the fieldwork area Transportation around the area during the trip Embarkation/ Disembarkation From vehicles at the roadside	The researcher (Catriona Doyle)	Low	Suitable travel arrangements and correctly licensed and insure drivers Carry out due diligence and use a reputable company rather than self – drive vehicles. Safety check on vehicles as far as is reasonably possible	The researcher will use her own vehicle, ensuring MOT, servicing and insurance are all up to date. This lessens the risk of transmission of COVID-19 on public transport. If this is unsuitable or not possible, the researcher will travel by public transport.	Catriona Doyle	In advance of research activity planned.	
Personal Safety Consider the risk of violence, kidnap, and crime. If overseas consider possible political instability.	The researcher (Catriona Doyle)	Low	Abide by the FCO advice on the country, ensuring updates are monitored before and during travel. Provide information and awareness briefings as appropriate.	The researcher will stay in areas which are well populated and not take short cuts though unfamiliar environments. The researcher will provide her supervisors with an itinerary of dates and times for where she will be.	Catriona Doyle	At the time of/in advance of research activity planned.	
Accommodation Consider Fire, Security, Local surroundings	N/A	N/A	Carry out due diligence on the accommodation both pre departure and on arrival. Use reputable company when booking. Ensure all party members familiarise themselves with the evacuation procedure and escape routes.	N/A	N/A	N/A	N/A
Catering	The researcher (Catriona Doyle)	Low	Carry out due diligence as far as is reasonably practicable on all catering facilities used. Ensure all participants know about the risks of food borne diseases. Be prepared for treating stomach upsets. Ensure allergies are disclosed.	The researcher has a severe nut allergy. She will prepare and bring her own food for consumption during research outings and/or buy foods she is confident are safe for her to eat. She will not accept food from research participants. The researcher does not plan to	Catriona Doyle	In advance of research activity planned.	

				provide catering for participants.			

What are the hazards?	Who might be harmed?	What is the risk level?*	What are the existing measures to manage the risk effectively?	Is any further action or information required?	Action by:		
					Who	When	Completed
Physical Hazards Extremes of weather. Countryside/ Wilderness environment e.g. mountains, cliffs, quarries, marshes and quicksand. Urban environment	The researcher (Catriona Doyle)	Low	Site specific risk assessments should be conducted as part of the planning procedure that take into account local climate, conditions at time of visit. Risk assessment should detail specific safety equipment required Suitable clothing and footwear advised. Consider sun protection Sufficient access to water, shelter, shade depending on the intended environment.	The researcher will dress appropriately for the weather and will bring food/water.	Catriona Doyle	In advance of the research activity	
Biological Hazards Poisonous plants Bites, stings	N/A	N/A	Site specific risk assessments to be conducted as part of the planning procedure that take into account local, conditions at time of visit. Suitable clothing, i.e. long trousers if there are insects that may bite etc.	N/A	N/A	N/A	

Aggressive animals Soil or water			Provide appropriate information to all participants about likely hazards and how to minimise risks Consider training/ briefing on how to behave around animals, if appropriate Consider immunisation and suitable medicines				

What are the hazards?	Who might be harmed?	What is the risk level?*	What are the existing measures to manage the risk effectively?	Is any further action or information required?	Action by:		
					Who	When	Completed
micro- organisms							
Chemical Hazards **Pesticides** Dusts Contaminated soils Chemicals used on site	N/A	N/A	Avoid where reasonable practicable If chemical hazards are likely to be significant to the intended trip, a separate specific COSHH assessment is needed	N/A	N/A	N/A	N/A
Other Hazards Electrical Equipment Vehicles Insecure buildings Slurry pits Power & Power lines	N/A	N/A	Avoid where reasonably practicable Ensure party members are adequately supervised and trained.	N/A	N/A	N/A	N/A
Hazards leading to Slips, trips and falls	The researcher (Catriona Doyle) and Participants	Low	Obtain basic first aid competence and carry first aid kits where possible Supervision of activities and team responsibilities.	The researcher is a qualified first aider and there should also be first aid protocols in place at all sites attended since this will be professional places of work. The researcher will clarify first aid protocols for each site in advance with each participant.	Catriona Doyle	In advance of the research activity.	

Manual Handling	N/A	N/A	Ensure all handlers of equipment /loads are familiar with appropriate manual handling techniques.	N/A	N/A	N/A	N/A
Emergency Arrangements	The researcher (Catriona Doyle)	Low	Emergency procedures (e.g. First aid, distance from medical facilities, survival aids, communication, incident management procedures) Use mobile phones in areas where reception is available. Have emergency numbers to hand.	As outlined above, the researcher is a qualified first aider and there should also be first aid protocols in place at all sites attended since this will be professional places of work. The researcher will write down (and store in her phone) the contact details of her next of kin and her supervisors so that these individuals can be contacted in an emergency.	Catriona Doyle	In advance of the research activity	

What are the hazards?	Who might be harmed?	What is the risk level?*	What are the existing measures to manage the risk effectively?	Is any further action or information required?	Action by:		
					Who	**When**	**Completed**
			Emergency plan in place.				
Misuse of alcohol and drugs/Poor participant behaviour	N/A	N/A	Establish clear rules about drinking and drug use, with sanctions applied if broken. Circulate the code of conduct.	N/A	N/A	N/A	N/A
Physical Exertion	N/A	N/A	Adequate food and drink each day, including breakfast Emergency food and water available	N/A	N/A	N/A	N/A
Recreational Activities/Down time	N/A	N/A	Establish clear rules about what is allowed, with sanctions applied if broken.	N/A	N/A	N/A	N/A
Environmental Impact	N/A	N/A	Keep physical disturbance to a minimum	N/A	N/A	N/A	N/A
Consider the presence of people with disabilities including:	Participants	Low	Foster a culture where people with disabilities are able to disclose their disability freely. Assessment into potential support	The researcher will provide an opportunity for participants to have a brief meeting with her before they take part in the study (if they wish) to ensure that they feel at ease and to	Catriona Doyle	Prior to the research activity	

1. Visual impairments 2. Mobility difficulties 3. Hearing difficulties 4. 'Hidden' Disabilities			needs and individual capabilities should be undertaken in consultation with the individual concerned. Make reasonable adjustments to enable participation Take steps to ensure the person does not go beyond their capabilities Take steps to ensure that other members of the party are not put at additional risk	give them an opportunity to disclose any information that they would like to around preferences in relation to disability.			

What are the hazards?	Who might be harmed?	What is the risk level?*	What are the existing measures to manage the risk effectively?	Is any further action or information required?	Action by:		
					Who	When	Completed
5. Mental health problems 6. Pre-existing conditions	The researcher (Catriona Doyle) and participants	Low	Fieldwork leaders should be advised in advance of how to manage foreseeable difficulties.	It is not the researcher's intention to discuss personal information during this process, however participants own personal experiences may be triggered due to the nature of the discussion (i.e. around mental health). To mitigate this, the researcher will ensure participants know that they reserve the right to pause or terminate the interview at any time if they feel uncomfortable. Participants will also be able to skip any questions they do not wish to answer. This information will be explained to participants as part of the informed consent process. Again, participants may wish to choose to disclose mental health difficulties to the researcher in advance of the interview. Although the researcher is currently mentally well, her own mental health challenges may be unintentionally triggered as a result of the nature of this discussion. She will ensure that she takes time to look after herself following each activity to mitigate this.	Catriona Doyle	Prior to, during and following research activity.	

Transmission of COVID-19	The researcher (Catriona Doyle) and participants	Medium	Become familiar with GSA Institutional COVID-19 guidelines. Become familiar with guidelines in place at locations being visited and asking for these from participants in advance.	The researcher will get in touch with participants before each session to request that the interview takes place at a 1 metre distance in a well-ventilated space and that any hard surfaces that will be touched (e.g. tables and chairs) should be cleaned in advance. When moving between any spaces, the researcher and participants will wear a face covering. Artifacts being handled will be quarantined for at least 48 hours before each participant handles them. Objects will be placed in a plastic tub for transportation and quarantine purposes. The researcher will ensure the use of hand sanitiser for themselves and for each participant before and after handling the object tub(s). Only the participant involved in the research on a particular day will handle the physical objects themselves.	Catriona Doyle	In advance of and during research activity.	
Injury when handling objects	The researcher (Catriona Doyle) and participants	Low	-	The researcher will be making the objects themselves and will ensure that there are no sharp areas on them that participants could get hurt on. In the unlikely event that objects break and/or participants get hurt, the researcher is a qualified first aider. She will ensure that she has access to first aid supplies before proceeding with the research.	Catriona Doyle	In advance of and during research activity	
Other	N/A	N/A	Consider further detailed risk assessment for any inherently dangerous activities, climbing, diving, caving	N/A	N/A	N/A	N/A

ADDITIONAL INFORMATION

Pre Departure Meeting(s)/Briefing Content and dates	The researcher will provide this following recruitment and confirmation of activity dates/times.
Participant Training	N/A
Transport Information (Flight Times and Rail/Road Travel times):	The researcher will provide this following recruitment and confirmation of activity dates/times.
Foreign and Commonwealth Office Advice (If Applicable)	N/A
Permission to Work on Site	The researcher will provide this following recruitment and confirmation of activity dates/times.
Insurance Arrangements	N/A
First Aid Cover	The researcher is a qualified First Aider and will also confirm First Aiders in the places of work sh will visit prior to research activity.
Staff to Student Ratio	N/A

SIGNATURES

Assessment Carried out by	Name	Signature	Date
Fieldwork Leader	Catriona Doyle	[redacted]	02/09/2022
Approved by Head of Department/ Manager	Marianne McInnes	[redacted]	7.9.22
Approved by Head of School (if residual risk is medium/high)			

APPENDIX 4

PARTICIPANT INFORMATION SHEET FOR PHASE 1

Thank you for your potential interest in taking part in the study: Sense of Community: Supporting self-management and empowerment in people with mental health challenges through co-design of tactile digital objects. This information sheet provides further details and will help you to make an informed choice about participation. The researcher has provided a sample consent form alongside this information sheet.

WHAT IS THE PURPOSE OF THE ABOVE STUDY?

A number of studies demonstrate the value and/or potential value of physical objects in the mental health space. They can fulfil a number of therapeutic roles, including reducing difficult feelings (Camic et al, 2011), providing links between an individual's inner and outer experiences (Brooker, 2010) and improving selfworth (Romano, 2012, Brooker, 2010, Camic 2010). Furthermore, creative object led activities done in a group can strengthen interpersonal connectedness and have a significant positive impact on mental health (Willcocks, 2021). In addition, a promising and growing body of research demonstrates how objects which incorporate tactile digital technology can facilitate a number of therapeutic experiences (McDaniel & Panchanathan, 2020). The researcher is interested in where these areas meet. In what ways can the therapeutic aspects of group object-based activity and tactile digital technology be combined? What is the potential for these combinations to enhance the therapeutic experience? How can these findings be used to produce recommendations for future-led therapeutic interventions which support condition management and citizen empowerment of mental health challenges? In this initial phase of the research study, these questions will be explored through observation and semi-structured interviews with professionals who work in the fields of both third sector mental health support and digital tactile

technology. These activities will centre around a series of prototype three dimensional objects created by the researcher.

WHY HAVE I BEEN INVITED TO TAKE PART?

You have been asked to take part due to your professional background within the field of mental health and wellbeing support and/or digital technology.

DO I HAVE TO TAKE PART?

Please do not feel under any obligation to take part in this study and be assured that you reserve the right to withdraw your participation at any stage in the process. You also reserve the right to skip any questions that you do not wish to answer during the interview. If you do choose to withdraw at any point in the process, the researcher will arrange a discussion with you about any data that you consent to being used in the project.

WHAT WILL HAPPEN TO ME IF I TAKE PART?

The researcher will arrange the activity with you on a suitable date and at a suitable time within your place of work, preferably face to face. The whole process should not take any longer than 1 hour and 30 minutes of your time. Prior to beginning, the researcher will request a short tour of your place of work and to see any relevant examples of your practice that you feel comfortable sharing. Observations about these aspects will be collected by the researcher in the form of audio recording and photographs. The purpose of this is to allow the researcher to build a clearer picture of your place of work and activities to help illustrate key research findings. The researcher will ask permission before each photograph is taken. Please note that you reserve the right to refuse any photographs that you do not wish to be taken and that photographs of your workplace will be used for reference only.

The semi-structured interview will consist of a relaxed conversation based around your knowledge and experience in your field and any significant projects you have been involved in. You will then be asked to engage with a series of three-dimensional objects that the researcher has made and to consider how these objects could be modified and/or have the potential to be used in relation to your area of expertise. Again, the researcher will observe your interaction with these objects for a short time and record these in the form of audio recordings and

photographs. The research activity will be audio recorded and transcribed by the researcher with the aid of transcription software. You, your colleagues and/or your clients may also be invited to take part in further phases of the research in the future. The same rules will apply in these further stages as outlined in the "Do I have to take part" section of this information sheet.

WHAT ARE THE POSSIBLE BENEFITS AND RISKS TO TAKING PART?

The study will give participants the chance to participate in a creative conversation, allowing them to reflect on their own practice and provide an opportunity to stimulate new ideas to be taken forward. It will also provide an opportunity for the development of further working relationships between the participant and the researcher.

Since this research is being proposed face-to-face, there is a risk of Covid-19 transmission. Risk assessments have been undertaken in preparation for the event of this happening, however a risk will remain. To mitigate this, the researcher requests that the activity should take place at a 1 metre distance in a well-ventilated space. Any hard surfaces that will be touched (e.g. tables and chairs) should be cleaned in advance. When moving between spaces, the researcher will wear a face covering and requests that all participants do the same if possible. All objects being used in the activity will be quarantined for at least 48 hours before each participant handles them. Each object will be placed in its own plastic tub for transportation and quarantine purposes, and hand sanitiser will be used before and after handling the boxes.

Since subjects relating to mental health will be discussed, sensitive personal thoughts or experiences could be triggered for some participants. Exploring this will not be part of the study, however participants reserve the right to terminate the interview at any time, to take breaks or to skip questions if they feel distressed or uncomfortable for any reason. It is also recognised that some participants may feel anxious about taking part in an interview and answering questions "correctly". Please be assured that all contributions made will be extremely valuable. Participants can also request a copy of the interview transcript to review and/or choose which information is included in the study dissemination. Please refer to the accompanying consent form where this choice can be outlined. Please let the researcher know in advance if these is anything she can do to make you feel safer, or if you would like to reschedule or withdraw your

participation at any point.

WILL MY TAKING PART BE KEPT CONFIDENTIAL?

Yes, you will be kept anonymous and only named as a numbered participant (e.g. "Participant 3"). Any photographs taken will be taken of your hands and the physical environment only. No identifiable photographs (i.e photographs of your face) will be taken. Any data collected in the form of audio recording will be used and represented in transcript form.

HOW IS THE PROJECT BEING FUNDED?

The project is being funded by the Digital Health and Care Innovation Centre. Please refer to their website here for more information.

HOW DO I TAKE PART?

Please complete the accompanying consent form and email it to c.doyle4@student.gsa.ac.uk.

HOW WILL MY INFORMATION BE STORED?

All data will be held in line with General Data Protection Regulation (GDPR) 2018. Completed consent forms containing personal information will be kept in both hard copy and digital format. Hard copies will be printed and stored securely in a designated locked cabinet on The Glasgow School of Art (GSA)'s Innovation School premises. These will be securely destroyed upon completion of the project. Digital copies will be saved from the email attachment to an appropriate place on the GSA network. These will be accessible to the researcher and her supervisory team only via their GSA log in details and will also be encrypted with a password and backed up. Email attachment copies of the completed consent forms will be deleted as soon as the document is saved, encrypted and backed up. These will be retained on the GSA network for ten years before being securely destroyed in line with GSA's Research Data Management Policy. For the duration of the project, research data containing non-personal information (audio recordings, transcripts etc.) will be kept in digital format on the researcher's space on the GSA network, backed up to an external hard drive and potentially retained in hard copy format in the researcher's home. Audio recordings will be encrypted with a password and backed up. Following completion of the project, this data will be 4 transferred to an appropriate area on the

GSA network and retained for ten years in line with GSA's Research Data Management Policy. It will be destroyed securely following this. Photographs will be kept permanently for dissemination purposes.

WHAT WILL HAPPEN TO THE RESULTS OF THIS STUDY?

The results of the study will be written up as part of the researcher's Master of Research thesis. This will be published on RADAR, The Glasgow School of Art's research repository which can be found here. The researcher may also choose to submit an article about the project for publication in a relevant journal and/or produce an exhibition as a research output at the end of the project. With permission, photographs of participant hands engaging with the objects may be disseminated anonymously via social media.

WHO SHOULD I CONTACT FOR FURTHER INFORMATION?

If you have any questions or require more information about this study, please contact the researcher (Catriona "Cat" Doyle) at [redacted]

You may also request a short meeting with the researcher prior to agreeing to take part if you wish. If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact GSA for further advice and information. Please send such enquiries to Jay Bradley at [redacted] and/or Madeline Smith at [redacted]

Thank you for reading this information and for considering taking part in this research. Please keep this information for future reference.

APPENDIX 5

PARTICIPANT INFORMATION SHEET FOR PHASE 2

TITLE OF STUDY

Wellbeing is No Object: Using craft to challenge perception of object-based practices in the Mental Health and Wellbeing space

INVITATION TO PARTICIPATE

Thank you for your potential interest in continuing to take part in the above study. This information sheet provides further details and will help you to make an informed choice about participation. The researcher has provided a sample consent form alongside this information sheet.

STUDY BACKGROUND AND PURPOSE

A number of studies demonstrate the value and/or potential value of physical objects in the mental health space. They can fulfil a number of therapeutic roles, including reducing difficult feelings (Camic et al, 2011), providing links between an individual's inner and outer experiences (Brooker, 2010) and improving self-worth (Romano, 2012, Brooker, 2010, Camic 2010). In addition, a promising and growing body of research demonstrates how objects which incorporate tactile digital technology can facilitate a number of therapeutic experiences (McDaniel & Panchanathan, 2020).

The researcher is interested in where these areas meet. In what ways can 3D object making practice be combined with a range of existing object handling practices to diversify the ways in which objects are used therapeutically in mental health and wellbeing contexts? How can tactile digital technology become embedded in the practice to enhance the object engagement experience? How do these handcrafted, digitally enhanced objects compare in terms of therapeutic benefit to other types of objects (e.g. found objects) in the literature?

WHY HAVE I BEEN INVITED TO TAKE PART?

You have been asked to take part in Phase 2 because you were a participant in Phase 1 and this project follows a Participatory Action Research (PAR) methodology. A key characteristic of PAR is that it allows knowledge to be produced *with* participants in a particular context through a series of research iterations. This knowledge is then fed back into the original context as an actionable intervention for change (McAra, 2017, Swann, 2002, Zuber-Skerritt 1993). In this next phase of the research therefore, participants and the researcher will build on the insights collected in Phase One to produce new knowledge to be taken into mental health and wellbeing contexts.

DO I HAVE TO TAKE PART?

Please do not feel under any obligation to take part in this study and be assured that you reserve the right to withdraw your participation at any stage in the process. If you do choose to withdraw at any point in the process, the researcher will arrange a discussion with you about any data that you consent to being used in the project.

WHAT WILL HAPPEN TO ME IF I DO TAKE PART?

Phase One of this study saw participants engage in activity-based interviews, where a series of physical 3D objects created by the researcher were used to explore these questions. In this second phase, the same participants will engage with a different set of objects that the researcher has made, which will this time be enhanced with digital technology. **Participants are not required to spend more than 30 minutes on this task, however you may do so if you wish and if you are enjoying the activity.**

Participants will be delivered one object each and asked to engage with the object in their own time, recording their reflections about the object using a journal and a series of journal prompts provided by the researcher. Blank journals will be provided by the researcher, but participants can use any other media they like when making their journal entries. Participants will be asked to record their reflections however they feel comfortable doing so and are encouraged to be as creative as they like (e.g. through drawings or photographs). One week later, the researcher will arrange for the collection of the objects and journal responses from the participants.

The researcher will collate the responses on interactive whiteboard using “Miro” online

collaboration platform and will then meet all participants together on Zoom for a focus group of no more than 2 hours (with a short break in the middle). During this session, the participants and the researcher will reflect on the journal responses produced and use these as a starting point for the co-production of a set of recommendations for how mental health and wellbeing interventions with such objects should be taken forward.

Please note that all activities for this second phase of fieldwork will take place remotely and you will not be asked to meet with the researcher or the rest of the participants face to face. Furthermore, yourself, your colleagues and/or your clients may also be invited to take part in further phases of the research in the future. The same rules will apply in these further stages as outlined in the "Do I have to take part" section of this information sheet.

WHAT ARE THE POSSIBLE BENEFITS AND RISKS OF TAKING PART?

The study will give participants the chance to participate in a creative conversation, allowing them to reflect on their own practice and provide an opportunity to stimulate new ideas to be taken forward. It will also provide an opportunity for the development of further working relationships between all participants (including between participants and the researcher).

Since subjects relating to mental health will be discussed, sensitive personal thoughts or experiences could be triggered for some participants. Exploring this will not be part of the study, however participants reserve the right to leave the group at any time, to take breaks or to skip questions if they feel distressed or uncomfortable for any reason. It is also recognised that some participants may feel anxious about taking part and in answering "correctly". Please be assured that all contributions made will be extremely valuable.

The focus group session will be audio recorded and transcribed using speech to text transcription software. The audio files and full transcripts will not be used in the research dissemination, however anonymised extracts from the transcript are likely to be used to illustrate research findings. Participants will not be identified personally and will be anonymised through the use of pseudonyms. However, they will have the opportunity to review the focus group transcript if they wish and to request removal of any information that may identify them or that they do not wish to exist in the public domain. Please refer to the accompanying consent form where this choice can be outlined.

Please let the researcher know in advance if these is anything she can do to make you feel safer, or if you would like to reschedule or withdraw your participation at any point.

WILL MY TAKING PART BE KEPT CONFIDENTIAL?

Yes, you will be kept anonymous and a pseudonym will be used in lieu of your real name. Any images that may be published in the final works that show your face (e.g. stills from Zoom) will be blurred so that you are not identifiable. Any data collected in the form of audio recording will be used and represented in transcript form.

HOW IS THE PROJECT BEING FUNDED?

The project is being funded by the Digital Health and Care Innovation Centre. Please refer to their website here for more information.

HOW DO I TAKE PART?

Please complete the accompanying consent form and email it to [redacted].

HOW WILL MY INFORMATION BE STORED?

All data will be held in line with General Data Protection Regulation (GDPR) 2018. Completed consent forms containing personal information will be kept in both hard copy and digital format. Hard copies will be printed and stored securely in a designated locked cabinet on The Glasgow School of Art (GSA)'s Innovation School premises. These will be securely destroyed upon completion of the project. Digital copies will be saved from the email attachment to an appropriate place on the GSA network. These will be accessible to the researcher and her supervisory team only via their GSA log in details and will also be encrypted with a password and backed up. Email attachment copies of the completed consent forms will be deleted as soon as the document is saved, encrypted and backed up. These will be retained on the GSA network for ten years before being securely destroyed in line with GSA's Research Data Management Policy.

For the duration of the project, research data containing non-personal information (audio recordings, transcripts etc.) will be kept in digital format on the researcher's space on the GSA network, backed up to an external hard drive and potentially retained in hard copy format in the researcher's home. Audio recordings will be encrypted with a password and backed up. Following completion of the project, this data will be transferred to an

appropriate area on the GSA network and retained for ten years in line with GSA's Research Data Management Policy. It will be destroyed securely following this. Non-identifiable photographs will be kept permanently for dissemination purposes.

WHAT WILL HAPPEN TO THE RESULTS OF THE STUDY?

The results of the study will be written up as part of the researcher's Master of Research thesis. This will be published on RADAR, The Glasgow School of Art's research repository which can be found here. The researcher may also choose to submit an article about the project for publication in a relevant journal and/or produce an exhibition as a research output at the end of the project. With permission as indicated on the consent form, non-identifiable images produced during the research may be used in future dissemination.

WHO SHOULD I CONTACT FOR FURTHER INFORMATION?

If you have any questions or require more information about this study, please contact the researcher (Catriona "Cat" Doyle) at [redacted] You may also request a short meeting with the researcher prior to agreeing to take part if you wish. If this study has harmed you in any way or if you wish to make a complaint about the conduct of the study you can contact GSA for further advice and information. Please send such enquiries to Jay Bradley at [redacted], Cara Broadley at [redacted] and Madeline Smith at [redacted].

Thank you for reading this information and for considering taking part in this research. Please keep this information for future reference.

APPENDIX 6

SAMPLE PARTICIPANT CONSENT FORM

Project Title: Wellbeing is No Object: Using craft to challenge perception of object-based practices in the Mental Health and Wellbeing space

Lead Researcher: Catriona "Cat" Doyle
Contact Details: [redacted]

Participant Name:
Preferred Contact Details:

Please tick the following statements to give your informed consent.

1. I have read and understand the participant information for the above study. ☐

2. I have had an opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

3. I agree to being recorded on zoom as part of the research. ☐

4. I agree to still images from zoom recordings being used to illustrate the researcher's findings and I understand that my face will be blurred to anonymise me. ☐

5. I understand that my contributions will be kept anonymous within the study and that I will not be identified by personal information (such as my name or place of work). ☐

6. I wish to receive a copy of the focus group transcript for the chance to make any amendments before the research findings are disseminated. ☐

7. I agree to the results of the study being made available in publications, presentations, reports or examinable format (dissertation or thesis) for the purposes of research and teaching and understand that I won't be made identifiable as a participant. ☐

8. I agree to images of my reflective responses being used in this project and understand that these will be credited with my participatory pseudonym. ☐

9. I understand that my reflective responses are my intellectual property and as such these will be returned to me following the research project. ☐

10. I agree to images of my reflective responses being used in future research and understand that these will be credited with my participatory pseudonym. ☐

11. I agree to images and quotes from the focus group being used anonymously in potential future exhibitions as part of further research. ☐

12. I agree to the results being used for *future* research or teaching purposes. ☐

13. I understand that the raw research data collected by the researcher when I take part in the study will be destroyed following the project completion. ☐

14. I understand that this consent form will be stored **securely** in hard copy and digital format for the duration of the project. ☐

15. I understand that following the project, the hard copy version of this consent form will be securely destroyed while the encrypted digital version will be stored securely on The Glasgow School of Art network for the next ten years in line with The Glasgow School of Art's Research Data Management Policy. ☐

16. I agree to be contacted about any further studies within the next 5 years and agree that my personal details can be retained in accordance with General Data

Protection Regulation (GDPR). ☐

17. I have the capacity to give informed consent and agree to take part in the above study. ☐

Please sign and date overleaf.

_____	_____	_____
Participant Name	Date	Signature

_____	_____	_____
Participant Name	Date	Signature

APPENDIX 7

TOPIC GUIDE FOR SEMI-STRUCTURED ACTIVITY BASED INTERVIEWS

PART 1: CONTEXTUAL INFORMATION

- Tell me about the work that you currently do and how your background led you there?
- What are the key approaches that underpin your practice and why do you choose to use these?

- What are your main goals for supporting participants?
- How far do you feel those goals are met?
- Do you face any challenges that you'd like to improve?

- Have you got any insights on the individual vs the group setting in mental health and wellbeing? What are the benefits of each?
    - Any thoughts on how objects can feed into these settings?

- Who typically uses your service?
    - What types of difficulties do they present with?
    - Do they experience barriers to connection? In what ways?
    - How do people typically access the service?
    - How long do people typically access the service for?
    - What differences do you see in people as a result of using the service?

- Is a safe space for emotional communication encouraged as part of the work that you do? If so, how?
- Do object -based practices could come into the work that you do? How?
- If so, how do you think objects can help people understand their own experiences/feelings?
- If not, can you see the potential of objects being used in this way? Why/Why Not
- What other ways do you believe objects can support mental health and wellbeing?

PART 2: OBJECT ACTIVITY

Spend some time engaging with the objects in the box before choosing one that speaks to you in some way.

1. **Describe** (the object you have selected for the recording)
    - What physical characteristics does it have?
    - What do you think it is made of?
    - What sensory aspects does the object have? (what does it feel/look/smell/sound like?)
    - What colours/textures/patterns/shapes can you see within the object?
    - Do you think the object is meant to look like anything in particular?
    - Are there any other defining qualities about the object?

- 2. **Deduction** (about the object in relation to you)
    - Why did you select this particular object ?
    - Does the object relate to/remind you of anything?
    - Does the object bring up any particular experiences, emotions or memories? Please feel free to share these, but do not feel obligated.

- **Hypothesis** (the object's place in wider object-based practices)
    - Have you seen/can you see objects like these playing a similar role in mental health and wellbeing? How/Why?
    - How do you think using handmade objects like these could be different than using other types of objects (found/everyday/museum). Please bring your own experience into the question if appropriate.
    - What elements of this activity do you think have the potential to support mental health and wellbeing?
    - Some objects are enhanced with digital technology to offer another level of interaction. Can you see these objects being enhanced with technology in this way? How? (Provide examples of digitally enhanced objects to set context for this question).

APPENDIX 8

CULTURAL PROBE INSTRUCTIONS

Thank you for returning to take part in Phase 2 of Fieldwork for "Wellbeing is No Object".

This exercise should take no more than 30 minutes of your time. Please read the following instructions carefully before proceeding.

THE KIT

The kit that you have received should contain:

- 1 x handmade object attached to wires that lead inside a wooden box
- 1 x USB-A to USB-B cable (or USB-C to USB-B cable in one case)
- 1 x wall plug
- 5 x sheets of blank A5 paper
- 1 x black fine line pen
- These instructions (including the list of prompts below)

WHAT DO I DO?

Please engage with the enclosed object and reflect on your experience of doing so using the following prompts and the pen and paper provided.
Feel free to reflect any way you feel comfortable (e.g. writing, drawing etc.) You can also use any other mark making media that you would prefer use instead of the pen provided.

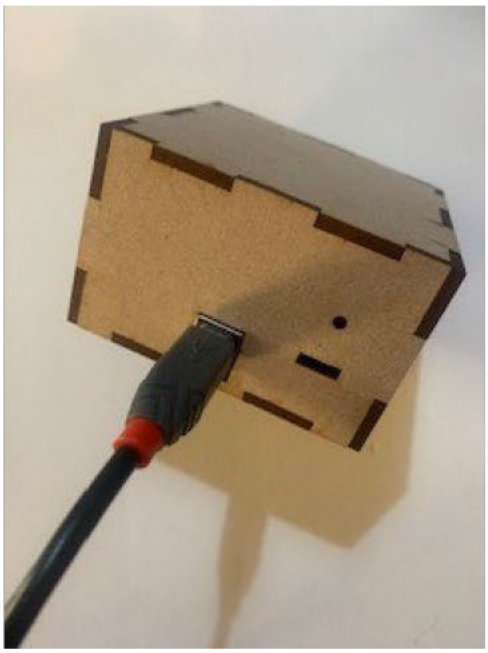
PART ONE

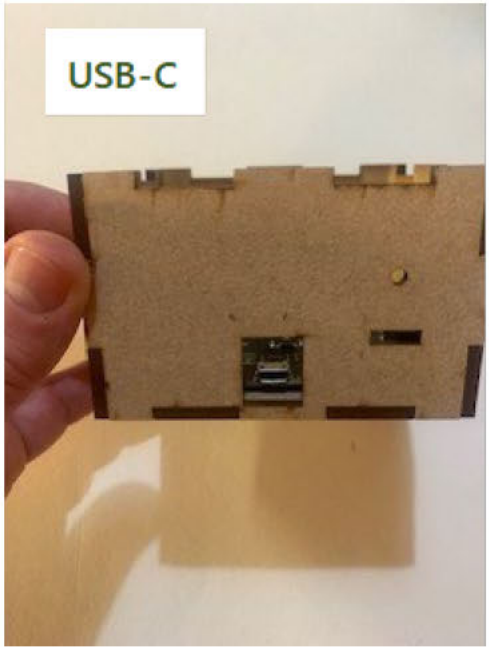
Take the object out of the box. Ignore the wires and the box for now and focus on the object itself.

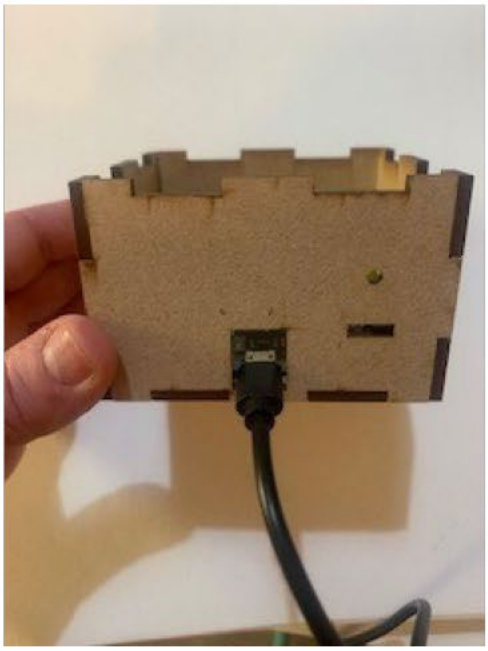
- Describe your interaction with the object
- What sensory aspects are associated with your interaction?
- How does the object interact with your body as you handle it?
- Can you find a way of interacting that feels therapeutic? How?

PART TWO

Now, plug the USB-A (or USB-C) end of the cable into the box as shown in the images overleaf. You will have either a USB-A or USB-C at one end of your cable.







Plug the USB-B end of the cable into the plug provided and plug this into an electrical wall socket. When you touch the end of the green wire, the copper element should gently vibrate. The object has now been enhanced with digital vibrotactile technology.

Please write some short reflections on the following:

- Describe your new interaction with the object, again focusing on the sensory.
- How does the digital enhancement affect your sensory engagement with the object?
- Has the addition of the digital vibrotactile element changed how your body interacted with the object initially? How?
- How does the digital enhancement affect the therapeutic qualities of the object you reflected on in Part One?

PART 3

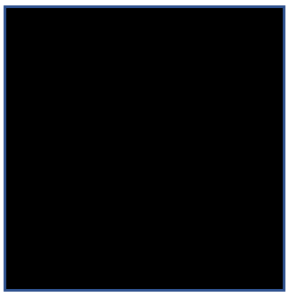
Please reflect on the following:

- Do you think digitally enhanced objects like this one have (a) the same (b) more or (c) less value than non-digital objects in the object based mental health space? Why?
- Can you see digitally enhanced objects like this one somehow becoming embedded into your own/other object-based mental health practices? How/Why not?
- Do you have any further ideas about how digital vibrotactile technology could be embedded into objects to support mental health? If so, please give details.

NEXT STEPS

We will discuss how you found this exercise as part of the focus group for this phase of the research.

When you are finished participating in the exercise and the focus group, please return the kit at your earliest convenience to:



Please let me know your preferred way for the cost of postage to be reimbursed (e.g. by bank transfer). For participants within the Glasgow area, I can also pick up the kit from you if preferred.

If there are any problems with getting the digital technology to work, please contact the researcher via text or phone on [redacted]

Many thanks again for participating!

APPENDIX 9

FOCUS GROUP TOPIC GUIDE

DIGITAL TECHNOLOGY

- Describe your initial responses to the digital object?
    - How would the change in the vibrotactile technology I've described change your response?

- Do you think enhancing the object with digital technology in this way can support the way objects help people to (1) draw out and articulate feelings (2) Provide an interactive thereputic experience?

- How much value do you think technology adds here? How necessary is it?

HANDMADE OBJECTS IN OBJECT BASED PRACTICES

- Can you see yourself using handmade artefacts like the ones you've engaged with as part of your own practice? How might these feed into what you already do?

- Do you think handmade objects might have the potential to shape new object-based engagement practices in mental health and wellbeing going forward? How?

- Would you prefer these objects to be more rough and ready (Phase 1) or more refined (Phase 2)

INDIVIDUAL AND GROUP APPROACHES

- Thinking about what I've said and your own practice, do you think there are ways that individual and group object based approaches can be combined to harness best practices? How?

PRACTITIONER vs FACILITATOR

- What can facilitators learn from your approaches?
- What can you learn from their approaches?
- Is there room for both approaches in the mental health space or should both approaches feed into each other for better practice?
- How does choice of intervention fit in to all of this?
- What are your thoughts in relation to retention rate? Do you have a high retention rate?
- What are your thoughts on the barriers that facilitators face?
- Does anything need to be different to enable facilitators to run sessions more safely?

RECOMMENDATIONS

- Can you think of any other examples or any other mental health/wellbeing contexts that you think could benefit from object-based practices other than those described in the research? (focusing on handmade, but other examples also welcome) If so, what are these?
- Do you think sceptics can potentially be engaged? How?
- Do you have any further ideas about how handmade/creative object-based practices could be diversified in the mental health space? What are these?
- Do you think a framework is needed to help other practitioners to employ these practices with handmade objects? If so, do you know what it should include? What advice would you give them?
- Has reflecting on your own practice and the conversations this research has opened up allowed you to think more broadly about handmade (and other) object-based practices for mental health? How?
- What should be taken forward from this project into future research projects into handmade (and perhaps other types of) object-based practices for mental health?
- How might you and the people you support be part of shaping this?