# A service evaluation of the use of Photography Art Therapy to support mother-infant bonding on a perinatal inpatient Mother and Baby Unit.

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# Introduction

## 1. Background

### 1.1 Perinatal mental health

The perinatal period, which spans from conception to twelve months after giving birth, is a demanding, challenging and affirming milestone for new parents (Garcia & Yim, 2017; Howard & Khalifeh, 2020; & Lam, 2021; Shorey & Chan, 2020). Mothers and fathers navigating this process will experience an array of emotions whilst their identities, roles and responsibilities evolve (Westrupp et al., 2022; Wong et al., 2015). Although fluctuations in wellbeing are to be expected, this period also serves as a risk factor for the development or resurfacing of parental mental health difficulties, including anxiety, depression, eating disorders, post-traumatic stress and psychosis (Dennis et al., 2018; Howard & Khalifeh, 2020; Nillhi et al., 2018; Smythe et al., 2022).

### 1.2 Mother-infant bonding

The terms ‘attachment’ and ‘bonding’ represent two unique components of the parent-infant relationship (Ettenberger et al., 2021; Redshaw & Martin, 2013). ‘Attachment’ prioritises the infant’s experience of developing a relationship with their parent, which hopefully leaves the infant feeling confident to venture into new environments, safe in the knowledge that their caregiver will be available to soothe them during periods of distress (Ainsworth, 1964; Bowlby, 1969; Ettenberger et al., 2021;). In contrast, ‘bonding’ represents the parent’s cognitive, emotional and behavioural response to their infant (Ettenberger et al., 2021; Redshaw & Martin, 2013).

### 1.3 Mother-infant bonding during the perinatal period

There is a wealth of evidence confirming the importance of the perinatal period, particularly with regards to securing the mother-infant bond (Britton et al., 2001). Systematic review, meta analyses and longitudinal research consistently report that disruption to this bond carries implications for the infant's psychosocial development, during their early and later years (Davies et al., 2021; Feldman, 2010; Joas & Mohler, 2021; Le Bas et al., 2022; Leadsom et al., 2014). Given the criticality of this period, many Government, NHS and Health and Social Care initiatives endeavour to intervene during the early years (Leadsom et al., 2014).

## 2. Perinatal Mental Health Services

### 2.1. Development of specialist services

In recognition of the significance and complexity of the perinatal period, NHS England sought to improve the provision of perinatal mental health services as part of their Five Year Long Term Plan (NHS England, 2019). Within this plan, ambitions were set out to develop early intervention services, such as Maternity Outreach Clinics, alongside the expansion of specialist community and inpatient services.

### 2.2. Inpatient Perinatal Mental Health Services

Considering the continuum of the Perinatal Mental Health Pathway, inpatient support represents the most intensive support offered by the NHS (NHS England, 2019). Referred to as Mother and Baby Units (MBU), these services offer support to mothers who require a hospital admission due to experiencing complex and severe mental health difficulties during pregnancy and up to one year post-partum. Mothers and their infant reside on the ward, whilst receiving support from a specialist multidisciplinary team.

Alongside mother and infant, MBU prioritise the inclusion of the wider family system (e.g partner). Advocating a systemic approach is of great importance, given that fathers express feeling alienated from their partner's care, which impacts their attachment to baby and long-term relationship with their spouse (Marrs et al., 2014; Taylor et al., 2017; Taylor et al., 2019)

## 3. Psychological approaches within Perinatal Mental Health Services

### 3.1 National Institute for Health and Care Excellence (NICE) guidelines

NICE (2022) guidelines recommend that parents experiencing mental health difficulties during the perinatal period should have access to High Intensity Cognitive Behavioural Therapy (CBT), Trauma Focused CBT (TF-CBT), Interpersonal Therapy (IPT), Behavioural Couples Therapy (BCT) and Family Therapy (FT). Additionally, following the successful integration of creative arts initiatives within Mental Health Services across the UK, Health Education England (HEE) recommend that Art Psychotherapy becomes embedded within preconception, antenatal and postnatal NHS maternity care pathways (Davis & Lovegrove, 2019; Gordon-Nesbitt, 2017).

### 3.2 Art Psychotherapy

Art Psychotherapy is founded upon the principles of attachment, psychoanalytic and humanistic theories and uses art forms, including photography, to facilitate emotional exploration and expression (Case & Daley, 2014; Cheng et al., 2021; Saita & Tramontano, 2018; Schaverien, 1999). Within the context of perinatal mental health, these art forms aim to unite the parent and infant in an intersubjective experience (Armstrong & Howatson, 2015; Armstrong & Ross, 2020; Bruce & Hackett, 2020). The therapist supports the parent to mentalise their infant's emotional experiences, by offering

observations and encouraging discussions surrounding the parent-infant relationship (Armstrong & Ross, 2020; Becker-Weidman & Hughes, 2008).

### 3.3 Effectiveness of Art Psychotherapy within Perinatal Services

The evidence base concerning the impact of Art Psychotherapy on mother-infant bonding is sparse and inconsistent (Hogan et al., 2017). Following a twelve week group intervention, Armstrong and Howatson (2015) reported significant improvements in self-reported maternal wellbeing and clinician rated observations of the mother-infant relationship. Although similar outcomes in self-reported parental wellbeing were noted by Armstrong et al (2019,) improvements in bonding did not achieve statistical significance. Interestingly, clinician ratings indicated that mothers demonstrated significantly more positive interactive behaviours post-intervention yet the use of negative behaviours (e.g. expressing anger and fear towards the infant) remained the same. A subsequent evaluation by Bruce and Hackett (2020) highlighted that mothers reported improvements in their relationship with their infant yet felt the group addressed their own mental health experiences to a greater extent.

These inconsistent outcomes may be attributable to a number of methodological and contextual factors. For example, the literature utilised both standardised and non-standardised outcome measures which may have led to differences in how ‘bonding’ was operationalised (McNamara et al, 2019). At the time of the intervention, some mothers were simultaneously accessing parental support groups and input from the wider perinatal community team, thus making it difficult to attribute any improvements to the group alone.

A further limitation pertains to the tendency to focus on outcomes alone, rather than the key therapeutic processes underpinning these outcomes (Kazdin, 2009). To address this, Armstrong and Howatson (2015) and Armstrong and Ross (2020) explored the mechanisms of change contributing to the positive outcomes of a range of parent-infant Art Psychotherapy groups. Thematic analysis revealed that parents and therapists attributed post-intervention improvements to; the sense of safety and containment created within the group, offering and receiving support from other parents, the therapist's compassion and attendance to the parent-infant relationship, collaborating with their infant, the accessibility of the materials, modelling positive interactions to the parent and the opportunity to promote an intersubjective experience.

### 3.4 The Service Evaluation Project (SEP)

The Yorkshire and Humber Mother and Baby Unit (MBU) is an eight bedded inpatient service, offering multidisciplinary specialist support to mothers, their infant and family. The project was initially commissioned by the Principal Clinical Psychologist based on the unit but, due to Sue Ranger leaving post, was subsequently overseen by Dr Katie Glazebrook, Senior Clinical Psychologist based in the community team.

The Art Psychotherapy group was introduced onto the unit in January 2021, following the appointment of a Trainee Art Psychotherapist into the service. The first phase of the intervention involved an initial drop-in art psychotherapy session, which focused on journal making. Group art therapy sessions were facilitated alongside the drop-ins. Following this, mothers participated in approximately six structured photo art therapy sessions, which involved the therapist taking photographs of mother-infant interactions and using these art forms to support the mother to mentalise the infant's needs and reflect

on their bonding experience. In line with the mother's ongoing recovery, these photographs progressed from capturing less intense to more complex interactions (e.g. from a photograph of the infant alone to mother and infant co-producing artwork). The photographs were then placed in the journal to illustrate the developing mother-infant relationship. Individual sessions complemented the group format, if needed.

### 3.5 Aim of the SEP

This SEP aimed to evaluate mothers' experiences of an art psychotherapy group during their stay on an inpatient MBU, including the impact on mother-infant bonding.

## 4. Method

### 4.1 Design

A mixed methods research design was used to address the aims of the SEP. This design offered an opportunity to complement the richness of the participants qualitative data with the standardised outcome measures routinely collected as part of their admission (Palinkas, 2014). Such a design has been noted to enhance data triangulation, thus strengthening the credibility of the service evaluation process (Bryman, 2006; Doyle et al., 2009).

### 4.2. Participants and recruitment

To be eligible to participate, participants must have attended at least one Art Psychotherapy session whilst residing on the MBU and have reached an appropriate stage of recovery to provide informed consent and engage in an interview, based on the clinical judgement of the project team members working on the ward. Fluency in the English Language did not form part of the exclusion criteria as the ward had access to an

interpreter service. To safeguard participants and uphold the research ethical principles outlined by the British Psychological Society (BPS; 2021), a purposive rather than volunteer sampling strategy was employed to recruit participants.

In line with Braun and Clarke (2006) recommendations, the project aimed to recruit six to ten participants. Six participants expressed an interest initially, however, due to personal circumstances, two mothers withdrew. As a result, four participants took part in the project. At the time of the interview, all participants had been discharged from inpatient services but remained under the care of the community perinatal team.

### 4.3 Measures

#### 4.3.1 Quantitative measures

**4.3.1.1 The Postpartum Bonding Questionnaire** (PBQ; Brockington et al., 2001)

The PBQ, comprised of twenty-five statements, is a self-report measure regarding the mother-infant relationship. It assesses four domains, namely ‘Impaired Bonding’, ‘Rejection and Anger’, ‘Infant Focused Anxiety’ and ‘Aggression Towards Baby’. Each statement is attached to a six-point Likert scale ranging from ‘always’ to ‘never’, with higher scores indicative of greater bonding difficulties. This measure has produced high levels of internal consistency ($\alpha$=0.76) and interrater reliability (0.87; Brockington et al., 2006; Wittkowski et al., 2007; see Appendix B).

The PBQ was chosen as this measure is routinely administered by the service at the point of admission and discharge. It was therefore not necessary for mothers to complete additional measures, thus reducing participant burden. Although some participants completed the PBQ mid-admission, this was not consistent as other participants only

completed the questionnaire at admission and discharge. To ensure consistency, only admission and discharge scores were analysed. It was noted, however, that some data was completed retrospectively, following a push for the service to improve their outcome measure adherence. Although the Trainee Art Psychotherapist implemented a session-by-session rating scale, this was limited to one question and only completed post-session, thus rendering it difficult to complete pre-post comparisons.

#### 4.3.1.2. Demographic Questionnaire

Participants were invited to complete a demographic questionnaire, which sought information relating to their age, ethnicity, length of stay on the ward, the number of Art Psychotherapy sessions attended and the age of their infant at admission (See Appendix C).

### 4.3.2 Qualitative measures

Following consultation with the Commissioner and Trainee Art Psychotherapist, the PICT devised a semi-structured interview schedule. This was shared with members of the project team, during which feedback and amendments were encouraged (see appendix A). Interviews, as opposed to questionnaire, were deemed most appropriate given the projects aim to capture an in-depth account of the participant's experiences and the sensitivity of the interview topic. By completing interviews, the PICT was able to draw upon their clinical skills to create a safe and ethical interview space (Dempsey et al., 2016). Interviews lasted between 40-90 minutes.

### 4.4 Procedure

Potential participants were approached by a member of the project team working in the perinatal service, either in person or via telephone. Following written completion of the initial interest form (see Appendix D) or verbal receipt of contact details, the PICT telephoned the participant to arrange an interview. Occasions in which the participant had been discharged some time ago and could not recall the Participant Information Sheet (PIS), a copy was sent via email (See Appendix E). As all participants had been discharged from the MBU, interviews were completed via zoom.

Prior to the interview, participants re-read the PIS and were invited to ask any questions. They then provided verbal consent (See Appendix F), completed the demographic questionnaire and engaged in an interview. The PICT read through a debrief form (see Appendix G) post-participation, a copy of which was provided via email. The PBQ data was extracted from the participant's online NHS file by the Commissioner. The scanned PBQ documents were then sent via secure NHS email to the PICT.

### 4.5 Ethical considerations

Ethical approval was provided by the University of Leeds Doctorate in Clinical Psychology Sub Research Ethical Committee on 16th May 2022 (reference number: 21-015). The project also received approval from the Leeds and York Partnership NHS Foundation Trust Research and Development Department on 18th March 2022. Minor amendments, including expanding the project team to include the ward Charge Nurse and phoning participants following discharge were granted by the Committee on 7th June 2022. The following ethical considerations were identified and addressed.

#### 4.5.1 Informed consent and right to withdraw

Participants were invited to review the PIS prior to the interview and consent was verbally recorded. They were encouraged to ask any questions and both the consent and debrief form emphasised their right to withdraw up to two weeks after the interview. The PICT emphasised that the participant could complete none, some or all of the demographic questionnaire.

#### 4.5.2 Confidentiality and its limits

Confidentiality was upheld by assigning a pseudonym/participant name to the participants interview transcript and the information collected as part of the demographic questionnaire was presented in a summary rather than individual format. Only the PICT listened to the interview recordings and all interview summary templates were anonymised. The PIS outlined the concept of confidentiality and its limits, which were reiterated by the PICT prior to the interview.

#### 4.5.3 Potential for distress

To safeguard against unnecessary distress and ensure participants were at the appropriate stage of recovery to take part, members of the project team working in the perinatal service identified and approached potential participants. At the start of the interview, participants were reminded to consider their wellbeing and only share information they felt comfortable disclosing. In the event a participant became distressed, the distress protocol was followed (Appendix H). The debrief form encouraged participants to seek support from ward staff and their community mental health team if they required additional support post-interview.

# 5. Analysis

## 5.1 Quantitative analysis

To explore whether the Art Psychotherapy group improved mother-infant bonding, admission and discharge PBQ scores were compared. This involved assessing for reliable and clinically significant change (CSC; Jacobson et al., 1984).

### 5.1.2 Reliable Change

Reliable change analysis assesses whether changes in mother-infant bonding were the result of the Art Psychotherapy group rather than random or systematic errors in the outcome measure itself or its delivery (Morley, 2018). To determine this, it is necessary to calculate the Reliable Change Index (see Diagram 2). If the Index falls above plus or minus 1.96, the mother-infant relationship is deemed to have reliably improved or worsened, at a significance level not attributable to measurement factors.

$$\frac{\text{Pre PBQ score and post PBQ score difference}}{\text{Standard Error of Measurement (SEM) as calculated by } \sqrt{1\text{- internal consistency coefficient of PBQ questionnaire}}}$$

Diagram 1: Reliable Change Index algorithm (Jacobson et al., 1984, Morley, 2018; Morley & Dowzer, 2014)

### 5.1.3 Clinically Significant Change (CSC)

CSC complements reliable change, by assessing whether mother-infant bonding scores have moved from the clinical range (i.e. scores that are indicative of bonding difficulties) at admission to the non-clinical range (i.e. scores that are not indicative of bonding difficulties) at discharge (Jacobson & Truax, 1991). The clinical cut off scores for each domain of the PBQ are located in figures 1-4 (Brockington et al., 2006, p.236). To assess

for CSC, reliable change must be confirmed initially (Morley, 2018). The Leeds Reliable Change Calculator (Morley & Dowzer, 2014) was implemented to determine reliable and CSC change (see Appendix M-N).

**5.2 Qualitatitive analysis**

Rapid Qualitative Analysis (RQA; Hamilton, 2013) was applied to the interview data. Braun and Clarke (2006) Thematic Analysis was chosen initially, however, due to recruitment difficulties and time constraints, this was not feasible. Hamilton (2013) proposed that RQA is appropriate for mixed methods projects that aim to address a specific question and offer prompt, directive feedback that will improve service delivery. It is considered less time consuming as transcription is omitted yet produces levels of methodological rigour similar to that of Thematic Analysis (Gale et al., 2019; Nevedal et al., 2021; Taylor et al., 2018). Hamilton (2013) RQA process was therefore applied to the interview data (see diagram 1).

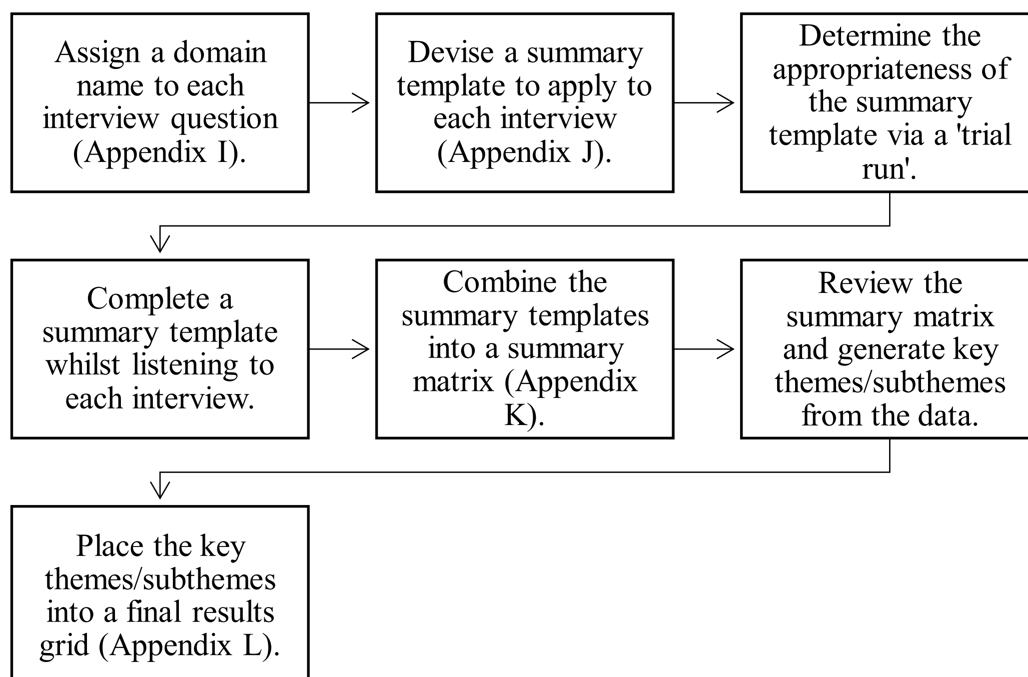


Diagram 2: RQA process (Hamilton, 2013).

### 5.2.1 Credibility checks

The themes generated from the RQA process were discussed with the PICT Academic Tutor. The poster created for the purpose of the SEP conference, which outlined key findings, was reviewed by the Commissioner and read by fellow trainees on the Clinical Psychology Doctorate course.

## 6. Results

### 6.1. Demographic questionnaire

Participants ages ranged from 27 to 35 and all identified as White British. The average length of stay on the MBU was 11 weeks (range: 7 weeks-16 weeks), whilst the number of Art Psychotherapy sessions attended averaged 7 (range: 2-12 sessions). At the time of admission, infants ages averaged 8 weeks (range: 1 week-5 months).

### 6.2 Quantitative results

### 6.2.1 Impaired Bonding Subscale

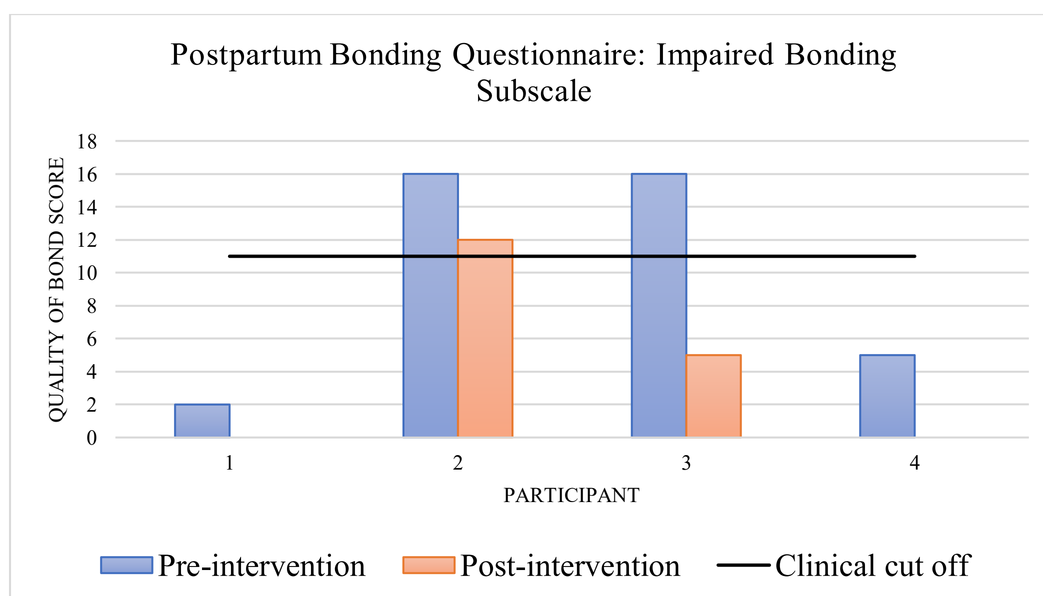


Figure 1: Impaired Bonding Subscale pre and post intervention scores.

As demonstrated in Figure 1, all four participants self-reported improvements in the mother-infant relationship from the point of admission to discharge. However, reliable change indices (0.31, 0.62 and 0.78 respectively) indicate that, for participant one, two and four, these outcomes did not achieve reliable and therefore CSC. In contrast, participant threes scores confirmed reliable change (RCI value of 3.93) and, due to their scores moving from the clinical to non-clinical threshold, CSC was also achieved.

### 6.2.2 Anger and Rejection Subscale

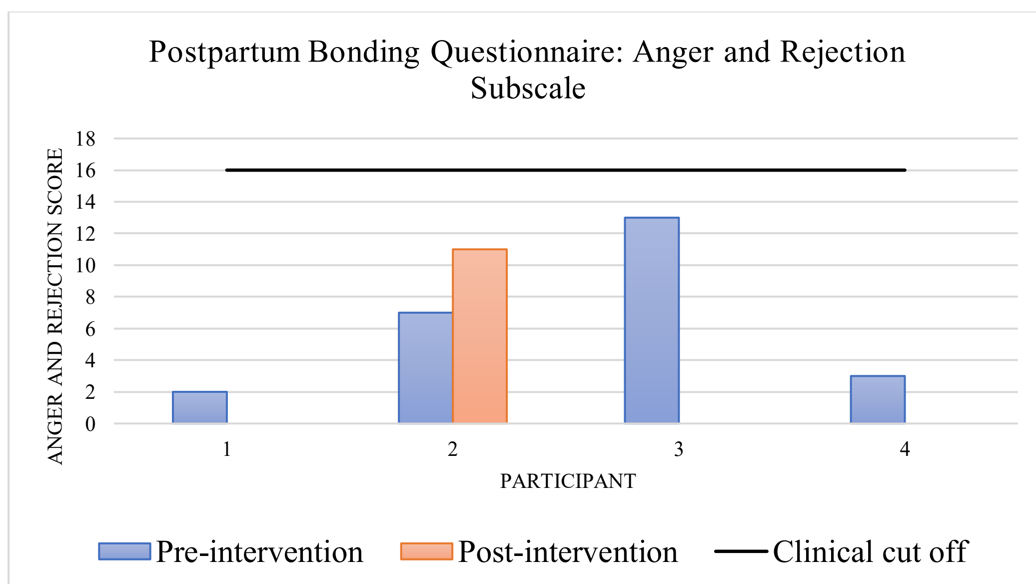


Figure 2: Anger and Rejection Subscale pre and post intervention scores.

Figure 2 indicates that three participants reported a reduction in feelings of anger and rejection towards their infant at discharge. For participants one and four, this did not meet the criteria for reliable or CSC (RCI values: 0.20 and 0.44). Participant two self-reported an increase in this subscale but this did not meet the threshold for reliable or CSC (RCI value: -0.59). Participant threes improvements did achieve reliable change (RCI value:

2.80) however, as their scores were outside the clinical threshold at admission, CSC was not applicable.

### 6.2.3 Infant Focused Anxiety Subscale

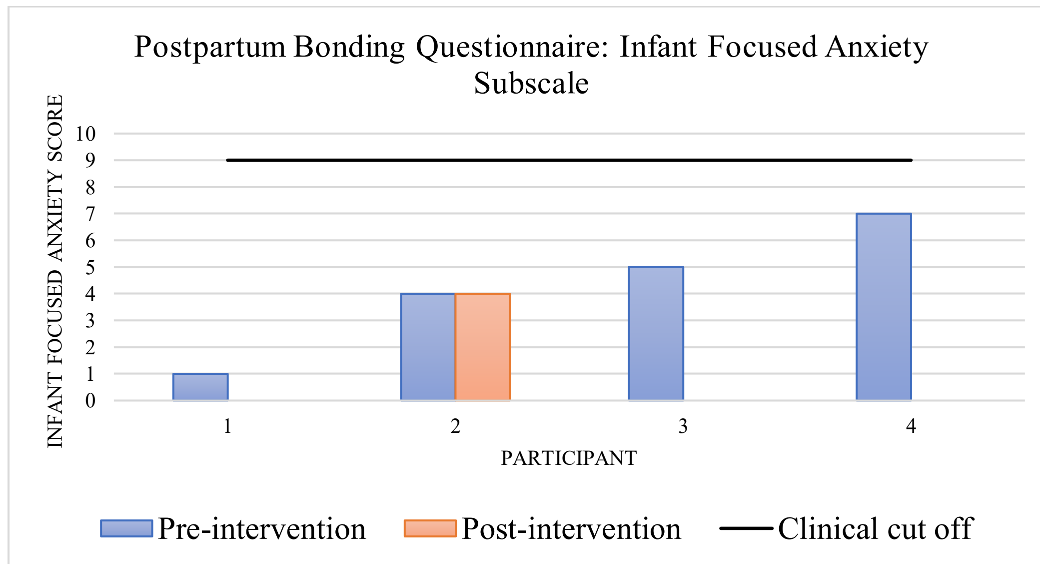


Figure 3: Infant Focused Anxiety Subscale pre and post intervention scores.

As depicted in Figure 3, three participants expressed a reduction in anxiety over the course of their admission. Participant one and three did not meet reliable or CSC (RCI values: 0.28 and 1.42 respectively) and participant two remained consistent. Results indicated that participant four achieved reliable change (RCI value: 1.98), however, as their admission score did not fall within the clinical threshold, CSC was not applicable.

#### 6.2.4 Aggression Towards Baby Subscale

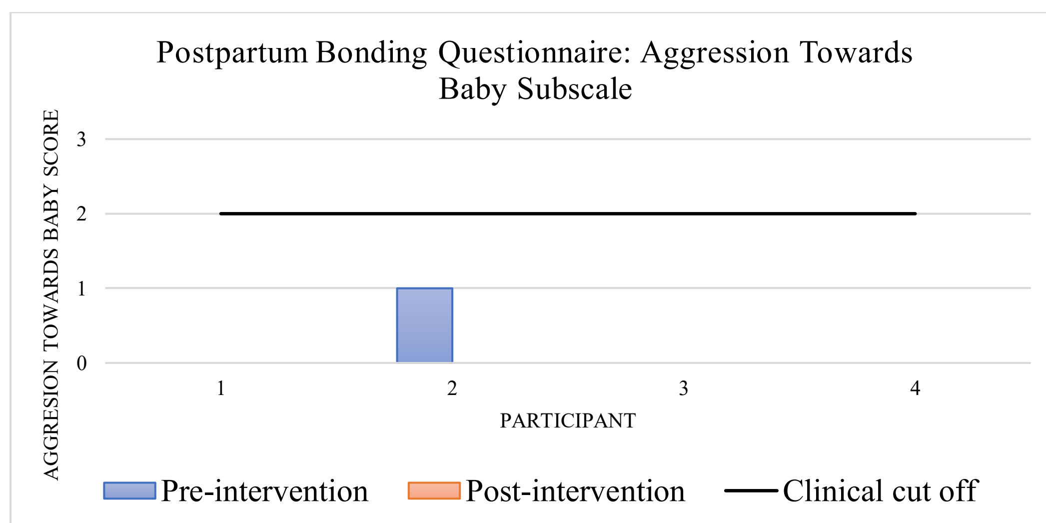


Figure 4: Aggression Towards Baby Subscale pre and post intervention scores.

The majority of participants did not report experiencing aggression towards their infant denied experiencing thoughts to harm their infant at admission, which remained consistent at discharge. Participant two scored one within this subscale pre-intervention but this reduced to 0 post intervention. It was not possible to determine reliable and CSC as normative clinical data was not available.

### 6.3 Qualitative results

During the RQA process, five main themes and sixteen subthemes were established. These included; **(1) Attributes of the therapist** (‘Person centred practice’, ‘Cultivating safety and containment’ and ‘Keeping in mind the family unit’), **(2) Key therapeutic moments** (‘Creating memories’, ‘Coproducing artwork’ and ‘Learning you are not alone’), **(3) Positive outcomes** (‘Opening up conversations’, ‘Sharing the space with baby’, ‘Attending to own needs’ and ‘Confidence being a mum’), **(4) Positive outcome attributions** (‘The power of the art group’, Support from the wider team’ and

‘Medication’), and **(5) Areas for development** (‘Frequency’, ‘1:1 opportunities’ and ‘Communication’; See Figure 5). Illustrative quotes representing the themes and subthemes above are located in Table 1 (see Appendix O for additional quotes).

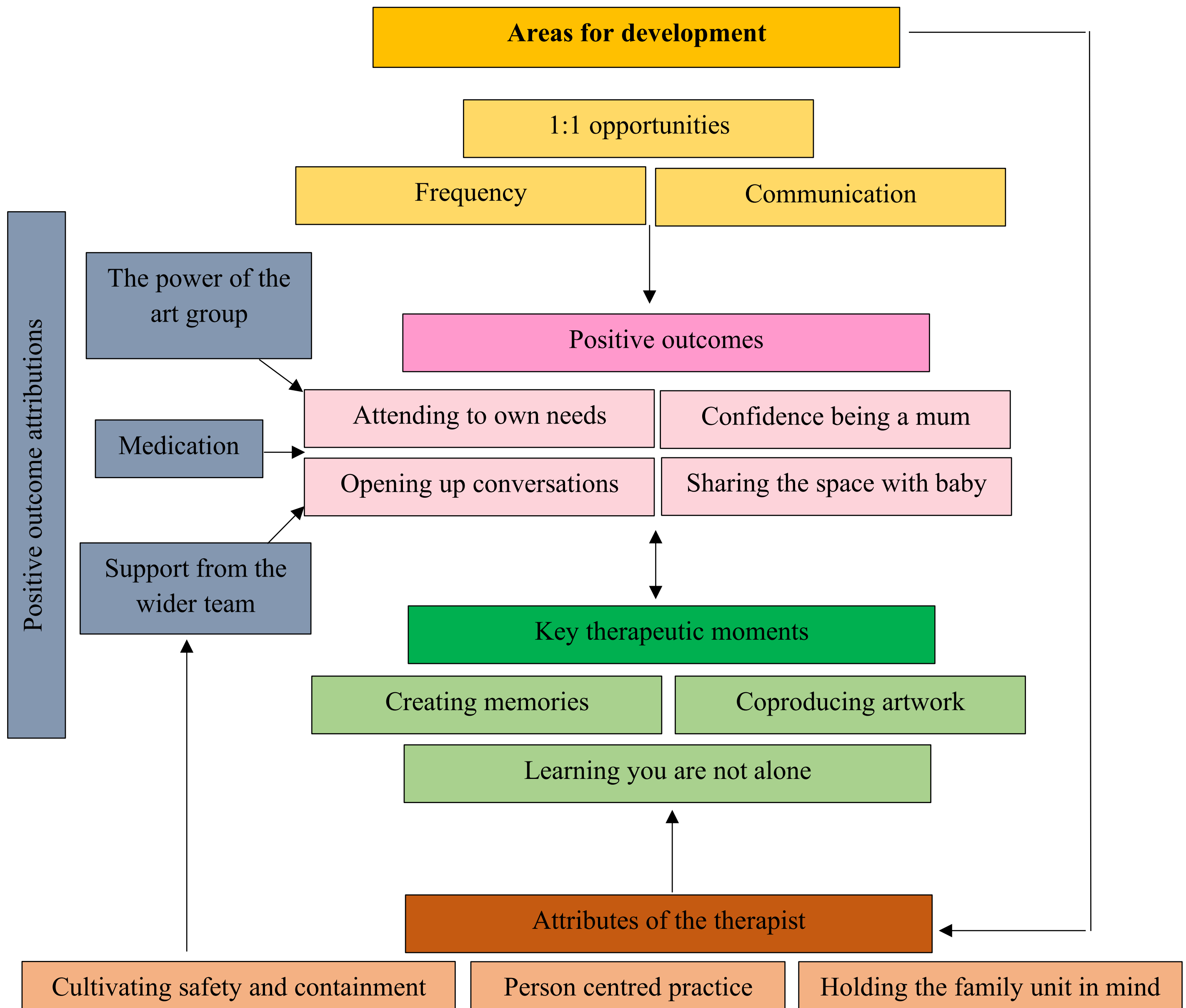


Figure 5: Themes and subthemes

**Attributes of the therapist**

Participants highly regarded the skills of the therapist, particularly their ability to deliver person-centred rather than standardised interventions, whilst holding the infant's father and wider family members in mind. This promoted connectedness and alleviated anxieties relating to the security of the family unit. Participants also expressed that the therapist dedicated time prior to the session, paced the session well and achieved a therapeutic balance of offering guidance and promoting independence. These skills, along with their compassion and support, set the foundations for a contained and safe therapeutic space. One participant noted that the therapist's presence grounded unsettled ward dynamics and positively impacted staff wellbeing.

**Key therapeutic moments**

Participants identified a number of key therapeutic moments during the group. These included the creation of positive memories which may otherwise have been lost amidst the stress and distress of admission, co-authoring artwork with their infant and the opportunity to challenge isolation through sharing their experiences with others.

**Positive outcomes**

Supported by the aforementioned themes, participants shared a number of positive outcomes following participation in the group. These included feeling more confident initiating conversations regarding their mental health with family members, other mothers and professionals. Participants also expressed that they felt more confident to share an active and sometimes messy space with their infant, whilst balancing their own and their infant's needs. This paralleled increased confidence in their identity as a mother, as well as their ability to give themselves permission to attend to their own needs. The majority

of mothers rated these outcomes as unexpected yet important components of their recovery journey.

**Positive outcome attributions**

When asked what may have contributed to these positive outcomes, participants identified the Art Psychotherapy group as a catalyst, alongside the supportive nature of the wider team. These qualities, namely compassion, encouragement and negotiation, appeared to feed into the safety and containment subtheme. Two participants referred to access to medication, although this was described as a complementary rather than standalone factor.

**Areas for development**

Participants expressed that they would like the group take place more frequently, particularly as this may reduce the likelihood of non-attendance due to other commitments (e.g. leave). For one participant, increased frequency was hypothesised to expedite recovery and reduce the duration of admission. Individual therapy opportunities were also suggested, particularly during the earlier stages of recovery when a group format may have felt overwhelming. One participant fed back that communication could be improved, as there were occasions the group did not take place but they were not informed.

| Theme | Subtheme | Example quotes |
|---|---|---|
| **Attributes of the therapist** | **Person-centred practice** | "When I first got told we'd do art classes on the unit that is what I assumed it would be, some pre-scheduled, everyone decorate a bag for the day kind of thing, it's really not like that with Lisa, she spent time to get to know you, she has probably even sat down with your nurse and talked about your first, it takes it to a complete new step…"(3) |
| | **Cultivating safety and containment** | "She'd come in on a Thursday and on a Friday the whole atmosphere would be a lot more relaxed from what it was on the Wednesday" (3)<br>"She has a harmonious presence about her…I can't explain her personality, but she was really soft, it was like a hug…A walk toasty hug with the way she approached you and she had no judgement at all on anybody" (4) |
| | **Keeping in mind the family unit** | "Whilst I was in there, I actually missed out on Father's Day, so it was nice to be able to come out and give him [partner] a bit of something" (1) |
| **Key therapeutic moments** | **Creating memories** | "It was just nice to know that I'd got her little footprints because I feel like I'd, with me being poorly, I feel like I lost out on a couple of weeks of her so it was nice to have a little memoir of her little feet and photos being taken" (1) |
| | **Coproducing artwork** | "I drew a big artwork of a flower and the baby put her handprints on the bottom corners and it was just really nice to both have our little mark on it" (2) |
| | **Learning you are not alone** | "It felt like such a huge relief that after the first three lessons I actually cried one evening because it felt like a huge weight was off the shoulders; that I wasn't the only one, there were others in a similar situation that I could relate to" (4) |

| | | |
|---|---|---|
| **Positive outcomes** | **Opening up conversations** | "It has made me realise that there are people I can talk to, not just friends and family but professionals as well" (4) |
| | **Sharing the space with baby** | "If you're a mum, some mums feel like you can't do stuff that they enjoy because they have got a baby but [the group] gave you an opportunity to try" (2) |
| | **Attending to own needs** | "You don't really notice that you are focusing everything on your baby and you do forget about yourself, so it was nice to do a little bit of something for myself to take my mind off, well maybe even just baby for ten minutes" (1) |
| | **Confidence being a mum** | "…I was frightened every time he cried, I got upset because I felt like I was the worst and now it's night and day. If he cries I go oh what are you crying for, you're fine, you need to feed, let's get you a bottle. I am able to hold him and cuddle him and actually put him down…" (4) |
| **Positive outcome attributions** | **The power of the art group** | "I used to do some sketchbook stuff and I've looked back on it recently and it's not particularly anything other than lines and things like that but I was doing it alongside talking to her and I think it maybe made me feel a bit more relaxed and more able to say some of the things I was feeling" (3) |
| | **Wider staff support** | "All the staff support- reassure me I was doing a good job and if I asked for help when really I don't think I needed it, they would encourage me to keep going" (1) |
| | **Medication** | "It could be a little bit of the medication, but I think more the trusting and talking" (2) |
| **Areas for development** | **Frequency** | "I do think it would have helped women get better faster if she'd be there one or two days a week" (3) |
| | **1:1 opportunities** | "Maybe on the days I wasn't feel quite so confident, a one on one would have been better" (1) |

| | | |
|---|---|---|
| | **Communication** | "There were weeks when she wasn't there and that wasn't always passed onto you. People don't say until that Thursday morning oh Lisa's not actually here this week" (3) |

Table 1: Themes, subthemes and illustrative quotes

# 7. Discussion

## 7.1 Main findings

The aim of this project was to evaluate the use of Photography Art Psychotherapy on the MBU, with a particular focus on mother-infant bonding. RQA revealed that mothers appreciated the therapist's ability to create a safe and person centred environment, which held in mind the needs of the wider family. A number of key therapeutic moments were identified, including the coproduction of artwork, creating memories and challenging feelings of isolation. Participants shared that these moments enabled them to feel more confident attending to their own needs, engaging in joint work with their infant and participating in conversations about their mental health experiences, alongside greater security in their identity as a mother.

This feedback draws parallels with the existing literature, particularly with respect to improvements in parental wellbeing and bonding experiences (Armstrong & Howartson, 2015; Bruce and Hackett, 2021). The 'key therapeutic moments' theme is consummate with Armstrong and Ross (2020) mechanisms of change, thus suggesting that the therapeutic skills of the facilitator, the opportunity for mother-infant co-participation and a space to share experiences may underpin the effectiveness of this intervention.

Analysis of the PBQ lends further support to the qualitative component of this project, with outcomes depicting an improvement in bonding, alongside a reduction in anxiety, anger and aggression within the context of the mother-infant relationship. However, reliable rather than CSC was predominantly observed, with the exception of one participant who achieved CSC within the Impaired Bonding Subscale. This is due to the majority of scores not meeting the clinical threshold at admission.

Importantly, participants attributed these outcomes to the Art Psychotherapy group, although acknowledged the supportive nature of the wider team and pharmacological interventions. This highlights the importance of multidisciplinary interventions and the merits of maintaining a biopsychosocial approach towards recovery. Together, the findings from this SEP strengthen the case for Art Psychotherapy to be embedded within perinatal services (Davis & Lovegrove, 2019; Gordon-Nesbitt, 2017).

### 7.2 Strengths and limitations

In terms of merits, the demographic information suggested a level of heterogeneity within the sample, with mothers and infants varying in ages, length of stay and the number of Art Psychotherapy sessions attended. However, all participants identified as White British, which does not represent the voices and experiences of mothers from culturally diverse communities. Participants were recruited via a purposive sampling strategy which carried the advantage of safeguarding mothers yet may have led the project team to recruit on the basis of 'good outcomes' and the quality of the therapeutic relationship. By focusing on mothers who attended the group, the project did not capture the perspectives of those who felt the group was inaccessible. As such, it may be beneficial for future projects to focus on the barriers to participating in Art Psychotherapy when accessing support from a MBU.

Additionally, it is important to acknowledge that the majority of PBQ scores at admission fell below the clinical threshold. This is somewhat surprising given the context of an inpatient admission and prompts queries as to whether this sample was representative of the mothers who typically access the service. It is possible that lower than expected level of bonding difficulties may have contributed to their readiness to participate in a

therapeutic intervention. However, as with any self-report measure, there is a risk of social desirability, meaning that responses may not offer an accurate representation of the client's emotional state. This is of particular relevance as participants expressed feeling ashamed and fearful that their infant may be removed from their care. Understandably, these emotions may have reduced participants confidence to disclose the more distressing aspects of the mother-infant relationship.

A strength of this project involves its mixed methods design, which united quantitative data from a standardize measure with the richness of interviews. However, in addition to the small sample size, it was not possible to truly integrate the data as the PBQ was completed at discharge rather than post-intervention. The timeframe from the final Art Psychotherapy session and completion of the PBQ was also omitted, which makes it challenging to triangulate the PBQ scores with the time point at which the intervention ended and therefore the contribution of the wider therapeutic environment. Future projects may benefit from using pre-post session measures, as opposed to admission and discharge outcomes.

### 7.3 Reflexivity

Reflexivity refers to the impact the researcher's assumptions, experiences, theoretical and therapeutic orientations may have on the conduction and analysis of research (Olmos-Vega et al., 2022). With this in mind, it is important to acknowledge my position within this project. I have an interest in the application of art within therapeutic settings and, prior to and whilst on training, endeavour to integrate creativity into my practice. I have often felt that the value of art within therapy is not recognised, hence my motivation to celebrate its successes and identify how it may be improved within this service.

Additionally, I was aware that Art Psychotherapy on a MBU is a rarity and this project would likely influence future provision within the service. To manage issues of bias, I was mindful to remain loyal to the interview schedule, paying particular attention to questions that may initiate discussions around less helpful aspects of the group. I also discussed the themes with a member of the project team not based on the inpatient perinatal service and fellow trainees offered feedback regarding the research poster.

### 7.4 Dissemination

This project was presented during a SEP conference in October 2022, which was facilitated by the University of Leeds Clinical Psychology Doctorate Programme. It is intended for this report to be disseminated to the Commissioner, the perinatal service and wider NHS Leeds and York Partnership Trust.

## 8. Conclusion and recommendations

In conclusion, it appears that mothers who participated in the Art Psychotherapy group during their stay on the MBU described an overwhelmingly positive experience, with outcomes suggestive of personal and relational growth. Based on feedback regarding good practice and areas for development, the following recommendations are suggested.

- Participants expressed how valuable the group was for their recovery. As such, it is highly recommended that Art Psychotherapy continues to form part of the therapeutic programme on the MBU.
- Participants appreciated the therapist reviewing their wellbeing and needs prior to the session. It is recommended that the facilitator continues to have protected time prior to the session to complete this preparatory work.

- The therapist's ability to hold in mind the wider family unit and acknowledge important occasions was a strength. It is recommended that these occasions (e.g. Father's Day) continue to be integrated into sessions.
- To ensure that mothers have the opportunity to participate in the group whilst accessing other therapeutic components of their admission (e.g. leave), it would be advantageous for the group to be facilitated twice a week (e.g. Monday and Friday). Participants anticipated that more frequent sessions would expedite recovery and reduce the length of admission.
- Although the group format was well received, some participants expressed that they would have preferred individual sessions. Therefore, it may be that two 'streams' of intervention (group and individual) are offered more readily to accommodate this request.
- To improve communication, is recommended that the service considers how they may use existing tools to ensure that mothers are informed about changes to the therapeutic timetable. This may include adding a section to the 'who is on shift?' board to make mothers aware, if it is not possible to inform them in person.
- It may be beneficial for group specific pre and post intervention and clinician rated measures to be implemented. This will also support the triangulation of data, in the event future projects are completed.

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# 10. Appendices

## Appendix A

### Interview schedule

### Welcome and general introductions

- Recap the aims of the project
- Prompt participant to think about their personal wellbeing and emotional safety.
- Remind participant that they do not have to answer any questions they do not want to and can end the interview at any point.
- Outline confidentiality and limits to this.
- Explain that I might make notes whilst we are talking to help me remember important details and remind myself of things to come back to.

### Overall experiences of the group

1. How would you describe your experience of the art psychotherapy group?
2. Were there any parts of the group you found particularly helpful/enjoyed the most?
3. Were there any parts of the group you found less helpful/did not enjoy?
4. How would you describe the impact of the group on your own wellbeing/relationship with family/friends?
5. Do you have any thoughts as to what you would have liked to be different/suggestions about how the group could be improved?

### Effects of the group on mother-baby attachment

I would like to move onto another topic, which focuses on your relationship with your baby. Again, please remember that you do not have to share anything you do not wish to and can decline to any questions.

1. To start, I wondered if you would feel comfortable sharing the name of your baby? This will not be referenced when I write up the project.

2. I would like to invite you to think back to the time before you started the art psychotherapy group. How would you describe your relationship with X?

3. What was it like to have X join you/what was it like to spend time with X as you participated in the group?

4. As your journey with the group has progressed, how has your relationship with X evolved?

5. Are there any moments during the group which stand out as particularly meaningful for you and X's relationship? What were the effects of these moments (on yourself, family, baby)?

6. Are there any moments during the group which you feel had a less positive effect on your relationship with X?

**Client change interview questions**

I have made a note of some of the things you have shared, which seem to be particularly meaningful got you. For example… Thinking about the changes you have noticed:

1. To what extent did you expect this change?

2. To what extent do you think these changes are a result of attending the group?

3. Could anything else have contributed to the changes you noticed?

4. How important are these changes to you and your recovery?

Bringing the interview to a close

1. Is there anything else you would like to say?

2. Is there anything we haven't talked about, that you were hoping to discuss?

Thank you very much for your time!

**Appendix B**

**Postpartum Bonding Questionnaire**

Appendix C

Demographic Questionnaire

Version4

**Demographic questionnaire**

Use of photography art therapy to support the developing mother infant attachment relationship on a perinatal inpatient Mother and Baby unit.

Project team: Dr Gary Latchford (Supervisor and Joint Programme Director, University of Leeds), Megan Stratford (Psychologist in Clinical Training), Sue Ranger (Principle Clinical Psychologist), Dr Katie Glazebrook (Clinical Psychologist), Caroline Moran (Charge Nurse) and Lisa Hunter (Art Psychotherapist in Training)

This questionnaire asks about some of your and your baby's personal characteristics. It is your choice whether you complete the entire form, part of it or none at all. If there are any parts you do not wish to answer, please circle the 'prefer not to say' option. You are still welcome to take part in the interview, should you decide not to complete the questionnaire.

False name ……………………………………….

1. **How old are you?**

| Age: | Prefer not to say |
|---|---|

2. **Please indicate the ethnicity you identify as**

| Ethnicity: | Prefer not to say |
|---|---|

3. **Are you currently staying on the Mother and Baby Unit or have you been discharged?**

| I am currently staying on the Mother and Baby Unit | I have been discharged | Prefer not to say |
|---|---|---|

4. **If you are currently on the Mother and Baby Unit, how long has your admission been so far?**

| Length of stay: | Prefer not to say |
|---|---|

5. **If you have been discharged from the Mother and Baby Unit, how long was your admission?**

| Length of stay: | Prefer not to say |
|---|---|

6. **How old was your baby when you first arrived on the Mother and Baby Unit?**

| Age of baby: | Prefer not to say |
|---|---|

7. **Approximately how many art psychotherapy sessions have you attended since you arrived at the Mother and Baby Unit?**

| Number of sessions attended: | Prefer not to say |
|---|---|

Appendix D

Initial interest form

**Initial interest form**

Use of photography art therapy to support the developing mother infant attachment relationship on a perinatal inpatient Mother and Baby unit.

Project team: Dr Gary Latchford (Supervisor and Joint Programme Director, University of Leeds), Megan Stratford (Psychologist in Clinical Training), Sue Ranger (Principle Clinical Psychologist) Dr Katie Glazebrook (Clinical Psychologist), Caroline Moran (Charge Nurse) and Lisa Hunter (Art Psychotherapist in Training)

| Name | |
|---|---|
| Telephone number | |
| Email address | |
| I consent for Megan to approach me on the ward (please circle your answer)? | Yes/No |
| I consent for Sue, Caroline or Lisa to pass the information I have provided in the initial interest form and questionnaire scores onto Megan either verbally or by secure email (please circle your answer)? | Yes/No |
| I consent for Megan to contact me on the above telephone number or email address if I have been discharged or are on leave from the Mother and Baby Unit (please circle your answer)? | Yes/No |
| I consent to receive the participant information sheet via email (please circle your answer) | Yes/No |

Participant name ……………………… Participant Signature ………………………….. Date ………………

**Who has approved this study?**

This study has received approval from the Doctorate in Clinical Psychology Research Ethics Committee at the University of Leeds (DClinREC ref number 21-015).

| **Name of project team member** | **Email address or telephone number** |
|---|---|
| Dr Gary Latchford, Supervisor, Joint Programme Director and Academic Tutor, University of Leeds | G.Latchford@leeds.ac.uk |

| | |
|---|---|
| Megan Stratford: Psychologist in Clinical Training | Approach on the ward or email ummgs@leeds.ac.uk |
| Caroline Moran, Charge Nurse | Approach on the ward or phone the ward (redacted) and ask to speak to Caroline. |
| Dr Katie Glazebrook, Clinical Psychologist and SEP Commissioner | Approach on the ward or phone the ward (redacted) and ask to speak to Sue. |
| Lisa Hunter, Trainee Art Psychotherapist | Approach on the ward or phone the ward (redacted) and ask to speak to Lisa |

**Appendix E**

**PIS**

**Version 4**

**Participant Information Sheet**

**Use of photography art therapy to support the developing mother infant attachment relationship on a perinatal inpatient Mother & Baby unit.**

Project team: Dr Gary Latchford (Supervisor and Joint Programme Director, University of Leeds), Megan Stratford (Psychologist in Clinical Training), Sue Ranger (Principle Clinical Psychologist) Dr Katie Glazebrook (Clinical Psychologist), Caroline Moran (Charge Nurse) and Lisa Hunter (Art Psychotherapist in Training)

Thank you for taking the time to read this information sheet. You are being invited to participate in a Service Evaluation Project. Before you agree to take part, it is important to know why this project is taking place and what you will be asked to do. Please take some time to read the following information. You are welcome to discuss the information with friends and relatives, if you would like to. Please ask if there is anything you do not understand or you have any further questions. Please take your time when deciding whether you would like to take part.

**Who is completing this SEP?**

Megan Stratford, Psychologist in Clinical Training at the University of Leeds is completing this project. Megan is working alongside the project commissioner, Katie Glazebrook, Clinical Psychologist at The Leeds and York Partnership NHS Foundation Trust and Lisa Hunter, Trainee Art Psychotherapist at the same Trust. This project is supervised by Dr Gary Latchford, Joint Academic Director and Academic Tutor, as it

forms part of requirements for the Doctorate in Clinical Psychology programme at the University of Leeds.

**What is the purpose of this project?**

We are interested in hearing about your experiences of attending the art psychotherapy group during your stay on the Mother and Baby Unit. We would like to hear about what worked well, what could have been better and how the group has affected your relationship with your baby. From your feedback, we aim to celebrate the groups success and make suggestions for the future. This will ensure that people who take part in the group in the future receive the best care possible.

**What will my participation involve?**

**1. Initial interest form**

Sue, Katie, Lisa or Carol will invite you to take part in the project. You will be provided with an information sheet to read through and, if you would like to be involved, you will be asked to complete an initial interest form. Katie, Lisa or Carol will give this information to Megan when she is on the ward or via secure NHS email. If you have been discharged, Megan will send you an email with the information sheet. Megan will then approach you on the ward or contact you via telephone or email to arrange an interview.

**2. Interview**

Megan will complete the interview with you. If you are staying on the ward, the interview can take place either on the ward or remotely (over the phone, Microsoft Teams or Zoom). If you have been discharged, the interview will take place remotely.

Before the interview, Megan will invite you to read the information sheet again and sign a consent form. If the interview is taking place remotely, you will be asked to give verbal consent. This will be recorded. Megan will then invite you to complete a demographic questionnaire. You can complete all, some or none of the questionnaire; it is completely your choice. You can still take part in the interview if you do not complete the questionnaire.

The interview will take approximately 60 minutes, but this will vary depending on how much you wish to say. Megan will ask you about your experiences of the group and your relationship with your baby. If you do not want to answer a question, please say and Megan will move on. You are welcome to request a break or end the interview completely, at any point. The interviews will be recorded, either on a Dictaphone or using audio/video software on a laptop. You will only be asked to participate once.

**3. Postpartum Bonding Questionnaire**

We would like to use your scores to the Postpartum Bonding Questionnaire. You will have completed this questionnaire when you first arrived on the ward, possibly a few times during your stay and, if you have been discharged, before you left the ward. Megan will compare your admission score with your most recent scores to see if things have improved or not. You do not have to fill out another questionnaire. Sue, Katie, Lisa or Carol will find your scores on the system and give them to Megan either in person or via secure email.

**Will the information I share be kept confidential and anonymous?**

Megan will not share any identifiable information with people who are not directly involved in the project. However, there is a limit to this; if you disclose something which causes concern for your own or someone else's safety, Megan has a duty of care to inform the relevant professionals. She would discuss this openly with you if this happened.

Your answers to the demographic questionnaire and direct quotes from the interview will be used in the write up of the project. This information and any quotes from the interview will be anonymised by using your preferred false name. The demographic information you provide will be written up in a summary (e.g. participants ranged from X-X age, baby ages ranged from X to X) and will not be attached to your false name. Megan will do her best to maintain your anonymity, however it is not possible to completely guarantee this.

**Do I have to take part?**

No, participation is entirely voluntary and it is your decision whether to take part. You can withdraw from the study up to two weeks after the interview, without giving a reason. Deciding not to take part or withdrawing will not affect your participation in the art psychotherapy group or the support you receive from the service, now or in the future.

**What are the possible risks to taking part?**

Although this interview is not expected to cause distress, it may be that talking about your experiences is upsetting. Megan will encourage you to think about how you can look after yourself and remind you to only talk about experiences you feel safe discussing. You can

not answer a question, take a break or request to end the interview, at any point. Megan will give you a debrief form at the end of the interview which will outline who you can talk to about how you are feeling and your right to withdraw.

**What are the possible benefits to taking part?**

Although the personal benefits are minimal, some people appreciate the opportunity to share their experiences. Your feedback will help the service demonstrate what is working well and offer some ideas about what could be improved.

**How will my data be used, distributed and stored?**

Megan will use the information you provide in the demographic questionnaire and direct quotes from the interview in the write up of the service evaluation project. The project will be presented at conferences, shared with the perinatal service and possibly the wider NHS Trust. A copy of the project may be published by the NHS Trust and will be available for members of the public to read on the University of Leeds Extranet website. Anonymised example extracts from your interview transcript may be included in the appendices to demonstrate how Megan analysed the data.

Paper based data which contains identifiable information (e.g. initial interest form, consent form and demographic questionnaire) will be stored securely in a locked cabinet on the University of Leeds campus. Paper based data which does not contain identifiable information (e.g. anonymised transcripts, notes from the interview) will also be stored on campus but kept separate from the identifiable data. Non-identifiable information may be used in future research. The data will be held securely for three years, after which it will

either be shredded by the Doctorate in Clinical Psychology research staff or destroyed by a company employed by the university.

The interview will be recorded by using an encrypted recording device or the audio/video recording software on Zoom or Microsoft Teams. After the interview, the recording will be stored securely, in line with the University Data Protection Policy and then deleted from the recording device. The interviews will be transcribed (from an audio recording to typed words) by Megan and only people involved in the project will be allowed access to the original recordings, unless there is a safeguarding reason to do so. Megan would talk to you about this if it happened.

**What if I have concerns?**

If you have any concerns about this study, please approach or phone Megan, Sue or Lisa. You can also email Megan or Gary Latchford.

**Who has approved this study?**

This study has received approval from the Doctorate in Clinical Psychology Research Ethics Committee at the University of Leeds (DClinREC ref number 21-015).

| Name of project team member | Email address or telephone number |
|---|---|
| Dr Gary Latchford, Joint Programme Director and Academic Tutor, University of Leeds | G.Latchford@leeds.ac.uk |
| Megan Stratford, Psychologist in Clinical Training | Approach on the ward or email ummgs@leeds.ac.uk |
| Dr Katie Glazebrook, Clinical Psychologist and SEP Commissioner | Phone (redacted) and ask to speak to Katie. |
| Caroline Moran (Charge Nurse) | Approach on the ward or phone the ward (redacted) and ask to speak to Caroline. |

| Lisa Hunter, Trainee Art Psychotherapist | Approach on the ward or phone the ward (redacted) and ask to speak to Lisa |
|---|---|

**University of Leeds Research Participant Privacy Notice**

**Purpose of this notice**

This Notice explains how and why the University uses personal data for research; what individual rights are afforded under the Data Protection Act 2018 (DPA) and who to contact with any queries or concerns.

All research projects are different. This information is intended to supplement the specific information you will have been provided with when asked to participate in one of our research projects. The project specific information will provide details on how and why we will process your personal data, who will have access to it, any automated decision-making that affects you and for how long we will retain your personal data.

**Why do we process personal data?**

As a publically funded organisation we undertake scientific research which is in the public interest. This includes processing personal data to develop new data analysis techniques and tools, and investigate factors that affect the treatment and trajectories of different diseases. The categories of personal data included are names, addresses, date of birth, mental and physical health data, ethnic origin and sex life, and this is usually analysed at the level of data pertaining to an individual. The types of organisations we receive data from include health related organisations such as the NHS, data held by government departments (with appropriate permission), private organisations and charitable organisations. The recipients of this personal data are researchers. The DPA

requires us to have a legal basis for this processing; we rely upon "the performance of a task carried out in the public interest" as our lawful basis for processing personal data, and on "archiving in the public interest, scientific or historical research purposes, or statistical purposes" as our additional lawful basis for processing special category personal data (that which reveals racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic or biometric data, and data concerning health, sex life or sexual orientation).

**How do we follow data protection principles?**

- We have lawful bases for processing personal and special category data.
- Data are used fairly and transparently; we will make it clear to individuals what their data will be used for, how it will be handled and what their rights are.
- We only collect and use personal data for our research, for research in the public interest, or to support the work of our organisation.
- We only collect the minimum amount of personal data which we need for our purposes.
- We take steps to ensure that the personal data we hold is accurate.
- We keep your personal data in an identifiable format for the minimum time required.
- We take steps to ensure that your data is held securely.
- We keep a record of our processing activities.

**What do we do with personal data?**

Research data can be a very valuable resource for improving public services and our understanding of the societies we live in. One way we can get the most benefit from this work is to make the data available, usually when the research has finished, to other

researchers. Sometimes these researchers will be based outside the European Union. We will only ever share research data with organisations that can guarantee to store it securely. We will never sell your personal data, and any data shared cannot be used to contact individuals.

We do not conduct automated decision making with the data.

The project specific information will include more detail about how your data will be used.

**Your rights as a data subject**

Because we use personal data to support scientific research on the public interest, individuals participating in research do not have the same rights regarding their personal data as they would in other situations. This means that the following rights are limited for individuals who participate, or have participated in, a research project:

The right to access the data we hold about you.

- The right to rectify the data we hold about you.
- The right to have the data we hold about you erased.
- The right to restrict how we process your data.
- The right to data portability.
- The right to object to us processing the data we hold about you.

We have put in place security measures to prevent your personal data from being accidentally lost, used or accessed in an unauthorised way and will notify you and any applicable regulator of a suspected breach where we are legally required to do so.

**Retention periods**

We will only retain your identifiable personal information for as long as necessary to fulfil the purposes we collected it for; we may then retain your data in anonymised or pseudonymised format.

To determine the appropriate retention period for personal data we consider the amount, nature, and sensitivity of the personal data, the potential risk of harm from unauthorised use or disclosure, the purposes for which we process your personal data and whether we can achieve those purposes through other means, and the applicable legal requirements.

**Additional notices and guidance/policies**

The University has also published separate policies and guidance which may be applicable to you in addition to other privacy notices:

Current staff privacy notice

Current students privacy notice

The Research and Innovation Service website has other relevant policies and guidance.

**Communication**

In the first instance please contact the researcher who your initial contact was with. You may also contact the Data Protection Officer for further information (see contact details below). Please see the Information Commissioner’s Office Website for further information on the law. You have a right to complain to the Information Commissioner’s Office (ICO) about the way in which we process your personal data. Please see the Information Commissioner’s Office Website or contact 0303 123 1113.

**Concerns and contact details**

If you have any concerns with regard to the way your personal data is being processed or have a query with regard to this Notice, please contact our Data Protection Officer (Alice Temple: dpo@leeds.ac.uk).

Our general postal address is University of Leeds, Leeds LS2 9JT, UK.

Our postal address for data protection issues is University of Leeds Secretariat, Room 11.72 EC Stoner Building, Leeds, LS2 9JT.

Our telephone number is +44 (0)113 2431751.

Our data controller registration number provided by the Information Commissioner's Office is Z553814X.

This notice was last updated on 28 September 2020.

Appendix F

Consent form

**Participant consent form**

Use of photography art therapy to support the developing mother infant attachment relationship on a perinatal inpatient Mother and Baby unit.

Project team: Dr Gary Latchford (Supervisor and Joint Programme Director, University of Leeds), Megan Stratford (Psychologist in Clinical Training), Sue Ranger (Principle Clinical Psychologist), Dr Katie Glazebrook (Clinical Psychologist), Caroline Moran (Charge Nurse) and Lisa Hunter (Art Psychotherapist in Training)

Please read the statements below and tick the box if you agree.

| Statement | Tick the box if you agree |
|---|---|
| I confirm that I have read and understood the information sheet. | |
| I have had the opportunity to ask any questions and I am satisfied with the answers I have received. | |
| I understand that my participation is voluntary and I can stop the interview at any point or withdraw from the study, up to two weeks after the interview. | |
| I understand that my data will be kept confidential and anonymous, unless the project team are concerned about my own or someone else's safety. In this case, I understand that they will need to let someone else know (e.g. supervisor, emergency services). | |
| I understand that my interview data will be transcribed by Megan and my anonymised transcript will be read by the project team. | |
| I understand that the demographic information I provide will be presented in a combined format (e.g. as a participant demographic summary rather than individual details) and direct quotes from my interview may be referenced in the write up of the project, and during conferences. I understand that all quotes will be anonymised and no identifiable information will be included. | |
| I understand that this project will be shared with the perinatal team and possibly the wider NHS Trust. I understand that the results from the project will be presented at conferences. | |

| | |
|---|---|
| I understand that the project will also be published on the University of Leeds Extranet, which can be accessed by members of the public and may be published by the NHS Trust. | |
| I consent for my scores from the Postpartum Bonding Questionnaire to be analysed and include in the write up of the project. I consent for my questionnaire scores to be given to Megan in person or via secure email. | |
| I give permission for my interview to be audio/video recorded. | |
| I understand that my data will be stored securely, in line with University of Leeds data protection policy, up to three years after the study is completed. | |
| If my interview has taken place remotely, I consent to receive the debrief form via email | |
| I consent to take part in this project | |

This study has received approval from the Doctorate in Clinical Psychology Research Ethics Committee at the University of Leeds (DClinREC ref number 21-015).

Participant name…………………………………………….. Participant signature……………………………… Date……………………

Contact details for project team members:

| **Name of project team member** | **Email address or telephone number** |
|---|---|
| Dr Gary Latchford: Supervisor, Joint Programme Director and Academic Tutor, University of Leeds | G.Latchford@leeds.ac.uk |
| Megan Stratford, Psychologist in Clinical Training | Approach on the ward or email ummgs@leeds.ac.uk |
| Dr Katie Glazebrook, Clinical Psychologist and SEP Commissioner | Phone (redacted) and ask to speak to Katie. |
| Caroline Moran (Charge Nurse) | Approach on the ward or phone the ward (redacted) and ask to speak to Caroline. |
| Lisa Hunter, Trainee Art Psychotherapist | Approach on the ward or phone the ward (redacted) and ask to speak to Lisa. |

Appendix G

Debrief form

**Participant debrief form**

Use of photography art therapy to support the developing mother infant attachment relationship on a perinatal inpatient Mother and Baby unit.

Project team: Dr Gary Latchford (Supervisor and Joint Programme Director, University of Leeds), Megan Stratford (Psychologist in Clinical Training), Sue Ranger (Principle Clinical Psychologist), Dr Katie Glazebrook (Clinical Psychologist), Caroline Moran (Charge Nurse) and Lisa Hunter (Art Psychotherapist in Training)

Thank you for taking part in this service evaluation project. This project aims to explore mother's experiences of participating in an art psychotherapy group during their stay on a Mother and Baby Unit. By offering your time, you have provided valuable insight into this topic. Your feedback has contributed to the development of the group and supported us to make sure that future mothers who receive support from the perinatal service have access to the best care possible.

If you feel distressed or concerned about your wellbeing after the interview and are currently staying on the ward, please approach a member of staff. If you have been discharged from the ward, please contact your allocated care co-ordinator or the local perinatal mental health team, who will be supporting you post discharge. The following service may also offer a confidential space to talk about how you are feeling.

**Samaritans**

1. www.samaritans.org (general website)
2. On the website, there is an option to chat to a volunteer
3. jo@samaritans.org (helpline email, their response time is approximately 24 hours)
4. 116 123 (helpline number open 24 hours a day, every day)

You can withdraw your interview data up to two weeks after your interview. As your interview took place on [date], should you wish to withdraw, please let me know by [date], via email. If you have any further questions or concerns, please do not hesitate to contact myself or another member of the project team. If you do not receive a satisfactory reply,

please contact the University of Leeds Clinical Psychology Doctorate Programme. Thank you again, your participation is very much appreciated.

This study has received approval from the Doctorate in Clinical Psychology Research Ethics

| **Name of project team member** | **Email address or telephone number** |
|---|---|
| Dr Gary Latchford: Supervisor, Joint Programme Director and Academic Tutor, University of Leeds | G.Latchford@leeds.ac.uk |
| Megan Stratford: Psychologist in Clinical Training | Approach on the ward or email ummgs@leeds.ac.uk |
| Dr Katie Glazebrook, Clinical Psychologist and SEP Commissioner | Phone redacted and ask to speak to Lisa. |
| Caroline Moran (Charge Nurse) | Approach on the ward or phone the ward (redacted) and ask to speak to Caroline. |
| Lisa Hunter, Trainee Art Psychotherapist | Approach on the ward or phone the ward (redacted) and ask to speak to Lisa. |

Committee at the University of Leeds (DClinREC ref number 21-015).

**Appendix H**

**Distress protocol**

## Distress Protocol

Use of photography art therapy to support the developing mother infant attachment relationship on a perinatal inpatient Mother and Baby unit.

Project team: Dr Gary Latchford (Supervisor and Joint Programme Director, University of Leeds), Megan Stratford (Psychologist in Clinical Training), Sue Ranger (Principle Clinical Psychologist), Dr Katie Glazebrook (Clinical Psychologist), Caroline Moran (Charge Nurse) and Lisa Hunter (Art Psychotherapist in Training)

The following protocol will be referred to, in the event a participant becomes distressed during the interview.

- If a participant exhibits signs of distress, I will share my concerns with the participant. The participant will be invited to take a break or end the interview. If they wish to continue with or resume the interview, I will regularly seek feedback from the participant and use my clinical skills to observe any changes in the participant's level of distress.
- I will not offer any direct therapeutic input beyond what is considered appropriate within the context of an interview situation (e.g. the interview will not involve offering a therapeutic session in the even the participant exhibits signs of distress).
- If the participant is currently staying on the ward and the interview is terminated early due to their distress and I am concerned abut their welfare, I will make a staff member aware. If the interview takes place remotely but the participant is still on the ward, I will telephone the ward and speak to a staff member.
- If the participant has been discharged from the ward but terminates the interview early due to their distress and I am concerned about their welfare, I will contact Sue Ranger of Lisa Hunter. If a member of the project team is not available and I have immediate concerns regarding the participant's safety, I will contact the relevant services (e.g. emergency services).

**Appendix I**

**RQA processes Domain names**

| **Question** | **Domain** |
| --- | --- |
| **Considering the Art Psychotherapy group as a whole...** | |
| How would you describe your experiences of the art psychotherapy group? | General experiences |
| Were there any parts of the group you found particularly helpful/enjoyed the most? | Areas of strength |
| Were there any parts of the group you found less helpful/did not enjoy? | Areas for development |
| Do you have any thoughts as to what you would have liked to be different? | |
| How would you describe the impact of the group on your own wellbeing/relationships with others? | Relational and personal impact |
| **Considering your relationship with baby...** | |
| I would like to invite you to think back to the time before you started the art psychotherapy group. How would you describe your relationship with your baby? | Pre-group attachment experiences |
| What was it like to have your baby join you/spend time with your baby as you participated in the group? | Sharing the therapy space with baby |
| Are there any moments during the group which stand out as particularly meaningful for you and your baby's relationship? | Key moments of connection |
| As your journey with the group progressed, how did your relationship with your baby evolve? | Impact on attachment |
| Were there any moments during the group which you felt had a less positive impact on your relationship with your baby? | Areas for development |
| **Considering the impacts/changes you have described...** | |
| To what extent did you expect these changes? | Importance and expectation of changes |
| How important are these changes to you and your recovery? | |
| To what extent do you think these changes were the result of attending the group? | Mechanisms of change |
| Could anything else have contributed to the changes you noticed? | |

**Appendix J**

**RQA processes**
**Summary template**

**Transcript summary**

| **Participant:**<br>**Date of interview:** |
|---|
| **The Art Psychotherapy group experience** |
| **Overall experiences** |
| **Areas of strength** |
| **Areas for development** |
| **Impact (self/relationships etc)** |
| **Mother-baby attachment** |
| **Pre group attachment experiences** |
| **Sharing the therapy space with baby** |
| **Key moments of connection** |
| **Impact on attachment** |
| **Areas for development** |
| **Impact and changes** |
| **Expectation and importance of changes** |
| **Mechanisms of change** |

**Appendix K**

**RQA processes**

**Matrix summary**

| Summary matrix: themes referenced | Participant number referencing theme | Example quotes/further info |
|---|---|---|
| The Art Psychotherapy group experience | | |
| **Overall experience** | | |
| | | |
| **Areas of strength** | | |
| | | |
| **Areas for development** | | |
| | | |
| **Impact** | | |
| | | |
| Mother-baby attachment | | |
| **Pre-group attachment experiences** | | |
| | | |
| **Sharing therapy space with baby** | | |
| | | |
| **Key moments of connection** | | |
| | | |
| **Impact on attachment** | | |
| | | |
| Importance, expectation and mechanisms of change | | |
| **Key changes, expectations and importance** | | |
| | | |
| **Mechanisms of change** | | |
| | | |

**Appendix L**
**RQA processes**
**Final results grid**

| Theme | Sub theme/variation | Actions: Examples of good practice and improvements needed |
|---|---|---|
| **Attributes of the therapist** | Person centered practice | Preference for individualized rather than structured interventions. |
| | Cultivating safety and containment | Value of 'setting the scene' for therapy (e.g. checking in before session, requesting handover from nursing team). Time needs to be given to develop the therapeutic alliance and create a safe base. |
| | Keeping in mind the family unit | Keep in mind and acknowledge family-oriented days, even if these evoke strong emotions (e.g. Father's Day) |
| **Positive outcomes** | Opening up conversations | Where possible, facilitate opportunities for joint working with baby, other mums and the MDT. |
| | Sharing the space with baby | |
| | Attending to own needs | |
| | Confidence being a mum | |
| **Positive outcome attributions** | The power of the art group | Demonstrates the importance of MDT working and biopsychosocial interventions. |
| | Support from the wider team | |
| | Medication | |
| **Key therapeutic moments** | Creating memories | |
| | Coproducing artwork | |
| | Learning you are not alone | |
| **Areas for development** | Frequency | Consider 1:1 opportunities during the earlier stages of recovery to socialize mothers to Art Psychotherapy and develop confidence attending a group environment.<br>If Art Psychotherapist is not able to facilitate session due to mandatory training provide sufficient notice to mums. |
| | 1:1 opportunities | |
| | Communication | |

## Appendix M

## Data relating to reliable change/CSC calculations

Please note: There were two sources of normative data. The non-clinical norms were used from Brockington et al (2001) as this was the only paper citing a non-clinical population. The clinical norms were used from Brockington et al (2006) as the sample was more in line with the participants who took part in this SEP (e.g. accessing community and inpatient MBU within the UK rather than mothers experiencing pregnancy complications, alongside depression or attachment difficulties).

Brockington et al (2006) categorised the clinical population as 'depressed mothers with normal bond', 'normal bond plus pathological anxiety or anger', 'mild bonding disorders', 'threatened rejection', 'established rejection', Infant-focused anxiety: 'Mild anxiety' or 'severe anxiety' and 'Pathological anger: 'mild anger', 'moderate anger' or 'severe anger'. 'Mild bonding disorders' was chosen as it was not possible to ascertain mood and the majority of scores fell within the non-clinical threshold.

| Component of PBQ | Minimum/maximum score | Reliability co-efficient | Clinical/non clinical norms (SD) |
|---|---|---|---|
| Impaired Bonding Subscale | 0-60 | (Wittkowski et al., 2007) 0.79 | Clinical mean: 14.8 (9.9)<br>Non-clinical mean: 6.1 (5.2) |
| Rejection and Anger Subscale | 0-35 | (Wittkowski et al., 2007) 0.63 | Clinical mean: 9.2 (5.4)<br>Non-clinical mean: 3.1 (2.9) |
| Infant Focused Anxiety Subscale | 0-20 | (Wittkowski et al., 2007) 0.63 | Clinical mean: 6.0 (4.1)<br>Non-clinical mean: 3.1 (2.3) |
| Aggression Towards Baby Subscale | 0-10 | (Wittkowski et al., 2007) Not available | Clinical mean: Not available<br>Non-clinical mean: 0 |

## Appendix N

### PBQ summary scores with RCI and CSC indicators

**P1**

| Component of PBQ | **Pre-admission score** | **Post-admission score** | **RCI value** | **Reliable change?** | **CSC?** |
|---|---|---|---|---|---|
| Impaired bonding | 2 | 0 | 0.31 | X | X |
| Anger & Rejection | 2 | 0 | 0.20 | X | X |
| Confidence and anxiety | 1 | 0 | 0.28 | X | X |
| Aggression to baby | 0 | 0 | N/A | N/A | N/A |

**P2**

| Component of PBQ | **Pre-admission score** | **Post-admission score** | **RCI value** | **Reliable change?** | **CSC?** |
|---|---|---|---|---|---|
| Impaired bonding | 16 | 12 | 0.62 | X | X |
| Anger & Rejection | 7 | 11 | -0.59 | X | X |
| Confidence and anxiety | 4 | 4 | 0.00 | X | X |
| Aggression to baby | 1 | 0 | N/A | N/A | N/A |

**P3**

| Component of PBQ | **Pre-admission score** | **Post-admission score** | **RCI** | **Reliable change?** | **CSC?** |
|---|---|---|---|---|---|
| Impaired bonding | 16 | 5 | 3.93 | ✓ | ✓ |
| Anger & Rejection | 13 | 0 | 2.80 | ✓ | X |
| Confidence and anxiety | 5 | 0 | 1.42 | X | X |
| Aggression to baby | 0 | 0 | N/A | N/A | N/A |

**P4**

| Component of PBQ | **Pre-admission score** | **Post-admission score** | **RCI** | **Reliable change?** | **CSC?** |
|---|---|---|---|---|---|
| Impaired bonding | 5 | 0 | 0.78 | X | X |
| Anger & Rejection | 3 | 0 | 0.44 | X | X |
| Confidence and anxiety | 7 | 0 | 1.98 | ✓ | X |
| Aggression to baby | 0 | 0 | N/A | N/A | N/A |

- N/A due to absence of clinical norms

**Appendix O**

**Additional quotes**

| Theme | Subtheme | Example quotes |
|---|---|---|
| **The roots: Attributes of the therapist** | **Person-centred practice** | "Helped me decide what I wanted to do, not being forceful of what her ideas were but just helped me to choose what I wanted to do" (1)<br>"...I was going to all these paid things where you might turn up and have a photo shoot and then do some artwork of their hands printed on some paper and it all felt cold...Whereas Lisa's was really well thought through and felt caring" (3)<br>"Rather than being this is what we are doing on this week. I think there was a [reference to other professional] on the ward and she would pre-plan activities so they were the same for everybody whereas Lisa could get to know you and then plan things around what you've got going on that week, how your health is that week, why you were admitted" (3)<br>"To hold a conversation with each of us [reference to mums] whilst knowing information that the other participants wouldn't have known and being able to fit an art class around you whilst there being four other people at the table...She was really good at doing that" (3)<br>"Just having Lisa sit down with you for an hour and listening to you and understanding you before just going into doing something. Always before the session...She would come and find you and talk to you before she'd set up her art station, so you didn't feel like you were just a second thought" (3)<br>"You are seeing so many different staff so you do have a care team of your own, like I had a nurse and a nursery nurse and a health support worker but it didn't always mean they were always on like |

| | | |
|---|---|---|
| | | you might not see them for three four days but you knew every Thursday when Lisa was in she would somehow manage to find an hour for you, to have a really good chat and I'm not just talking "how have you been this week?", I told Lisa stuff I'd not got off my chest in years" (3)<br>"She picked up on everybody's individual personality" (4)<br>"[Lisa] always reminded us, you don't have to open up, you can sit here in silence, do whatever you want to do, be as creative as you want, use whatever you want" (4) |
| | **Cultivating safety and containment** | "Nothing ever felt too uncomfortable or anything she just knew what to do and what was right" (1)<br>"Little important things like having the safe paint for kids...Like when you are really anxious, and you are in the mother and baby unit and you are worried what people are thinking about you and are they thinking that they are not looking after my kid? Are they going to take my kid away from me...I'd ask her quite a lot, are the paints safe for kids? And she could show me the bottles...She had obviously pre-thought that question would come up" (2) |
| | **Keeping in mind the family unit** | "When your mental health is really bad and you are pulling away from everyone, Lisa was quite good at involving people around you" (3)<br>"One of my worries when I got admitted was that [partner] and his mum would try and take [baby] off me...That would be it, I would lose my [baby] so still trying to involve dad's and speak to that sensible sides of you where's like that is not going to happen, you are still a family unit" (3)<br>"Some of the things I did at some point was Father's Day presents which, when you are in a mother and baby unit and baby is not with dad that is quite important too" (3) |

| | | |
|---|---|---|
| | | "I turned his footprint into a heart…and we made it into a card, and he scribbled on it, I translated it and it was a birthday gift for his dad and he absolutely loved it." (4) |
| **The stem: Key therapeutic moments** | **Creating memories** | "It's a nice memory as it is something that doesn't happen very often at home" (2)<br>"We spent a lot of time doing stuff so that was nice to have some nice memories in there...You know it is not the nicest thing in the world to be...You'd have much rather spent your maternity at home, happy and doing things for your baby" (3)<br>"She brought blank journals we could fill in, in and I put mine in my memory box for [baby] because, although it was a difficult time to get through, it was still a really important part of [baby] first year" (3) |
| | **Coproducing artwork** | "It wasn't like right that's it, we've got a piece of paper full of baby marks, she would take nice pictures of us together and then we might use those marks that [baby] has done on the paper to put into something else" (3)<br>"She got mother and baby to do some artwork together like that because the baby got messy, the mother would get messy, your canvas would be covered in all sorts of colours and it was lovely because it was still artwork" (4) |
| | **Learning you are not alone** | "To just know that you are all there together, it is not the exact same experience, but you all have your own little struggles and people are there to support you" (1)<br>"It is nice to know that you are not alone with how you are feeling and what you are going through. It helped you make friends which helped on the other parts of the day Lisa wasn't there" (1) |

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| | | "We were able to sort of get together and do stuff together. It just brought us all together which helped us all get through it." (2)<br>"Us seeing them [babies] happy and messy, how they are meant to be helped us all as well, it was quite a good bonding thing for all of the mums in the unit" (3)<br>"There was that support, care, that shoulder to cry on and I think because of the art therapy sessions, we all came as a whole group, it was wonderful" (4) |
| **The flowers: Positive outcomes** | **Opening up conversations** | "Knowing that my experience was not something to be ashamed of and that I could just speak openly about it" (1)<br>"I think I am a lot more open when I have come out of the mother and baby unit and I actually like talking about the experience now" (1)<br>"It was nice for me to tell him [husband] how I was feeling, rather than phoning the ward" (1)<br>"I used to sometimes show the art my husband and explain it to him" (2)<br>"You can't just go in there and forget about baby's dad at home and it made him open up more because I'd sat and really thought about what I was going to make him, and it was personalized with [baby] stuff as well" (3)<br>"I feel as if I can open up, even to my own parents I never did but now I feel as if I can open up to my own parents and get the support from them" (4) |
| | **Sharing the space with baby** | "You don't really realise but it gives you confidence that I could have her with me and do something at the same time" (1)<br>"It is just nice for them to be there and enjoy that moment with you" (2) |

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| | | "You're trying to do two tasks. It is nice to see that you can do that" (2)<br>"As I got more relaxed, I allowed him to be more involved...At first she would say to me do you want to do some activities with [baby] this afternoon and I might disappear because the idea of getting him messy was just too beyond me but towards the end I might have even started the day with something like that rather than ending the day with something like that" (3) |
| | **Attending to own needs** | "I tried to not feel as guilty for asking for help and asking someone else to watch her whilst say I had a bath or a shower" (1)<br>"It was nice to have a bit of time to myself" (2)<br>"One of my coping mechanisms which probably was a bit unhealthy was to do stuff all the time and be thinking about something all the time that wasn't...like I should be reflecting on what was upsetting me rather than burying it and doing something else, so it probably helped me approach those things" (3)<br>"I didn't think I'd get to the stage of brushing my hair, brushing my teeth, having a shower, eating food and drinking…Because again, I'd just hover over him, I'd be scared to leave his side, if my eyes wasn't on him I wasn't happy..." (4) |
| | **Confidence being a mum** | "It was nice to have that little break and feel like, I felt a little bit more confident to be able to leave her and know that it was ok to leave her and she was just next door and I could just bob in and out to see her and then I would be able to come back to it" (1)<br>"As I got better I had more memories of him, you can even see it in my written journal that I wrote down more stuff about him like what he'd been eating and I think a couple of weeks into being |

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| | | admitted he was old enough to be doing weaning but I'd slowed down with it because I'd not had the brain power to do it and towards the end of my admission he was pretty much eating properly, near on fully weaned...So I'd obviously relaxed a lot to let him do things like that" (3)<br>"I feel like I've found a harmonious balance between being creative but still being mother and be proud of it" (4) |
| **Positive outcome attributions** | **The power of the art group** | Describing how I was feeling from my picture, it helped me talk which helped me start talking to the ward a bit more as well" (2)<br>"Being in the mother and baby unit has made me realise that actually I'm not a caterpillar, I'm a butterfly now…I don't think I would have got that if it wasn't for the art therapy" (4) |
| | **Wider staff support** | "They knew when I needed a little break but also knew when I didn't, even if I did say that I needed their help they would be like well you just do this and I'll do that, they would compromise" (1)<br>"There was someone there to tell you that you can do it and there was someone there is you really did need them" (1) |
| | **Medication** | "It could be a little bit of the medication but I think more the trusting and talking" (2) |
| **Strengthening the roots, stem and flowers** | **Frequency** | "Some mum's missed out when they went on leave, it was something we always looked forward to so it would have been nice to get a chance at either end of the week, just spread it out a little bit" (2)<br>"People go on leave at different times, for certain reasons. Their partner might work weekends so they might go on leave on Wednesday, Thursday, Friday and they try and build up your leave from two days to three days to four days so then you might be missing these sessions of stuff that would have |

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| | | been helpful to you. So, her being there more often might guarantee that you do get to see her that week" (3)<br>"I do enjoy painting and drawing and being able to express what I have in my mind and just having one day is not enough for me" (4) |
| | **1:1 opportunities** | If she'd gone to do something with another mum and baby, you want the support but it was no fault to her that is through no fault of her own, it's just you'd rather have someone present all the time" (3) |
| | **Communication** | No additional quotes |

Additional but not exhaustive list of quotes