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BOOST-3: Boosting baby communication and play

Submission date	Recruitment status	[X] Prospectively registered
12/06/2026	Not yet recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
15/06/2026	Ongoing	[ ] Results
Last Edited	**Condition category**	[ ] Individual participant data
15/06/2026	Mental and Behavioural Disorders	[X] Record updated in last year

Plain English summary of protocol

Background and study aims

When a mother or birthing person (MABP) experiences mental illness in the first two years of their child's life, this is known as perinatal mental illness. It can sometimes affect their confidence in their parenting ability, lead to difficulties in feeling a bond with their child, and lead to difficulties in understanding and responding to their child's communication (known as sensitivity difficulties). This can be distressing for parents and something they want support with. Addressing these early difficulties in parent-child relationships can potentially improve children's future mental health and social outcomes. However, we have no robust evidence on what helps to support positive parent-child relationships and child mental health specifically for mothers and birthing persons experiencing severe or complex perinatal mental illness. They are likely to need tailored support due to feeling self-critical about their parenting and worrying about being judged. The video feedback intervention for positive parenting (VIPP) involves videoing parents interacting with their children. Parents are given positive and strengths-focussed feedback to help them understand and respond to what their child is communicating (sensitivity) and to help them feel confident in their parenting abilities and in their bond with their child. Previous research has definitively shown that VIPP supports sensitive parent-child interactions and boosts child mental health in other vulnerable groups, such as parents with adopted children. However, we do not yet know if VIPP is helpful for mothers and birthing persons experiencing severe or complex perinatal mental illness. Our team has adapted VIPP to help mothers and birthing persons (MABP) experiencing severe or complex perinatal mental illness manage self-critical feelings and worries about being judged (VIPP-PMH). We found that MABP receiving VIPP-PMH felt more confident and were twice as likely to respond sensitively to their child's communication. But we could not be sure this was due to VIPP-PMH as the studies were small. We will now carry out a larger study to work out if VIPP-PMH really is helpful for this group of parents and their children.

Who can participate?

We will evaluate VIPP-PMH in 258 MABP experiencing moderate to severe or complex perinatal mental illness, who have a child aged 3 to 12 months old, and who are experiencing difficulties in their relationship with their child.

What does the study involve?
Half of the MABP will receive VIPP-PMH alongside perinatal mental health care, whilst the other half will receive perinatal mental health care alone. Who gets what will be decided at random.
1. We will evaluate whether VIPP-PMH is superior to perinatal mental health care alone in a) supporting MABPs' positive responses to their child's communication (sensitivity) and b) boosting their child's mental health. We will assess this using questionnaires and videos of them playing with their child.
2. We will also test whether VIPP-PMH is more helpful for some groups of MABPs than others, so we can ensure it is offered to the parents and children who will benefit the most in the future (targeting).
3. Finally, we will test whether one of the ways in which VIPP-PMH works to improve sensitivity and children's mental health is through improving c) MABPs' parenting confidence and d) their bond with their child (mediators)

What are the possible benefits and risks of participating?
We are in the early stages of this research and therefore we cannot say with certainty that taking part will be of benefit. However, the Baby Communication and Play sessions have been used in research studies previously and parents have found them helpful. Afterwards, participants will be able to download your own copy of the clips of baby and you playing together. The disadvantages of taking part are likely to be small. Participants will need to put some time aside for the research visits, and for whichever type of support you are allocated to receive (e.g. the Communication & Play visits). Answering questionnaires may bring up unhappy feelings. Some people can find it awkward to be filmed or to watch clips of themselves, and can start to feel self-conscious, judge themselves or worry that others will judge them. We have found people usually relax after the first session and when they realise they are not being judged. The professionals conducting the visits are specially trained to be aware of this and to help participants deal with these feelings.

Where is the study run from?
The study is led by researchers at City St George's, University of London. Local mental health and research teams are taking part all across England.

When is the study starting and how long is it expected to run for?
The study will open for new participants in December 2026 and is currently planned to stop recruiting participants in November 2028.

Who is funding the study?
The National Institute for Health and Social Care Research (UK)

Who is the main contact?
Una Hutton Una.hutton.3@city.ac.uk

Contact information

Type(s)
Principal investigator, Scientific, Public

Contact name
Dr Kirsten Barnicot

Contact details

Department of Population Health and Policy
School of Health and Medical Sciences
City St George's, University of London
Northampton Square
London
United Kingdom
EC1V 0HB
-
kirsten.barnicot@city.ac.uk

Type(s)
Public, Scientific, Principal investigator

Contact name
Dr Una Hutton

Contact details
Department of Population Health and Policy
School of Health and Medical Sciences
City St George's, University of London
Northampton Square
London
United Kingdom
EC1V 0HB
-
una.hutton.3@city.ac.uk

Additional identifiers

Integrated Research Application System (IRAS)
331818

Central Portfolio Management System (CPMS)
57520

National Institute for Health and Care Research (NIHR)
162467

Study information

Scientific Title
Efficacy and mechanisms of the video feedback intervention for positive parenting for mothers experiencing moderate to severe perinatal mental illness

Acronym
BOOST-3

Study objectives
1. To find out whether the video feedback intervention for positive parenting adapted for perinatal mental health (VIPP-PMH) is more effective in improving maternal sensitivity and

reducing the risk of child mental health difficulties compared with standard specialist perinatal mental health care alone, for mothers and birthing persons (MABP) with severe or complex mental illness who are experiencing difficulties in their relationship with their infant
2. To find out whether certain groups benefit more from VIPP-PMH than others - for example MABP who are have low maternal sensitivity, have more severe mental illness and higher socio-economic risk
3. To evaluate whether changes in parenting confidence and parent-infant bonding are responsible for improving parental sensitivity and child mental health

Ethics approval required
Ethics approval required

Ethics approval(s)
Not yet submitted

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Open (masking not used)

Control
Active

Assignment
Single

Purpose
Supportive care

Study type(s)

Health condition(s) or problem(s) studied
Perinatal mental illness

Interventions
People taking part in the study will be divided into two groups. A computer will decide at random if participants are in Group 1 or Group 2.

Group1 will receive 6 Baby Communication and Play Sessions (the video feedback intervention for positive parenting) with an NHS health professional. These will be for 1.5 hours every 2 weeks. They will usually be at the participant's home, unless the participant prefers somewhere else. During the sessions the clinician and participant will record and watch short film clips of the participant and their baby playing. They will talk about what their baby’s behaviour means, their bond with the participant, and what he/she is communicating.

Group 2 will receive other types of support with understanding and connecting with their baby, also with an NHS health professional. For example: talking therapies, group sessions with other Mums, or baby massage sessions.

The clinicians will let participants know what's available (it's different in different locations) and participants and clinicians will decide together what's best for them.

Duration of follow-up: 29 months post-baseline for all study arms.

Randomisation process: Randomisation will be via a secure fully automated service operated by the NWORTH Clinical Trials Unit, Bangor University. We will use a sequentially randomised dynamic adaptive algorithm stratified by Mental illness severity, Maternal Socioeconomic risk, type of parent-infant relationship problem and study site with a 1:1 intervention: control allocation ratio (Russell et al., 2011). Within the randomisation algorithm, the likelihood of the participant being allocated to each treatment group is recalculated based on the participants already recruited and allocated. This recalculation is done at the overall allocation level and within stratification. By undertaking this re-calculation, the algorithm ensures that balance is maintained within acceptable limits of the assigned allocation ratio while maintaining unpredictability. Prior to the beginning of the trial, NWORTH Clinical Trials Unit will create the randomisation system. Randomisation will take place after consent has been received, eligibility has been established, and baseline measures have been assessed, before the beginning of the intervention. Neither the Chief Investigator, nor co-investigators, nor local Principal Investigators, nor any other researchers having contact with trial participants, will have prior access to the allocation list, to ensure that the allocation remains unpredictable to any individuals in direct contact with trial participants.

Intervention Type
Behavioural

Primary outcome(s)
1. Maternal sensitivity measured using Ainsworth scale at baseline and 10 months

Key secondary outcome(s)
1. Maternal non-intrusiveness measured using observer-rated Ainsworth Scale at baseline, 10 months post-baseline

2. Maternal bonding problems measured using maternal self-report using the Postpartum Bonding Questionnaire (PBQ) at baseline, 10 months post-baseline

3. Maternal parenting confidence measured using maternal self-report using the Karitane Parenting Confidence Scale (KPCS) at baseline, 10 months post-baseline

4. Maternal mental illness severity measured using CORE-10 questionnaire at baseline, 10 months post-baseline

5. Maternal well-being measured using maternal self-report using the Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS) at baseline, 10 months post-baseline

6. Child emotion regulation difficulties measured using observer-rated emotional reactivity during a frustration task at baseline, 10 months post-baseline

7. Child emotional and behavioural problems measured using maternal report using Regulatory Capacity and Negative Emotionality subscales of the IBQ-R Short Form at 5 months and BITSEA at 10, 17 and 29 months post-baseline

Completion date
30/07/2031

Eligibility

Key inclusion criteria
The study will include mothers and birthing persons who:
1. Are using community perinatal mental health or parent-infant menta health services
2. Are experiencing moderate to severe non-psychotic mental illness (score of ≥15 on the CORE-10 (a short form of the CORE-OM,Evans et al,2002))
3. Meet diagnostic criteria for at least one of the five most common non-psychotic illnesses treated by perinatal mental health services: Generalised anxiety disorder (GAD),Major Depressive Disorder (MDD),Obsessive-compulsive disorder (OCD),Post-traumatic stress disorder (PTSD) and Personality Disorder (PD). disorder (National Maternity and Perinatal Audit,2024; Coates et al.,2018; Durrani & Cantwell,2009; Howard et al.,2022). Maternal mental health diagnosis will be ascertained based on clinical diagnosis and confirmed by a researcher administered MINI International Neuropsychiatric Interview (MINI; Sheehan et al.,1998),and/or scoring above threshold on at least one personality disorder screening tool (McLean Screening Instrument Borderline Personality Disorder (MSI-BPD) ≥7 (Zanarini et al,2003); or The Level of Personality Functioning Scale – Brief Form (LPFS-BF) ≥ 31(Tongyao et al,2025)
4. Are experiencing parent-infant relationship difficulties,indexed by:
4.1. Self-reporting bonding difficulties (scoring ≥ 12 on the Postpartum Bonding Questionnaire (PBQ) (Brockington et al,2006) and/or
4.2. A specialist perinatal mental health clinician identifies insensitive mother-infant interaction corresponding to an Ainsworth Maternal Sensitivity Scale (AMSS) score ≤ 5 (Ainsworth,1969). Ainsworth Sensitivity scale ratings will be verified by trained researchers based on videos of participating MABP interacting with their children.
These dual criteria have been established based on evidence that the two types of difficulties often do not align (Nath et al.,2020; Albanese et al.,2019)
5. Have parental responsibility for and unsupervised contact with a child aged 3-12 months at intervention initiation.
6. Are capable of giving informed consent
7. Are aged 16 to 65 years

Healthy volunteers allowed
Yes

Age group
Mixed

Lower age limit
16 Years

Upper age limit
65 Years

Sex

All

Total final enrolment
0

Key exclusion criteria
1. Families where a sibling or co-parent is participating in the trial
2. Families who have currently or previously experienced VIPP or VIG intervention
3. MABP who have English language or learning difficulties that are sufficiently severe to prevent them completing study measures even with assistance
4. MABP who have a significant visual impairment involving both eyes
5. MABP who are currently or in the past month experiencing acute symptoms of psychosis or mania identified by a score of ≥1 on the psychosis module of the MINI[UH32.1][KB32.2] (participants will complete the screening questions 1-7 of the Psychotic Disorders Subscale on the basis of symptoms within the last month) and/or a score of ≥10 on the Patient Mania Questionnaire -9 (PMQ-9;Cerimele et al.,2021)

Date of first enrolment
01/12/2026

Date of final enrolment
30/11/2028

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
-
-
-
England
-

Sponsor information

Organisation
City St George's, University of London

ROR
https://ror.org/047ybhc09

Funder(s)

Funder type
Government

Funder Name
National Institute for Health and Care Research

Alternative Name(s)
National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Kirsten Barnicot (Kirsten.Barnicot@citystgeorges.ac.uk). Anonymised quantitative datasets (e.g. questionnaire data) may be shared with external researchers on request, subject to CI approval, a methodologically sound proposal, and a signed data-sharing agreement. Data sharing will be available beginning from 12 months until 5 years after primary publication. Audio and video data will not be shared due to risks to participant anonymity, and data will not be placed in public repositories

IPD sharing plan summary
Available on request