# Assessing the efficacy of an intervention to improve mind-mindedness in teenage mothers

<b>Recruitment status</b> No longer recruiting	<ul><li>Prospectively registered</li></ul>		
	<pre>Protocol</pre>		
Overall study status Completed	Statistical analysis plan		
	[X] Results		
Condition category Pregnancy and Childbirth	Individual participant data		
	No longer recruiting  Overall study status  Completed		

### Plain English summary of protocol

Background and study aims

Findings from a number of studies show that parents' ability to 'tune in' to what their baby might be thinking or feeling (so-called 'mind-mindedness') is important for secure attachment, language, play and understanding of other people's thoughts and feelings. For families in poverty, parents' ability to tune in to their babies' thoughts and feelings helps the child avoid developing problem behaviours at school-starting age. This research shows the widespread benefits of parents' willingness to see things from the child's perspective. The main aim of this project is to develop and evaluate an intervention package that will use a smartphone app to inform parents in an accessible way about mind-mindedness. The effectiveness of this intervention package will be evaluated by looking at its impact on mother-baby interaction and child outcome in teenage mothers.

#### Who can participate?

Pregnant women or mothers aged under 20 with babies who are 6 months old or younger.

#### What does the study involve?

Participants will be randomly allocated to receive either the intervention package or a control package. The intervention package consists of an animated film and booklet to inform mothers about mind-mindedness, and a mind-mindedness smartphone app that has been designed for the study. The control group will receive a film and booklet focussed on general development and a widely-available baby app. Mothers and their 6-month-old babies will meet with the researchers. Mothers will be filmed playing with their babies for 20 minutes and will fill in some questionnaires about their background and wellbeing. The researcher will then show them a film, provide a booklet, and show them how the smartphone app works. The app will be downloaded onto the mothers phone for her to keep. Altogether, this will last about an hour and mothers will be paid for their time and travel. Mothers will use the smartphone app until their babies are 12 months old, when mothers and babies will meet with the researchers again. They will again be filmed playing together and mothers will fill in some questionnaires. The session will last about an hour and mothers will again be paid for their time and travel.

What are the possible benefits and risks of participating?

The app is designed to be fun to use, and will help mothers learn about their babys development

in a new, interactive way. Some mothers may find answering the questionnaires uncomfortable, but the researchers will be able to provide support if needed.

Where is the study being run from?

The researchers are based at the University of York and are working with GPs, health visitors and maternity sites across North Yorkshire to identify suitable participants. Testing will normally take place in the University of Yorks baby suite, but can be conducted at a local childrens centre or clinic if that is more convenient for mothers.

When is the study starting and how long is it expected to run for? The study runs from July 2014 until June 2016.

Who is funding the study? Economic and Social Research Council (ESRC) (UK).

Who is the main contact? Dr Fionnuala Larkin fionnuala.larkin@york.ac.uk

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Fionnuala Larkin

#### Contact details

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# Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 16561

# Study information

#### Scientific Title

Assessing the efficacy of an intervention to improve mind-mindedness in teenage mothers: a randomised controlled trial

#### Acronym

Mind-mindedness Intervention

#### **Study objectives**

The study seeks to evaluate whether mind-mindedness can be enhanced amongst teenage mothers through the provision of a 6-month, technology-based intervention package involving a smartphone app and animated film.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

14/NE/0114; First MREC approval date 22/05/2014

#### Study design

Randomised; Interventional; Design type: Treatment

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

# Study setting(s)

Hospital

# Study type(s)

Quality of life

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

# Health condition(s) or problem(s) studied

Topic: Reproductive Health; Subtopic: Reproductive Health and Childbirth (all Subtopics); Disease: Reproductive Health & Childbirth

#### **Interventions**

There will be two trial arms: the mind-mindedness intervention and the control intervention.

- 1. An animated film and associated booklet will inform the intervention group about mind-mindedness, and they will receive a mind-mindedness smartphone app that has been designed for the study.
- 2. The control group will receive a package focussed on general developmental milestones and a pre-existing baby app that is widely available.

#### Intervention Type

#### Other

#### Phase

Not Applicable

#### Primary outcome measure

Mind-mindedness will be assessed from transcripts of parent-child interaction using previously operationalised coding procedures (Meins & Fernyhough, 2012). Timepoint(s): After 6 months of intervention

#### Secondary outcome measures

- 1. Maternal mental health; Timepoint(s): After 6 months of intervention
- 2. Parent-child attachment; Timepoint(s): When child is aged 12 months These will be assessed through administration of the following measures:
- 1. Slade Pregnancy Interview, Revised (Slade, 2011)
- 2. Hospital Anxiety and Depression Scales (Zigmond & Snaith, 1983)
- 3. Rosenberg Self-Esteem Scale (Rosenberg, 1965)
- 4. Parental Bonding Instrument: Brief Current (PBI-BC; Klimidis, Minis & Ata, 1992)
- 5. Relationship Questionnaire (Bartholomew & Horowitz, 1991)
- 6. Family Emotional Involvement and Criticism Scale (perceived criticism items) (FEICS; Shields, Franks, Harp, McDaniel, and Campbell, 1992)
- 7. Los Angeles Symptom Checklist (LASC; King, King, Leskin, & Foy, 1995)
- 8. Parenting Stress Index, Short Form (3rd edition). (Abidin, 1995)
- 9. Recent Life Events Questionnaire (Department of Health, 1985)
- 10. Interpersonal Reactivity Index (IRI; Davis 1980)
- 11. Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet & Farley, 1988)
- 12. Parenting Sense of Competence Scale (Gibaud-Wallston & Wandersman, 1978)
- 13. Parent Development Interview Revised Short Version (Slade, Aber, Berger, Bresgi & Kaplan, 2012)
- 14. Laboratory Temperament Assessment Battery (Goldstein & Rothbart, 1999)
- 15. Strange Situation (Ainsworth & Wittig, 1969)

#### Overall study start date

17/02/2014

#### Completion date

30/06/2018

# **Eligibility**

#### Key inclusion criteria

- 1. Aged below 20
- 2. Pregnant or the mother of a baby younger than 6 months of age

#### Participant type(s)

Patient

#### Age group

#### Adult

#### Sex

Female

# Target number of participants

Planned Sample Size: 210; UK Sample Size: 210

#### Total final enrolment

141

#### Key exclusion criteria

Mothers who are not native English speakers

#### Date of first enrolment

29/07/2014

#### Date of final enrolment

30/06/2016

# Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre Department of Psychology

York United Kingdom YO10 5DD

# Sponsor information

# Organisation

University of York (UK)

# Sponsor details

Room 152 Seebohm Rowntree Building York England United Kingdom YO10 5DD

#### Sponsor type

University/education

#### **ROR**

https://ror.org/04m01e293

# Funder(s)

#### Funder type

Research council

#### **Funder Name**

Economic and Social Research Council (ESRC); grant codes: ES/K010719/1

#### Alternative Name(s)

**ESRC** 

#### **Funding Body Type**

Government organisation

# **Funding Body Subtype**

National government

#### Location

United Kingdom

# **Results and Publications**

# Publication and dissemination plan

Publication and dissemination plan as of 30/11/2018: Planned publication in high impact developmental journals.

# Intention to publish date

31/05/2019

# Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

Previous publication and dissemination plan:

Planned publication in high impact developmental journals.

# IPD sharing statement:

The datasets generated during and/or analysed during the current study will be stored in a non-publically available repository: the ESRC data service provider or the University of York's data repository

# IPD sharing plan summary

Data sharing statement to be made available at a later date

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		22/08/2019	22/04/2021	Yes	No
HRA research summary			28/06/2023	No	No