

The COSI Study

(The Circle of Security Intervention Study)



Anna Freud

Acknowledgements

We would like to thank the participants of the COSI Study. Their involvement has been crucial in understanding how to best support mothers and birthing parents facing mental health difficulties during the perinatal period.

This document provides an overview of the study and its findings.

More details about the study's results can be found [online](#).

Summary

The COSI Study looked at how the Circle of Security – Parenting programme (COS-P) affects the mental health of parents, their relationship with their child and how the child develops. COS-P is used in many countries and has been shown to help families. In this study, a 10-session group version of the programme was tested with parents who were experiencing mental health challenges in the year after birth and were accessing an NHS perinatal mental health service.

The COSI study found that mental health symptoms and bonding between parent and baby improved across time for many parents, regardless of whether they received COS-P. The study also showed that receiving COS-P on top of standard NHS care did not have any additional benefit for parents' ability to manage emotions, parenting or child development. This means that COS-P did not result in greater benefits than regular care alone.

Some of the parents we interviewed said the COS-P programme helped them, explaining that they noticed positive changes in their relationship with their baby as well as feeling more connected, patient and confident as parents. However, others felt the COS-P programme didn't fully address their mental health or bonding needs.

These findings will help improve support and treatment for both parents' mental health and bonding between parents and babies during the perinatal period. They offer valuable insights into what works best for parents, especially those facing mental health challenges, and will guide future programmes and therapies. When interpreting these findings, consideration has been given to the best way to deliver an intervention like COS-P and whether one-to-one delivery, face-to-face delivery or a longer version of the intervention may work better for some subgroups of parents.

A note on language

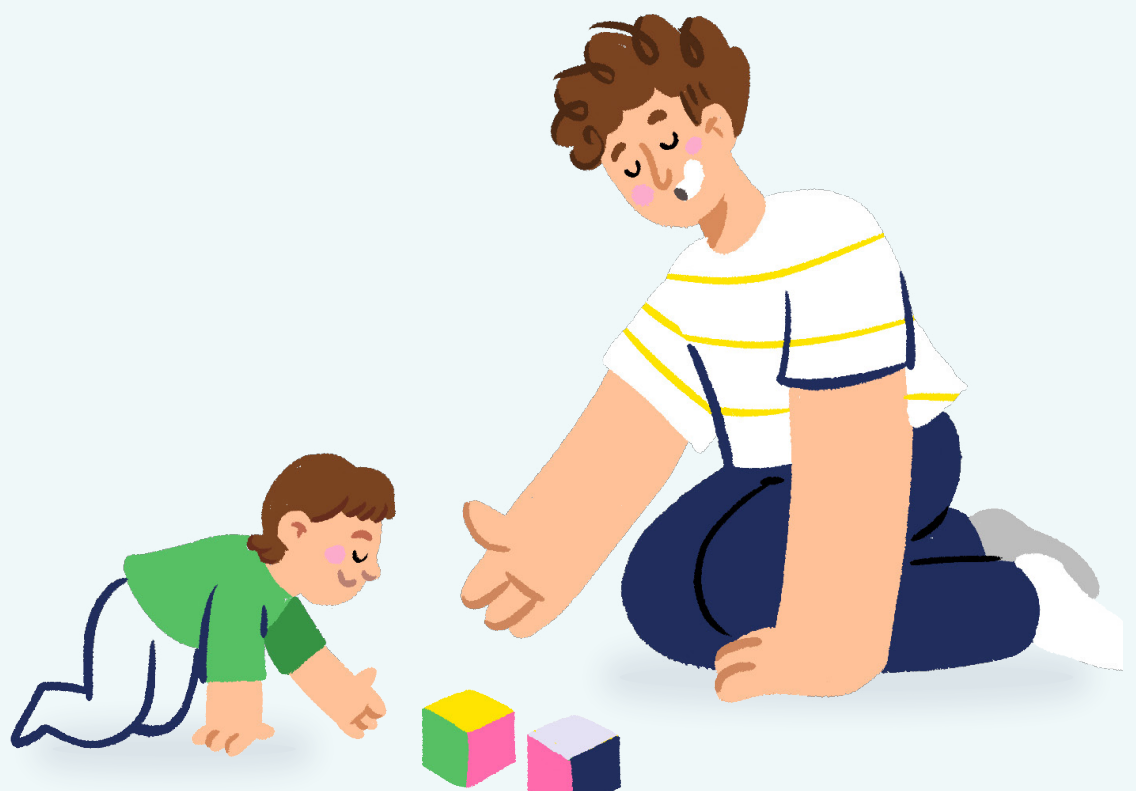


We use the term 'birthing parents' or 'mothers and birthing parents' to describe those of all genders who have given birth to their child.

What you'll find in this report

Use the headings below to navigate to the section you are interested in.

- What is the COSI Study?
- What did the study try to do?
- Why was this study needed?
- Who was part of the study?
- What did we do to meet this goal?
- What did we find?
- What do these results mean?
- How will these results be used?



What is the COSI Study?

The COSI study was conducted within NHS perinatal mental health services, which provide support to mothers and birthing parents facing moderate-to-severe mental health difficulties during pregnancy and up to two years after birth. In addition to mental health support, NHS perinatal mental health services also support the relationship between parent and baby. In the COSI study, we tested if the Circle of Security - Parenting group programme is a helpful and acceptable way of doing that.

What did the study try to do?

1. Examine whether COS-P improves parent mental health symptoms.
2. Explore whether the group changes parent-baby relationships.
3. Explore whether COS-P helps babies show better development.
4. Gather feedback from parents and staff on COS-P.

Why was this study needed?

Mental health challenges are common during pregnancy and after birth, and many mothers and birthing parents also face difficulties bonding with their baby. While NHS services help with these challenges, there is still a need to understand what kinds of interventions work best. While studies in other countries have already shown that Circle of Security groups can be helpful for parents and children, they have not been tested in NHS perinatal mental health services in England. This study aimed to test COS-P in NHS services and find out whether it could improve mental health and parent-baby relationships.



Who was part of the study?

Over 3000 mothers and birthing parents were approached to take part in the study. To join the study, parents had to:

- be currently receiving care from an NHS perinatal mental health service in one of the study locations
- have a baby under 12 months old
- meet certain mental health and parent-baby relationship criteria.

What did we do?

Between January 2022 and October 2023, 371 mothers and birthing parents from 10 different NHS perinatal mental health services joined the study. Participants were randomly put into a group that either received the COS-P programme (plus standard care in NHS perinatal mental health services) or standard NHS care alone. Those in the COS-P group were invited to attend 10 weekly sessions with 4-6 other parents, where they watched videos and discussed parenting with a trained facilitator. Sessions were available online or in person, with interpreters and digital tablets provided as needed.

Sites in the COSI study:



North West:

1. Cheshire and Wirral Partnership NHS Trust
2. Mersey Care NHS Foundation Trust - Mid Mersev Team
3. Mersey Care NHS Foundation Trust - Mersey Care Team

North East

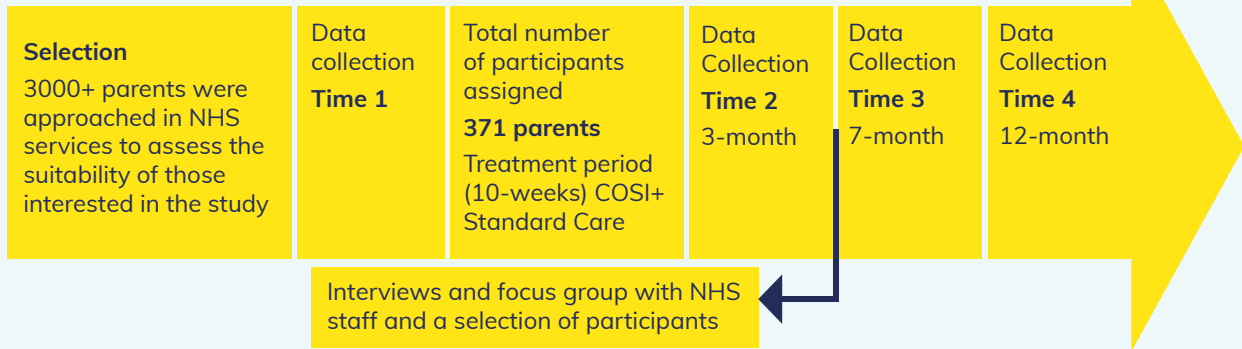
4. Cumbria, Northumberland, Tyne and Wear NHS Trust
5. South West Yorkshire Partnership NHS Trust
6. Tees, Esk and Wear Valleys NHS Foundation Trust

South

7. Northamptonshire Healthcare NHS Foundation Trust
8. Sussex Partnership NHS Foundation Trust
9. Devon Partnership NHS Trust
10. Southern Health NHS Foundation Trust

Study visits

We gathered information from mothers and birthing parents at four different timepoints. This allowed us to examine how the programme affected participants over time.



What did we find?

Mental health

On average, participants in the COSI Study showed meaningful improvements in mental health symptoms. Both the COS-P group and standard care group showed similar levels of improvement. Receiving COS-P did not result in greater benefits than regular care alone across the 12 months of the study.

We also found that participants' levels of emotion regulation difficulties were the same before and after receiving either COS-P or standard care.

We talked with the mothers and birthing parents to understand their opinions about the programme:

Some mothers and birthing parents reported improvements in their mental health, linking these changes to how they understand their baby and their approach to parenting.

Some felt that while COS-P offered benefits, it was not 'enough' to help with their mental health difficulties. They mentioned needing additional mental health support from their perinatal service after completing COS-P.

Some spoke about COS-P not being sufficient to treat longstanding mental health difficulties but said it helped them to reflect on their mental health and recognise how their patterns of parenting were influenced by their own parents.

Parent-baby bonding

On average, mothers' and birthing parents' self-reported bonding with their baby improved across time regardless of whether they received COS-P or standard care alone. We also video-recorded the mothers and birthing parents while they played with their baby to understand how well they could notice and respond to their child's needs and feelings. We found that on average, the quality in these interactions was similar for parents who received and didn't receive COS-P and was stable across time.

When we spoke to the mothers and birthing parents, they described their experiences in the following ways:

After receiving COS-P, some participants noticed positive changes in their relationship with their baby. They felt they better understood their own needs and their baby's needs, became calmer and more patient and started seeing their baby in a kinder way. They also felt more confident in caring for their baby, enjoyed spending time together and felt less pressure to be perfect.

Some thought making improvements in their relationship with their baby was a gradual process and would take time.

Others reported continuing bonding difficulties and found other parent-baby therapies more helpful for bonding than COS-P. They felt COS-P focused more on understanding than bonding itself and that bonding was more closely linked to their mental health and trauma - issues beyond the scope of COS-P.

Some felt improvements in their relationship with their baby were unrelated to COS-P and were instead due to factors such as baby's age, sleep patterns or medication.



Child development



The COSI study also looked at child development such as speaking and understanding language, moving and coordinating the body, thinking and learning, and getting along with others emotionally and socially. This was of course done relative to the age of the child at the time. We found that children whose parent received COS-P were not more likely to be developing any better or worse than those whose parent only received standard care.

We also looked at the type of attachment children formed to their parent at the end of the study. To do this, we observed how children reacted to new settings, meeting with a stranger (i.e., a trained researcher they never met before) and separations and reunions with their parent. Again, we found that children whose parent received COS-P had similar attachment styles than those whose parent only received standard care.

What do these results mean?

These results indicate that, on average, mothers and birthing parents in the study showed improvement in their mental health and bond with their baby over the course of a year, no matter whether they took part in the 10-week COS-P programme or not. The improvements after COS-P were not greater than the standard care in NHS perinatal mental health services.

Mothers and birthing parents had different views about how well the programme worked when they were interviewed. Some thought it was really helpful, some found it useful in some ways but felt it didn't help enough with their feelings or bond with their baby, and others didn't find it helpful at all.

How will these results be used?

These results will offer valuable insights for service developers. The findings will help identify the most effective approaches for the majority of service users and have the potential to inform the ongoing development of both existing and new therapies.

When interpreting these findings, consideration should be given to the best way to deliver an intervention like COS-P and whether one-to-one delivery, face-to-face delivery or a longer version of the intervention may work better for some subgroups of parents. Future research will help address these unanswered questions.

Final thoughts

At the heart of the COSI Study were the voices of mothers and birthing parents. We worked closely with a diverse group of parents with lived experience of perinatal mental health services who helped shape every aspect of the study – from the initial concept and funding application to the delivery of the study itself.

We would like to express our deepest gratitude to the participants for taking part in the COSI Study, as well as the NHS perinatal mental health services that supported the project. Their involvement was crucial in answering key questions about how best to support mothers and birthing parents facing mental health and bonding difficulties. We hope the results of this study will contribute to ensuring parents receive the best possible care in future.



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Anna Freud