Nesta/DCMS Centre for Social Action Innovation Fund Phase 2 Evaluation Report Summary Sheet

Grantee Name	Citizens UK
Programme Name	Parents and Communities Together (PACT)
Fund Name	Early Years Social Action Fund
Stage of Development	Scaling
Evaluation Partner	King's College London
Date Completed	September 2019
Budget	£30,000

Project Overview
Parents and Communities Together (PACT) is a community-led social support project, set up by Citizens UK, to support and empower parents in order to improve health and development outcomes for young children. The project is aimed at families from when they are pregnant until when the child is three or four. Parent Organisers and volunteers facilitate a listening environment, where they support parents to collaborate and empower them to lead. Two of the activities that PACT offers are MumSpace groups and Booksharing courses. These activities usually take place on a weekly basis and are attended by parents and facilitated by Parent Organisers and volunteers. The Booksharing course aims to equip the parent or carer with the knowledge of how to engage the child in interactive book-based play, while weekly MumSpace groups for parents with babies and toddlers are parent-led peer support groups that offer a space for children to play and parents to discuss challenges, share common experiences and anxieties, as well as socialise and make connections. PACT was developed and initially tested and delivered in Southwark. Following promising results from a previous evaluation conducted by King's College, Citizens UK were awarded funding in 2017 to grow PACT to an additional three locations - Leeds, Lewisham, and Newcastle - to test whether the model was scalable.
Headline Findings
The evaluation of PACT aimed to uncover whether the approach has the same impact in different areas and the impact of the MumSpace and Booksharing courses. Findings for **MumSpace**

IMPACT

- PACT continues to have the highest beneficial impact to mums who enter the programme with the highest severity of anxiety and depressive symptoms. This was especially noted in Newcastle.
- Within three months of engaging in PACT, the average satisfaction of mums' social networks had increased.
- Beneficial impacts also included increased parenting confidence.

PROCESS

- For the MumSpace group to succeed in new sites, a lot of different elements need to be in place. These include the location and culture of the community in which it is placed, allowing time for the service to become established, and creating a structured and welcoming environment in which the mums know what to expect each week and become readily involved in all aspects of the group (including research).
- MumSpace in Newcastle has been the most successful in terms of recruitment to the evaluation study, as well as in producing follow-up results.
- The fidelity results appear very encouraging, indicating it is possible to implement the principles of MumSpace in other geographical settings apart from Southwark.
- The location in which the 'MumSpace' model was unable to be effectively replicated during the period of data collection (Lewisham) was probably a result of not all the core elements of the programme (e.g. separate 'mum session' away from the children) being able to be organised because there were not enough mums attending for this to happen.

Findings for **Booksharing**

IMPACT

- Children have shown significant improvement in language acquisition and understanding of vocabulary across the booksharing course (as assessed using the Communicative Development Inventory).
- Mums self-reported an improvement in their parent-child relationship as a result of the booksharing course, particularly regarding their personal knowledge of their child.

PROCESS

- Booksharing courses were well adhered to at home (i.e. practice reading), with the biggest issues facing mums being that their child did not always want to read with them and finding enough time in their schedule to do so.

Evaluation Approach & Methodology

For **Mumspace**

The measures for assessment were selected by King's College London (KCL) as the measures that would indicate whether the MumSpace groups had been effective in impacting mental health, parenting self-efficacy and social capital. All measures were conducted as a self-report.

To measure mental health indicators amongst the mothers, the Patient Health Questionnaire-9 (PHQ-9) and Generalised Anxiety Disorder-7 (GAD-7) measures were used to measure depression and anxiety respectively. To measure social capital, the evaluation team adopted the same measure that had been used in previous PACT studies; the Arizona Social Support Scale (ASSIS) which mainly focuses on social support and has been recognised to be a key aspect of social capital.

To understand the key contributing factors to MumSpace's successful running, the Process Fidelity Checklist was developed and used. This was a list of 20 key aspects of MumSpace that were compiled from a previous qualitative report on the factors those attending MumSpace identified as important to them.

Each mother was approached by the group leader and researcher on their second or third attendance at the group and introduced to the research. Assessments were conducted within a 20-minute period during the group session with a follow up assessment requested three months later, which was conducted either at a group session or over the phone.

For **Booksharing**

In order to assess the impact of Booksharing, child literacy was measured using the Communication Development Index (CDI), a reliable and standardised measure of child language acquisition used across the UK. This was measured at the beginning and end of the course (at the eight-week point). An average of six mums attended each course. The courses have involved 31 mums in total, all of whom have participated in this study (London n=27, Newcastle n=4). Each mother was required to self-report how successful this reading practice had been by the end of the Booksharing course. Forms were provided at this end point which mothers completed to indicate how many days in the last two weeks they had practised, and how long per day the practise lasted for in the last week.

■ Quantitative	■ Qualitative	□ Mixed
■ Impact Evaluation	□ Process Evaluation	□ Economic Evaluation
■ One-off evaluation	□ Developing internal evaluation capacity	

Evaluation Implementation Challenges and Limitations

For both groups the small number sampled means that some care must be taken when interpreting the results. Although the measures used for Mumspace are robust and widely tested and used in research and healthcare, the sample size is small (n=38) and measures are self-reported. Therefore, the significance levels of the results should be interpreted with caution as the sample sizes are not large enough to draw clear causal connections between variables.

Key Recommendations and Next Steps

- The findings for Mumspace provide a good foundation on which further investigation

can be built. For example, qualitative research would be useful in investigating the difficulties in initial engagement further, and exploring mothers' experiences at the different groups, and motives for continued attendance in more depth.

Citizens UK will be sharing the evaluation with partners and other providers to promote their model of working as an effective means of building the capacity of parents to improve their own mental health, the well-being of their families and outcomes for their children.

There is also a larger evaluation led by KCL in its third year which includes Espacio Mama (a Spanish language version of Mumspace) and Dadspace groups (also part of PACT but which wasn't included in this evaluation). Preliminary results show significant mental health improvements among Spanish speakers.

CITIZENS UK   PACT

Evaluation of PACT in new areas:
final report of project funded by the Early Years Social Action Fund (2017-2019)

Report authored by June Brown and Annabel Burnley, 4th September 2019

Executive summary

Parents are at the heart of our work; activities are created for parents and led by parents. Parents and Communities Together (PACT) engages hard-to-reach communities who don't normally use statutory services (e.g. health and social care services) . The project is aimed at families from when they are pregnant until when the child is 3 or 4.

Parent and/or Community Organisers and volunteers facilitate a listening environment, where they support parents to collaborate and empower them to lead. PACT works with **health professionals** such as midwives and health visitors to offer clinical support and advice and also refer people to the PACT service. PACT also partners with **community and education institutions** such as churches, mosques, schools and children centres to host our activities, and refer people to the service.

PACT activities usually take place on a weekly basis, and are attended by parents and facilitated by Parent Organisers and volunteers.

This evaluation covers two aspects of the work of PACT: MumSpace and Book-sharing. While MumSpace originally took place in Southwark, Citizens UK were keen to see if MumSpace could also be successfully offered in 3 other areas: Newcastle, Leeds and Lewisham.

Book-sharing is a more specific activity designed to improve child language and wider cognitive development through engaging the child in reading with their mother. It originally took place in Southwark, but funding from Nesta allowed this to also be offered in Newcastle.
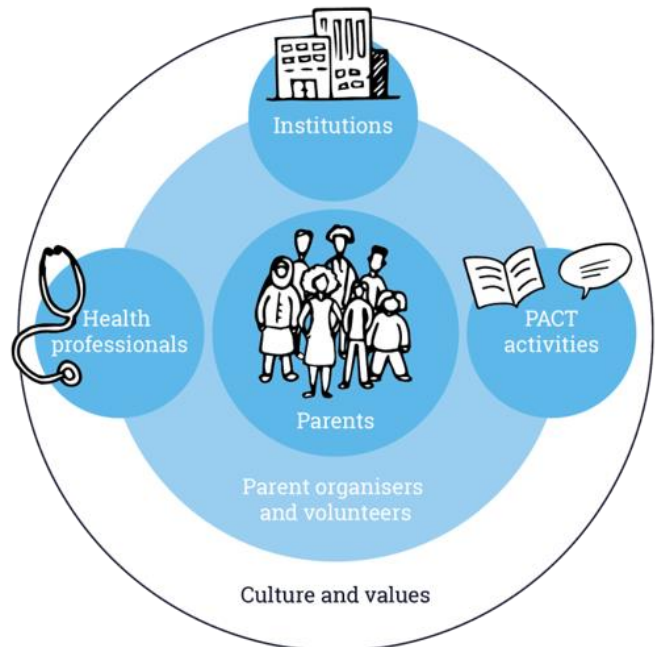
The evaluation of MumSpace starts on p.1, while the evaluation of Book-sharing starts on p.13.

Part 1: MumSpace

Aims of the MumSpace evaluation

In 2017, Nesta, in partnership with the Department for Digital, Culture, Media, and Sport (DCMS) awarded PACT £205,000 from their Early Years Social Action Fund to test if PACT can have the same effects in different areas. This upscaling has been evaluated by King's College London and the results are found in this report. The main aims of the evaluation were:

1. To describe the mums from all MumSpace groups at the 4 sites at follow-up (n=38);

2. To identify the differences in Mums attending MumSpace groups in different sites;

3. To evaluate any impact MumSpace attendance has had on mental health indicators, parenting self-efficacy and social capital;

4. To understand the key contributing factors to MumSpace's successful running.

The impact of the project

Throughout the life of PACT, over 343 mums have consistently engaged with the project, 147 of them have been in Newcastle, Leeds and Lewisham as part of the up-scaling of the project. A central function has been the recruitment, training and development of 46 volunteers, who were mums recruited from the project itself.

The key feedback that we receive from parents attending PACT are themed as follows:

- "No Judgement – lots of like-minded people to talk to"

- "PACT projects contributed massively to my mental well-being"

- "The team, and the people who attend; we all work together. The community makes the project work well."

Summary of the research findings

- While there was not an improvement in depression (PHQ) and anxiety (GAD) scores amongst mums generally across the 4 sites, there were significant improvements among mums who entered the groups at baseline with higher (clinical) levels of depression and anxiety;

- There was an increase in parenting confidence (KPCS) scores amongst mums, particularly for those struggling most acutely from depression and anxiety. The largest increase in confidence also came from Southwark mums;

- There were several improvements in the size of mums' specific social networks and satisfaction with them (ASSIS), with particular increases in the number of people mums felt they could rely on for childcare, advice and material aid;

- There is strong agreement on the Fidelity Checklist that all the MumSpace sites were providing the key elements in the services and staying true to the ethos of MumSpace. There were some lower scoring 'elements' providing areas for improvement for particular sites such as Leeds and Lewisham.

Background: PACT and Citizens UK

Citizens UK is the largest and most diverse alliance in the UK of active citizens and leaders from local institutions who are committed to working together for the common good. It is a growing organisation. Currently, there are over 450 local institutions in dues-paying membership.

Community organising starts with the recognition that real change can only come when community-rooted organisations pool resources and learn the arts of public action – building enough power to oblige the State and the Market to consider and respond to the real needs of ordinary people whilst also leading the way ourselves on the issues and good practices which are the responsibility of Civil Society.

Citizens UK has trained more than 7,000 community leaders in Community Organising and leadership techniques and built strong relationships of trust between diverse organisations. Through this training and by putting it into public action, we have given people the confidence to participate in public life for the good of their communities and the safe and peaceful governance of the City, Borough or Neighbourhood.

PACT grew out of conversations with parents about issues they faced and lack of local early years provision that addressed their needs. They told us about feelings of failure and worthlessness and how hard they found it to talk about their struggles or to know how and which support services to access. They told us that going to

play groups was painful as they felt that every other mother there was "amazing" at parenthood and had "the perfect child".

PACT uses Community Organising approaches to develop the leadership of parents who build new social support communities and change the way that statutory provision works for the better. PACT is run by and for parents. The design and delivery has been shaped by the lived experiences of parents. PACT empowers parents to design and deliver sessions that positively influence parental and children's health and developmental outcomes. Weekly MumSpace groups for parents with babies and toddlers offer a space for children to play and parents to socialise. Above all, PACT is a welcoming and friendly group run by parents for parents.

PACT delivers:

- **Community** - MumSpace groups are designed to ensure that no mum feels isolated. They are friendly, welcoming groups where people can talk openly and not feel judged.

- **Connections** - PACT creates new collaborations and pathways between community and statutory partners are developed, creating a more robust grassroots community support network.

- **Referrals** - Each week we discuss and share relevant issue for parents and also signpost parents to the practical services they need.

- **Support** - Parents involved in PACT have improved well-being, parenting skills and confidence, and social support.

- **Education** – Better informs parents about healthy behaviours and access to services; they feel able to articulate their health needs, helping shape services.

- **Skills** – Through stronger relationships, families and communities develop the skills to contribute to public policies ensuring they genuinely reflect the needs of children and reduce threats to their development. Volunteers are able to develop greater skills and confidence to identify and tackle problems.

- **Improved health** - Parents feel better able to implement healthy behaviours, such as diet and initiation and duration of breast-feeding. The interventions promote parental wellbeing and good mental health. Infants will have improved outcomes in social, emotional, and language development.

- **Leadership opportunities** - Parents are encouraged and supported in their development as parent leaders to take action to improve their communities, and to challenge and find solutions to the underlying issues that prevent families from flourishing e.g. housing, barriers to accessing health services, low wages, childcare and immigration. Community leaders feel encouraged and inspired to contribute as partners to the early intervention landscape by allocating time and resources to supporting parents.

- **Social capital** - as a result of participation, parents have more supportive relationships and access more services.

Introduction to the Evaluation

This study reports the results of a collaboration between Citizens UK (a community organiser organisation), King's Health Partners, health professionals and local mothers. This resulted in a community led network of social support and health education for local mothers in Southwark called PACT: Parents and Communities Together. A pilot study found the project, which was largely offering social support and termed 'MUMSPACE', to be feasible (Bolton M., Ferreira, Day, & Bolton D., 2016). A further quantitative study, which included more health education, found significant improvements in maternal mental health and social support, as well as high engagement with hard to reach groups in Southwark (Brown, Luderowski, Namusisi-Riley, Moore, Bolton M., & Bolton D., under review).

The evaluation extends the research, with the extra funding provided by Nesta and DCMS of new groups in Lewisham, Leeds and Newcastle. In doing so, the research aims to address the 'Impact' stage in the Theory of Change

('Intermediate Outcomes' and 'Final Outcomes'; see *Appendix 1*), a model that aims to clarify what the activities of a project aim to achieve, and provides a structure for identifying what outcomes can be measured to monitor this achievement. This final 'Impact' stage aims to link the already identified user benefits (e.g. improvements in mental health) to changes in outcome data (e.g. comparing data across groups; before and after). In doing so, it enables us to monitor programme delivery and understand how key outcomes (e.g. improvements in mental health) can be achieved as the programme expands.

The evaluation therefore aims to understand the characteristics of the new mothers who attend both the original MUMSPACE in Southwark, as well as the mothers that attend the new sites, and how these groups may differ. It also aims to understand whether attending the MUMSPACE groups benefits mothers' mental health as shown in previous research, both at the original site and new sites. Similarly, it aims to investigate how attending MUMSPACE groups may affect the social capital and parenting confidence of these new mums. Finally, the study aims to understand the key factors that contribute to MUMSPACE's impact, monitoring the services each group provides and how they are run.

Methodology

Process and eligibility

Across all 4 sites, volunteer research workers recruited mums between October (2018) and April (2019). Those selected as eligible are those that attend a local MumSpace session at least twice, were above the age of 18, had a child at pre-school age and who gave their consent. Processes and measures were chosen based on those that were used in previous studies at MumSpace (Brown et al., in press). This enables the studies to remain comparable and ensure recruitment methods are effective.

Each mother was approached by the group leader and research worker on their second or third attendance at the group and introduced to the research. They were invited to participate in an assessment by the research worker and offered a £10 voucher to compensate for her time. These assessments were conducted within a 20-minute period during the group session. The mother was then re-contacted 3 months later and invited to a follow-up assessment, which was conducted either at a group session or over the phone, depending on the mother's availability at the time. A further £10 voucher was offered for this further assessment.

Measures

The measures were selected by King's College London as the measures that will indicate whether the MumSpace groups have been effective in impacting mental health, parenting self-efficacy and social capital. All measures were conducted as a self-report.

To measure mental health indicators amongst the mothers, the Patient Health Questionnaire-9 (PHQ-9) and Generalised Anxiety Disorder-7 (GAD-7) measures were used to measure depression and anxiety respectively. These measures have been shown to be reliable and valid. The PHQ-9 has been shown to be valid (Kroenke K 2001) and is widely used to measure depression. The GAD-7 has been shown to be valid in measuring anxiety (Spitzer, Kroenke et al. 2006) and is routinely used to measure anxiety among adults. (See *Appendix 2* for further details as to how the measures are scored).

Social capital is a complex concept (Lomas 1998) which makes it more difficult to measure. The measure that has been used in previous PACT studies is the Arizona Social Support Scale (ASSIS) which mainly focuses on social support and has been recognised to be a key aspect of social capital. It is measured by quantifying the number of people an individual can rely on for a number of different 'interactions' (e.g. 'How many people can you rely on for help with pregnancy queries or childcare'). It also measures the satisfaction each individual has with their social network concerning each 'interaction'. This measure has been shown to measure changes in

social support and to be able to be sensitive enough to distinguish the effects for different social support groups (Barrera and Garrison-Jones 1992; see *Appendix 3* for further details as to how the measure is scored).

Parenting Self-Efficacy theory is based on Bandura's (1977) theory of self-efficacy which states that greater self-efficacy is related to an increased willingness to tackle challenges and being successful. Parenting self-efficacy

(believing one has the ability and the knowledge to address child-rearing tasks) is associated with lower distress, positive parenting practices, and child development (Coleman & Karraker, 1997). The chosen measure of this for the current study is the Karitane Parenting Confidence Scale (KPCS; Črnčec, Barnett & Matthey, 2008). The KPCS was developed in Australia to measure parenting self-efficacy, but has been used widely in research in the UK, including the NHS. The version used includes 15-items and is used for the parents of infants 0-12 months, and measured perceived parental self-efficacy (Please see *Appendix 2* for further details on how this is scored).

To understand the key contributing factors to MumSpace's successful running, the Process Fidelity Checklist was developed and used. This was a list of 20 key aspects of MumSpace that were compiled from the previous Qualitative report on the factors attending MumSpace identified as important to them (PACT Evaluation Report, 2018; see *Appendix 4* for the full list of these features). Each of these aspects were also reflective of PACT's wider business model (PACT Business Model Explained, 2019). Examples these include running educational workshops, providing local community links to other services and training parents to take leadership roles (e.g. 'Parent Champions'; PACT Business Model Explained, 2019). Each mother, researcher and group leader per site was asked to complete the PFC in accordance with their experience of either partaking in, or observing the groups each week. (Please see *Appendix 4* for further details on how this measure is scored).

Considerations

Some care must be made when interpreting the results. Although the measures used are robust and widely tested and used in research and healthcare, our sample size is small, and measures are self-reported. Therefore, the significance levels of the results should be interpreted with caution.

1. Research participants at all 4 sites

Recruitment

In total, 54 mums were recruited, with 38 successfully followed-up (see *Table 1* for a further breakdown of recruitment per site). This gives a follow-up rate of 70.4%. Where mothers were unable to be assessed at follow-up it was largely due to their lack of attendance or contact with MumSpace and the researchers. The follow-up rate is lowest in Leeds where attendance and engagement from mums remained low, with a decision made in June to terminate the running of one of the Leeds MumSpace groups, in Meanwood.

Table 1. Recruitment at baseline and follow-up for the MumSpace evaluation between Oct 2018 - July 2019.

	Southwark	Lewisham	Newcastle	Leeds	Total
Recruitment					
Baseline	12	4	26	12	54
Follow-up	10	3	23	2	38
Follow-up rate	83.3%	75.0%	88.5%	16.7%	70.4%

2. Characteristics of mums attending in the different sites

Mums attending MumSpace who completed the evaluation (n=38) demonstrate a wide range of demographic characteristics and differed between regions (i.e. London, Newcastle and Leeds). Overall, the majority were white (63.2%); only the London groups (Southwark and Lewisham), had more Black or Black British women (28.9%), probably reflecting the ethnicity of the local population. A majority (73.7%) were born in the UK, with

a diversity of other nationalities represented in the remaining 26%, but most spoke English as their first language (84.2%). Most were unemployed (64.9%) and just over half were married or cohabiting with a partner (61.0%), with over a third (34.2%) single or separated. The age of the women in the study ranged from 26 to 55, with an average of 32.9. There was a spread of educational backgrounds and household incomes, as represented in Table 2.

The population of mums in Newcastle were demographically different from those in London. Amongst these Newcastle mums there is a higher proportion in full-time employment (43.5%) and a slightly lower proportion of unemployed mums (47.8%), a higher proportion who were married (52.2%), with higher education (47.8%) and they were the only population with average incomes above £30,000 per annum.

Table 2. Participant characteristics comparing demographic characteristics of follow-up samples across regions.

	Southwark % (n)	Lewisham % (n)	Newcastle % (n)	Leeds[1] % (n)	Total % (n)
TOTAL	100 (10)	100 (3)	100 (23)	100 (2)	100 (38)
Ethnicity					
White	- (0)	- (0)	95.7 (22)	100.0 (2)	63.2 (24)
Black/Black British	80.0 (8)	100.0 (3)	- (0)	- (0)	28.9 (11)
Mixed/Multiple	20.0 (2)	- (0)	- (0)	- (0)	5.3 (2)
Other	- (0)	- (0)	4.3 (1)	- (0)	2.6 (1)
Country of origin					
UK	40.0 (4)	33.3 (1)	95.7 (22)	50.0 (1)	73.7 (28)
Cameroon	10.0 (1)	- (0)	- (0)	- (0)	2.6 (1)
Cuba	10.0 (1)	- (0)	- (0)	- (0)	2.6 (1)
Iran	- (0)	- (0)	4.3 (1)	- (0)	2.6 (1)
Kenya	10.0 (1)	- (0)	- (0)	- (0)	2.6 (1)
Romania	- (0)	- (0)	- (0)	50.0 (1)	2.6 (1)
Saudi Arabia	10.0 (1)	- (0)	- (0)	- (0)	2.6 (1)
Sierra Leone	- (0)	33.3 (1)	- (0)	- (0)	2.6 (1)
Somalia	20.0 (2)	- (0)	- (0)	- (0)	5.3 (2)
Uganda	- (0)	33.3 (1)	- (0)	- (0)	2.6 (1)
First Language					
English	70.0 (7)	66.7 (2)	95.7 (22)	50.0 (1)	84.2 (32)
Other	30.0 (3)	- (0)	- (0)	50.0 (1)	10.5 (4)
English and other	- (0)	33.3 (1)	4.3 (1)	- (0)	5.3 (2)
Employment Status					
Unemployed	80.0 (8)	100.0 (3)	47.8 (11)	100.0 (2)	64.9 (24)
Part-time employed	- (0)	- (0)	8.7 (2)	- (0)	27.0 (10)
Full-time employed	10.0 (1)	- (0)	43.5 (10)	- (0)	8.1 (3)
Relationship Status					
Married	10.0 (1)	33.3 (1)	52.2 (12)	50.0 (1)	39.5 (15)
Co-habiting	10.0 (1)	- (0)	26.1 (6)	50.0 (1)	21.1 (8)
Steady relationship	20.0 (2)	- (0)	- (0)	- (0)	5.3 (2)
Single	50.0 (5)	66.7 (2)	21.7 (5)	- (0)	31.6 (12)
Divorced/separated	10.0 (1)	- (0)	- (0)	- (0)	2.6 (1)
Highest Education					
None	22.2 (2)	- (0)	4.3 (1)	- (0)	8.1 (3)
GCSE	22.2 (2)	33.3 (1)	26.1 (6)	50.0 (1)	27.0 (10)
A-level	11.1 (1)	33.3 (1)	17.4 (4)	- (0)	16.2 (6)
BTEC	11.1 (1)	- (0)	4.3 (1)	- (0)	5.4 (2)
Undergraduate	11.1 (1)	- (0)	13.0 (3)	50.0 (1)	13.5 (5)
Postgraduate	22.2 (2)	33.3 (1)	34.8 (8)	- (0)	29.7 (11)
Household Income					
<£10k	- (0)	33.3 (1)	22.7 (5)	- (0)	15.8 (6)
£10k-30k	40.0 (4)	33.3 (1)	22.7 (5)	100.0 (2)	33.3 (12)

£30k-50k	- (0)	- (0)	27.3 (6)	- (0)	16.2 (6)
>£50k	- (0)	- (0)	27.3 (6)	- (0)	16.2 (6)
Prefer not to say	60.0 (6)	33.3 (1)	4.3 (1)	- (0)	21.1 (8)
Age					
Average age (SD)	34.2 (6.6)	32.7 (4.7)	31.0 (4.2)	32.6 (5.3)	32.9 (5.5)

[1]Descriptive statistics are also available on request for the Leeds baseline sample (n=12) to get a demographic representation of the women attending the groups.

3. Changes in mental health and social capital of participants

Mental Health

Because of the smaller number of mums who participated in the study than expected (n=80), the results are underpowered to show significant results. However, analyses of the data can still show some important differences and trends.

For both the GAD-7 and PHQ-9 measures, the average scores of mums were in the 'mild' range at baseline.

There were no significant changes in mental health and confidence between baseline and follow-up. From results for the follow-up sample of 38, for the GAD-7 anxiety measure, the difference between the participants at baseline and follow-up indicates a drop in anxious symptoms, but this change was not significant (please see *Appendix 5* for all significance figures).

For the PHQ-7 depression measure, there were no significant differences between baseline and follow-up. These results indicate only a slight decrease in depression.

There was also no significant difference found between KPCS scores at baseline and follow-up. This indicates a slight increase in confidence.
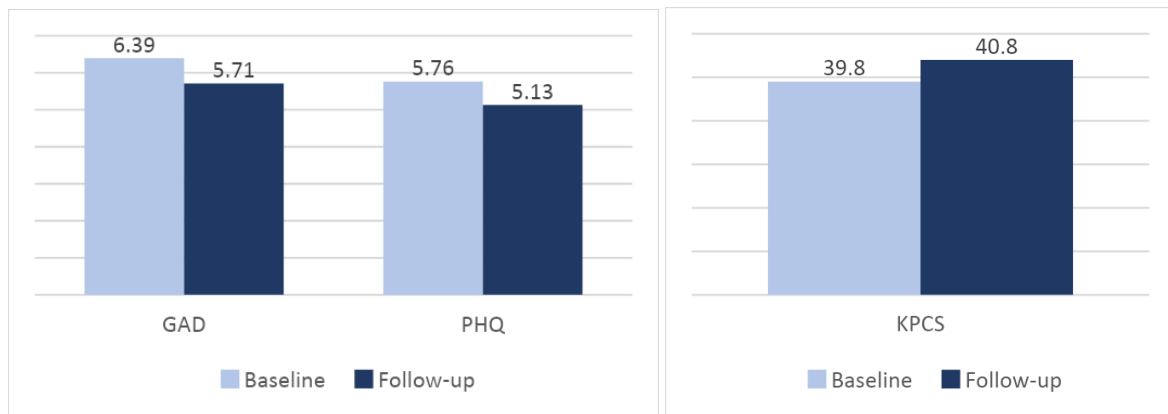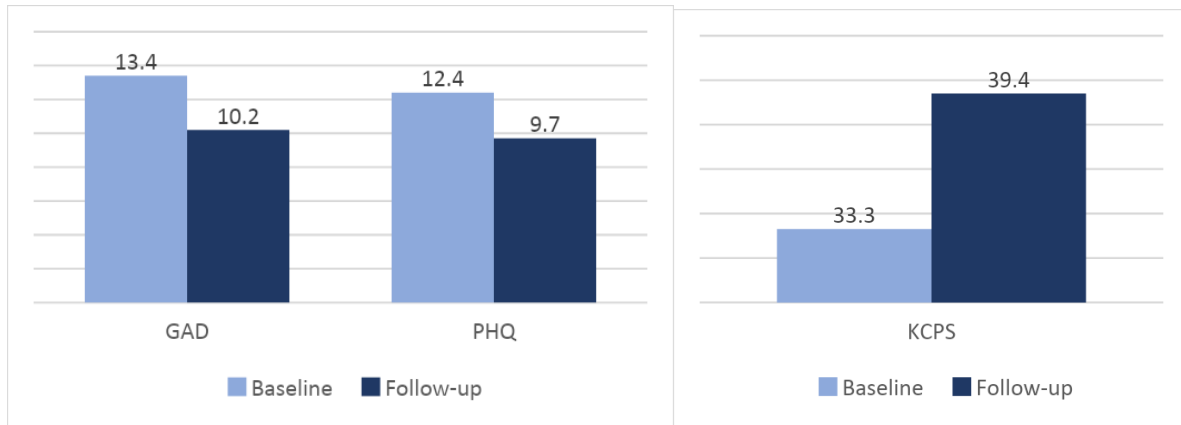

Figure 1. Differences in mean scores of GAD, PHQ and KPCS at baseline and follow-up.[2]
[2]Please note that the higher scores for both the GAD and PHQ correspond with higher rates of anxiety and depression (and therefore a decrease denotes a positive change), whereas higher scores on the KPCS correspond with higher rates of maternal confidence (and therefore an increase denotes a positive change).

In the previous study, the scores of mothers who scored above the threshold (threshold≥10) were analysed separately. The same will be done in this evaluation.

There were nine individuals who had scores on the GAD-7 and PHQ-9 at baseline above the clinical thresholds for depression and anxiety. For these individuals, there were more dramatic improvements, as shown in Figure 2, where the average GAD-7 scores dropped significantly (please see *Appendix 5* for all significance levels).

In addition, PHQ-9 scores also dropped significantly. This means that, on average, the mums' scores dropped below the threshold after 3 months of attending MumSpace. KPCS scores also rose, but only reaching a trend level, demonstrating a nearly significant increase in parenting confidence.

Figure 2. Differences in scores of GAD, PHQ and KPCS at baseline and follow-up for those over the threshold for clinical depression and anxiety.

If we look at site differences (see Table 3), mums attending the Newcastle group were the only ones to show a significant decrease in anxiety symptoms. At follow-up, Newcastle mums' levels of anxiety symptoms had decreased to below the minimum clinical threshold for anxiety (threshold of 5), from an average of mild anxiety symptoms (6.57). Improvements in depressive symptoms and parenting confidence among this population were however not significant.

In comparison, mums in Southwark had the highest levels of both anxiety and depression at both baseline and follow-up, with no significant improvement between these two time points. Although it did not reach a level of significance, Mums attending Southwark did have the largest increase in parenting confidence between the two time points, having started with the lowest level of confidence across groups (*Table 3*). The high rate of anxiety and depression symptoms and low rate of parenting confidence among this group demonstrates the need for support amongst mums in Southwark.

Table 3. Comparison of mental health scores at baseline and follow-up between sites.

	Southwark M(SD)	Lewisham[3] M(SD)	Newcastle M(SD)	Leeds[3] M(SD)
GAD-7	N=10	N=3	N=23	N=2
Baseline	8.20 (5.57)	1.00 (1.732)	6.57 (4.83)	3.50 (2.12)
Follow-up	8.70 (5.19)	3.33 (2.52)	4.78 (3.42)	5.00 (5.66)
Significance (p)	.586	.423	.008[4]	.830
PHQ-9	N=10	N=3	N=23	N=2
Baseline	8.60 (5.72)	3.00 (3.60)	5.13 (5.22)	3.00 (1.41)
Follow-up	7.10 (5.20)	4.00 (4.58)	4.43 (5.12)	5.00 (7.07)
Significance (p)	.288	.828	.126	.705
KPCS	N=8	N=3	N=23	N=2
Baseline	37.0 (6.85)	41.33 (1.15)	40.48 (3.91)	41.50 (.71)
Follow-up	40.0 (4.19)	41.67 (.58)	41.04 (3.87)	42.50 (3.54)
Significance (p)	.115	.423	.574	.705

Social Network

A significant increase in overall satisfaction with the mums' social networks was found between baseline and follow-up. Of particular interest is a significant increase specifically in the satisfaction with social support they received for pregnancy and/or childcare between baseline and follow-up (*Table 4*).

There were also significant increases in the number of people mums had in their social network for particular interactions. There was a significant increase in network size for support with pregnancy and/or childcare related issues, social support through material aid, number of people from which to receive advice, and the number of people in their social networks regarded as 'close' friends or family (*Table 4*).

There was however no significant difference between the overall baseline and follow-up scores for total network size.

Table 4. Baseline and follow-up for satisfaction and network size scores for different social interactions.

	Satisfaction				Network Size			
	Baseline M (SD)	Follow-up M (SD)	Difference[5]	Sig. (p)	Baseline M (SD)	Follow-up M (SD)	Difference	Sig. (p)
Total	37.5 (1.2)	40.7 (0.5)	3.2	.013[6]	7.8 (0.6)	8.0 (0.5)	0.2	.713
Pregnancy/ Childcare	4.9 (1.7)	5.8 (0.5)	0.9	.001[6]	2.5 (1.4)	3.5 (2.7)	1.0	.048[6]
Material Aid	5.6 (1.1)	5.9 (0.9)	0.3	.050	2.1 (1.4)	3.1 (2.2)	1.0	.001[6]
Advice/ Information	5.4 (1.3)	5.6 (0.9)	0.2	.258	2.2 (1.4)	3.1 (2.4)	0.9	.012[6]
Tangible Assistance	5.3 (1.5)	5.5 (1.3)	0.2	.119	2.6 (2.0)	2.6 (2.0)	0.0	.567
Intimate Interaction	5.9 (0.8)	6.0 (0.5)	0.1	.184	3.9 (2.5)	4.0 (2.1)	0.1	.934
Socialising	6.0 (0.6)	6.0 (0.3)	0.0	.675	4.1 (2.8)	4.2 (3.5)	0.1	.937
Positive Feedback	5.8 (1.2)	5.6 (1.2)	-0.2	.865	4.0 (3.0)	4.0 (2.9)	0.0	.891
Close Friends	-	-	-	-	2.2 (2.0)	3.2 (2.5)	1.0	.002[5]

[5]Table ranked by changes in satisfaction between baseline and follow-up. [6]These scores indicate significant changes from baseline to follow-up (p<0.05).

4. Understanding key contributing factors

Fidelity of MumSpace

Results show there was strong agreement about the fidelity of MumSpace services, with an average agreement score ranging from 3.47 (out of 5) for the lowest average scored service offered (parent champions trained), to 4.95 for the highest scored service offered (welcome by staff).

Table 5. Process Fidelity Checklist scores as ranked by highest rate of agreement (top 5 and lowest 5 ranked).

	M[7]	SD	N
Top 5 scoring processes			
Staff welcome mothers when they arrive	4.95	.22	40
Activities for child which are helpful	4.75	.49	40
Mums don't need to worry about legal issues	4.72	.55	40
Opportunities for mums to share experiences	4.70	.61	40
Opportunities for mothers to choose activities e.g. advice	4.65	.62	40
Bottom 5 scoring processes			
MumSpace is linked to local statutory services	4.00	1.00	39
Educational and fun activities run for mothers	4.00	1.15	40
Training programme for volunteers organised	3.82	.93	40
Mothers who do not attend are gently followed-up	3.52	.99	40
Parent champions are trained	3.47	.78	40

[7]Figures exclude missing data.

Strengths

Particular strengths include those behaviours and services for which the mothers agreed most that they observed most frequently at MumSpace. Mothers felt MumSpace was a place in which they were warmly welcomed by staff, gave their child helpful activities for their socialisation, and a place where they could escape any legal issues. They also observed that they could, share experiences with other mums and choose activities they were interested in.

Observations for discussion

Areas for discussion include behaviours and services that mothers reported experiencing least at MumSpace. Mothers generally felt MumSpace was less frequently providing educational activities for mothers and they were not always linked in with statutory services. They also did not report high scores for being followed-up after absence from a group. Many did not feel they could comment on the training for volunteers and Parent Champions.

Of note, lower scores were mostly from mothers opting out of the questions as they didn't believe it was relevant to them, or they were unsure how to answer – rather than much active disagreement. These scores may also reflect a lack of need for these features amongst these particular mothers as well as some geographical variation in provision of these features.

The performance of different sites

It is clear from the data that all 4 sites perform well for the top scoring elements of the services. There is high agreement that staff in all groups welcome mothers and say goodbye to them, that all groups provide helpful activities for the child, provide a place where mums do not have to worry about legal issues and provide a creche that is run by volunteers (all features that scored an average of the highest agreement score in all sites). This indicates that the 'core elements' of MumSpace have been delivered.

However, the areas for largest improvement differ across the 4 sites. Lewisham and Leeds have the lowest ranks, especially for 'Separate space organised for Mums', which is understandable as neither groups are established enough yet (or have enough mums in attendance) to have this routinely organised. Similarly, Lewisham scores very low for 'groups provided at various times and days of the week' simply as there is only one group running currently. The small sample sizes at these two sites however mean that conclusions must be drawn with caution.

Potential discussion points for Leeds are weaker 'links to local civic and statutory services', and 'gently following up mums' when they don't attend. In comparison, Lewisham's main point for improvement would be providing 'educational activities for mums'.
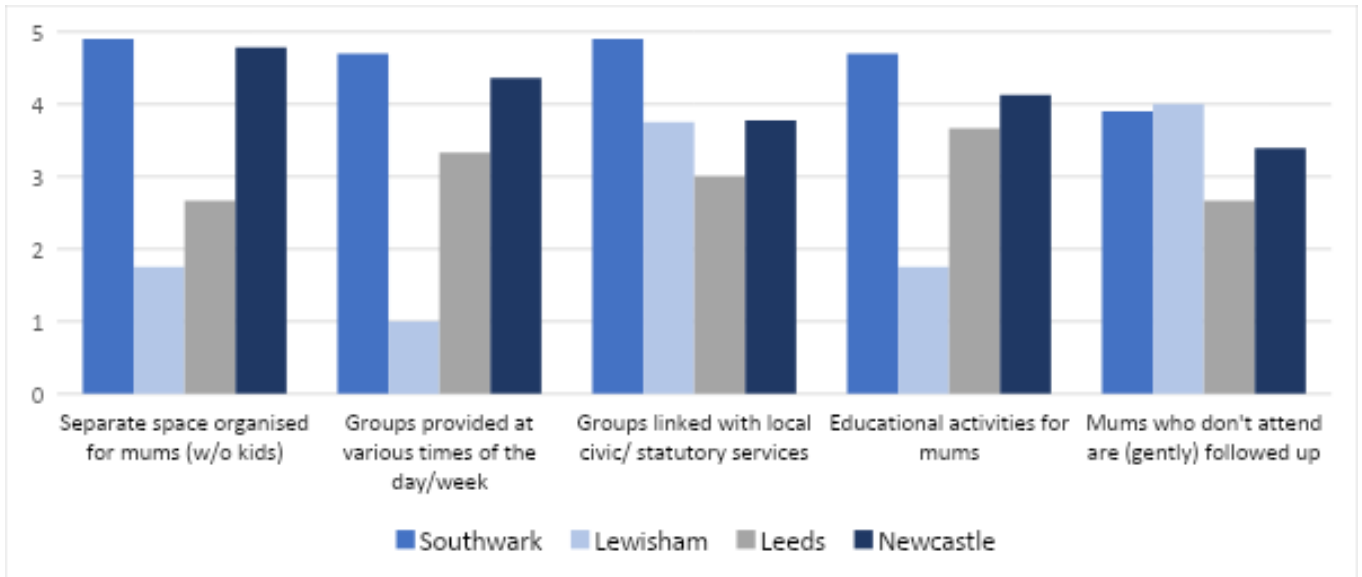
Figure 3. Comparison of the services offered that showed the biggest differences across sites regarding their adherence to the 'MumSpace' model (based on SD)

Obstacles for the research and establishing MumSpace in new sites

What can be seen from the results across sites is that the MumSpace model does have the potential to work, but requires a number of elements to be in place. We can see these from the research, as well as anecdotal feedback from mums, researchers and group leaders. For the success of establishing a new group and being able to evaluate it adequately, three key requirements can be isolated thus far:

- **The immediate geographical area and social groupings is relevant** Speaking to the group leaders in Leeds, a challenge that continued to affect the feasibility with which Leeds's groups could be continued is the demographic splits of the areas in which the groups take place. As a result, the group set to run in Meanwood was terminated in June due to poor attendance. It is an area with proportionally more affluent mums and a smaller number of deprived families. It is also an area in which there are thought to be many more established community groups that mums attend more regularly. It was felt by the group leader that this might contribute to a culture of 'come-and-go' so that mums were less regular attendees at MumSpace. There is scope for future research to further understand the motives behind lack of engagement in different areas. Contributing factors such as culture and other community organisations in the area could be investigated.

- MumSpace groups also need **time to become established**. This allows them to attract a sufficiently large number of regular group of attendees, before there can be a separation into a mums and toddler group. This was been an issue for the Lewisham group, which only started in January and took until April for the 2 groups to be established. As a result, it had only been able to successfully run two 'MumSpace' sessions where the mums are given the opportunity to go into a separate space away from the children. As a new group, relationships with healthcare visitors and other professionals in the area also needed to be built and maintained so that they could visit these sessions. In comparison, Southwark had a healthcare visitor that comes every Tuesday, offering helpful guidance to the mums. An established group also means that there are more additional activities that are able to exist to attract new mums, for example the baby bank at Southwark, which adds an extra incentive for mums to attend each week, and bring other mums with them. While Lewisham had attracted a strong group of mums, it probably needs more time to be able to function with as much structure as Southwark does.

- One of the great successes of the fieldwork that was able to be fulfilled in Newcastle was the **operational set-up of the research**. From the beginning, the researchers had a 'research station' which became an instant part of the established group set-up. As a result, it created a structured environment in which the mums who attended for the second or third time were directed to the

  'station' and engaged more readily in the research. This symbolic structure also meant that it was more at the forefront of the group leader's mind, making the process of recruitment and re-engagement at follow-up much more of a priority and therefore smoother for the research volunteers.

Conclusion and key lessons for the future

This final report indicates that following successful effects in Southwark, MumSpace can be implemented to different degrees in other parts of the country. And there have been important lessons learned.

1. For the MumSpace group to succeed in new sites, a lot of different elements need to be in place. These include location and culture of the community in which it is placed, allowing time for the service to become established, and allow a structured environment in which the mums know what to expect each week and become readily involved in all aspects of the group (including research).

2. MumSpace in Newcastle has been the most successful in terms of recruitment to the evaluation study, as well as in producing follow-up results; this was the only site to show significant decreases in rates of anxiety.

3. Lewisham has been the slowest to recruit to the study, which has been partly due to operational issues which meant that the location of MumSpace had to be altered for it to start to offer a service.

4. Leeds has had some difficulties recruiting mums to the study, as mothers have not always stayed. More research is needed to understand reasons behind this. Group leaders suggested a combination of more varied groups in the area, and socioeconomic challenges regarding the group attracting the target audience. This has resulted in one of the groups closing down completely.

5. Southwark, despite being very busy with mothers at MumSpace, did not have many new mothers to the MumSpace groups during the period of data collection. This therefore meant that the numbers of mothers taking part in the study in Southwark was artificially low as it did not reflect actual activity at the site. However, it did raise the issue, which is now being discussed, about whether MumSpace should be a 'club' for existing mothers or whether it should provide a service for new mothers, or both. Despite performing well on the fidelity checklist, the mums did not show a significant improvement in their mental health scores at this site. Reasons behind this could include smaller sample sizes and shorter follow-up time period than previous studies. Given the high rates of mental health issues amongst this group, and what we know about Southwark operating well as a longer-term 'club', more time may be required to allow mums to benefit fully from the services and community offered at Southwark. It is still important noting that Southwark mums showed the largest increase in parenting confidence across the sites, so the contribution of MumSpace remains evident in some way.

6. PACT continues to have the highest beneficial impact to mums who enter the programme with the highest severity of anxiety and depressive symptoms. Beneficial impacts also include increasing parenting confidence.

7. Within 3 months of engaging in PACT, the average satisfaction of mums' social networks had increased, with particular increases in size and satisfaction regarding the support mums received for pregnancy and/or childcare. On average, mothers also felt there were more people they could turn to for advice and material aid.

8. The fidelity results appear very encouraging, indicating it is possible to implement the principles of MumSpace in other geographical settings apart from Southwark. However, it will probably take more time and a few other changes for Lewisham and Leeds to match the performance of Newcastle.

9. The locations in which the 'MumSpace' model was unable to be effectively replicated during the period of data collection (Leeds and Lewisham) are probably those where not all the core elements of the programme (e.g. separate 'mum session' away from the children) could be organised because there were not enough mums attending for this to happen. This will need further research to monitor in Leeds where

   groups have continued beyond this period of data collection, as this research only reflects this period.

10. The research is helpful in understanding the different successes of the groups and highlighting some areas for discussion at particular sites. Though the sample sizes are not large enough to draw clear causal connections between variables, the findings provide good foundation on which further investigation can be built. For example, qualitative research would be useful in investigating the difficulties in initial engagement further, and exploring mothers' experiences at the different groups, and motives for continued attendance in more depth.

Part 2: Book-Sharing project

Introduction and Aims

'Booksharing' is a strategy used for the promotion of interactive and shared carer-child reading (Vally et al., 2015). It is argued to benefit child cognitive development, based on Vygotsky's theory (1978) that child language and wider cognitive development occur best within the context of a social interaction with a knowledgeable other. The Booksharing course aims to train the parent or carer with the knowledge of how to engaging the child in this interactive book-based play. Examples of practices the parent is taught include engaging in extensive labelling of objects, open-ended questioning and commenting on pictures. Skills in Booksharing have been shown to be trained successfully in group settings (Whitehurst et al., 1988), with significant benefits to child development (Arnold, Lonigan, Whitehurst, & Epstein, 1994; Lonigan & Whitehurst, 1998), particularly around language acquisition and more recently, prosocial behaviour (Murray et al., 2016).

The Parents and Communities Together (PACT) group began running Booksharing in 2018 in both London (Southwark) and Newcastle. Each course involves a weekly meeting, lasting for 90mins, running for a total of 8 weeks. After each group session, mums are required to read with their children at home throughout the week.

This evaluation of Booksharing aimed to investigate the impact of the courses by measuring two key aspects:

- Language acquisition (measured through the Communication Development Inventory; CDI)
- Child prosocial behaviour (through self-report impact scales, see *Appendix 6*)

It also aimed to understand how easily and effectively Booksharing was delivered within a PACT context. To do so the evaluation also captured:

- Frequency of home practice (see *Appendix 7*)
- Parents' perception of benefits and challenges of the Booksharing course (see *Appendix 8*)

Process and Procedure

A total of five Booksharing courses have taken place between May 2018 and January 2019; four in London and one in Newcastle. These groups involved children of two age groups (1-2 year olds and 3-4 year olds) and were mostly held at local schools, with one course being held at a MumSpace location in London. As a result, groups involved both mothers from MumSpace as well as those not attending MumSpace. An average of 6 mums attended each course. The courses have involved 31 mums in total, all of whom have participated in this study (London n=27, Newcastle n=4).

Each mother was then required to self-report how successful this reading practice had been by the end of the Booksharing course (8 weeks). Forms were provided at this end point for mothers to fill in how many days in the last two weeks they practiced, and how long per day the practice lasted for in just the last week (see *Appendix 7*). This data shows that mums average of 3.7 days per fortnight (as per the last 2 weeks of the course), however there was a large range (range=3-14; *SD*=23.21). On average, mothers spent 102.67 hours reading with their child a week whilst on the course (range=22.5-315; *SD*=72.17). No objective measures were collected in order to test the accuracy of both recall and self-reporting of these figures. Although all efforts

were made to minimise over-reporting biases by emphasising the confidentiality and anonymity of the data, accuracy of the data must therefore be understood with caution.

Self-reported changes in their parent-child relationships and child's behaviour was also collected at this end point. Mothers were asked for feedback about their experience of book-sharing including its potential

helpfulness regarding their child's literacy and behaviour, any difficulties they experienced with the course and who in the family was involved in reading practice at home during the course.

At the beginning and end of the course (at the 8 week point) child literacy was measured using the CDI (short form; Charman, Drew et al., 2003). It is a reliable and standardised measure of child language acquisition used across the UK, and was therefore chosen to measure any changes that had occurred across involvement in the course. The CDI (short form) is a list of 110 words for mothers to indicate whether their child 'understands but does not yet say' each word, 'understands and also says' each word, or 'does not understand or say' each word. (Please see *Appendix 9* for examples of how this is set-up).

Measured Impact of Booksharing Groups

Communication Development Index (CDI)

There was a significant difference between total baseline scores across regions for the CDI (M=147.3, SD=63.09) and follow-ups (M=165.1, SD=56.78); t(30)=-4.05, p<.001. There was also a significant difference between baseline *(M=138.6, SD=63.13)* and follow-up scores *(M=157.6, SD=57.09)* for the CDI for London; t(26)=-3.77, p=.001. Significances were not calculated for Newcastle as there are only currently 4 participants.

Table 6. Descriptive statistics for the CDI scores at baseline and follow-ups by different regions.

		Mean	SD	N
All	**Baseline**	147.3	63.09	31
	Follow-up	165.1	56.78	31
London	**Baseline**	138.6	63.13	27
	Follow-up	157.6	57.09	27
Newcastle	**Baseline**	205.8	5.44	4
	Follow-up	216.0	5.66	4
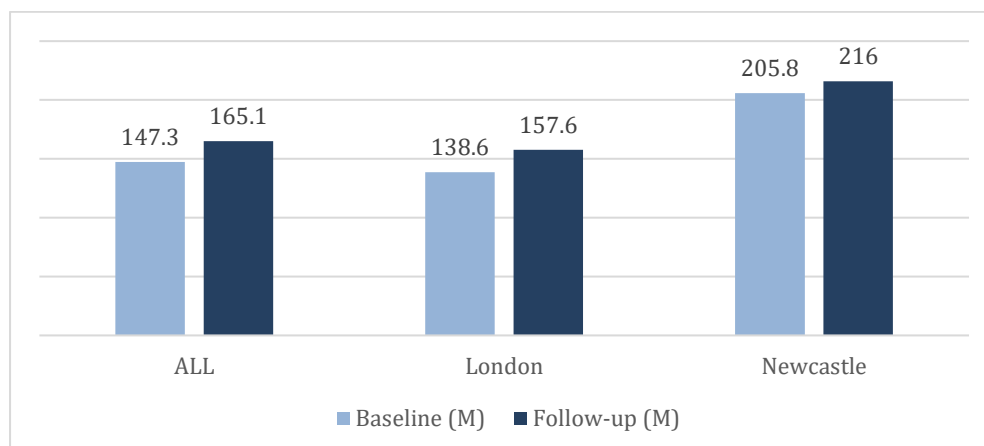
Figure 3. Difference in CDI at baseline and follow-up across the different regions.

Self-reported Impact & Implementation

Mums self-reported their experiences in two aspects: (1) any personal impact to their parent-child relationship and child's behaviour (9 statements; *Table 7*), and (2) the ease with which they were able to adhere to the

course at home (7 statements; *Table 8*). For each, mums were required to rank on a scale from 0-3 how much they agreed with each (0 indicating low agreement, 3 indicating high agreement).

In total, mums reported a high rate of perceived change in their relationship with their child. On average, across the statements, 67.8% of mums responded in the top 2 scores of agreement for the impact of book-

sharing ('Quite a lot' and 'Very much so'), with very few (6.6%) disagreeing that it had made no impact across statements. The biggest self-reported impact was to the mothers' perceptions of their knowledge about their child. Many mums also self-reported that their relationship with their child had improved, and that their child participated better in other educational activities now as a result of the book-sharing practice. Please see *Table 7* for further scores.

Table 7. Self-reported changes in child behaviour and parent-child relationship as a result of the book-sharing course (all regions).

|	Not at all % (n)	A little % (n)	Quite a lot % (n)	Very much so % (n)	Average[6] M (SD)
My knowledge of my child has improved	0.0 (0)	9.1 (2)	31.8 (7)	59.1 (13)	2.5 (0.7)
Relationship with child has improved	4.5 (1)	18.2 (4)	36.4 (8)	40.9 (9)	2.1 (0.9)
Child participates better in other educational activities	0.0 (0)	25.0 (5)	45.0 (9)	30.0 (6)	2.1 (0.8)
Child has been playing better with other children	4.8 (1)	23.8 (5)	33.3 (7)	38.1 (8)	2.0 (0.9)
Child has learned new words	0.0 (0)	31.8 (7)	31.8 (7)	36.4 (8)	2.0 (0.8)
Child better able to talk about emotions	4.8 (1)	42.9 (9)	19.0 (4)	33.3 (7)	1.8 (1.0)
Child has been more social and empathetic	10.0 (2)	25.0 (5)	40.0 (8)	25.0 (5)	1.8 (1.0)
Have been able to talk about difficult issues with my child	15.0 (3)	25.0 (5)	30.0 (6)	30.0 (6)	1.8 (1.1)
Child's behaviour has improved	20.0 (4)	30.0 (6)	25.0 (5)	25.0 (5)	1.6 (1.1)
Total average (M, SD)	***6.6 (6.7)***	***25.6 (8.7)***	***32.5 (7.3)***	***35.3 (9.9)***	***- (-)***

[6]The statements are ranked by highest average score. NB: scores were ranked on a scale from 0-3, with 3 being the highest level of agreement.

Table 8. Difference in difficulties with adhering to book-sharing course at home, as self-reported by mothers, between regions.

	Total M[8] (SD, n[7])
My child does not want to do book-sharing when I want to do book-sharing	0.7 (0.8, 22)
It has been difficult to find time to do book-sharing	0.6 (0.8, 22)
My child never wants to do book-sharing	0.5 (0.8, 22)
My child is very chaotic and unfocussed during book-sharing	0.4 (0.8, 21)
I do not have enough books at home that I can use for book-sharing	0.2 (0.7, 22)
I do not enjoy book-sharing	0.2 (0.7, 22)
I am not confident with using the book-sharing techniques	0.1 (0.6, 22)

[7]Variations in 'n' are due to missing data (mothers leaving statements blank).

[8]NB: a lower score indicates a stronger disagreement with the statement, and therefore lower scores are preferable.
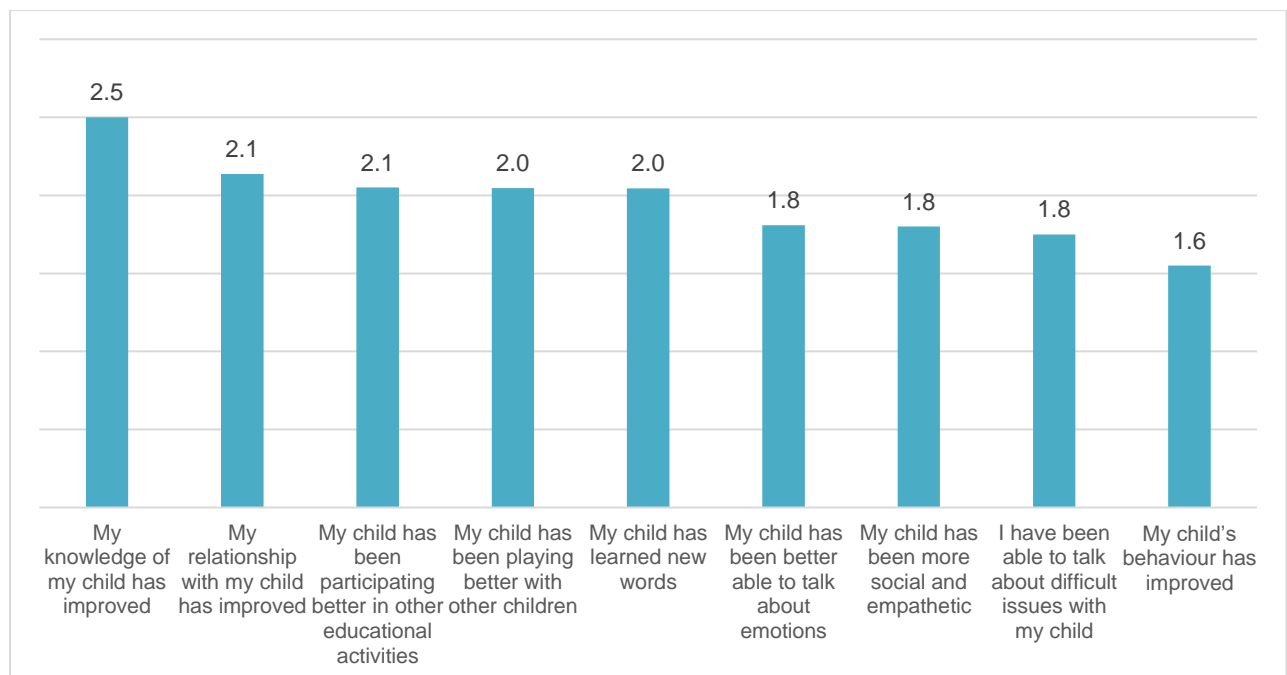
Figure 4. Difference in average self-reported changes in child behaviour in relation to the book-sharing course attended (both London and Newcastle).

Regarding the self-reported experiences of taking part in the book-sharing course, mums reported struggling the most with motivating their child to want to read with them at a given time, and finding time in their day to do so. However, it must be noted that these agreement scores were very low across statements, and

therefore there appeared no clear issue with adhering to the course, or problems that mums required further help with.

In Conclusion: the impact of the first book-sharing groups:

1. Children have shown significant improvement in acquisition and understanding of vocabulary across the book-sharing course (CDI);

2. Mums self-report an improvement in their parent-child relationship as a result of book-sharing course, particularly regarding their personal knowledge of their child;

3. Book-sharing courses were well adhered to at home (i.e. practice reading), with the biggest issues facing mums being that their child did not always want to read with them and finding enough time in their schedule to do so.

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Appendix 1

USING THEORY OF CHANGE TO DETERMINE WHAT EVIDENCE TO COLLECT

Stage	Key question	Evidence sources
Inputs/ activities	What has been delivered?	- Facts - Staff reviews - Details of processes/ partnerships
Outputs/ engagement	How good was it? Did users engage?	- Staff reviews, - Users' views - Partners' views
Intermediate outcomes	In what ways can we show that users have benefited?	- Assessments of service users (before and after) - Cases studies - Staff/ partners views - Direct observation of behaviour
Final outcomes	Can we link user benefits to changes in outcome data?	Data/Statistics

Appendix 2

The GAD-7 consists of 7 items selected to detect generalised anxiety disorder (e.g. "Feeling nervous, anxious or on edge"), whilst the PHQ-9 includes 9 items that are used to detect symptoms of depression (e.g. "Little interest of pleasure in doing things"). Both are scored similarly, where participants are asked how often each statement has bothered them over the last two weeks. Response options are "not at all", "several days", "more than half the days" and "nearly every day", scored as 0, 1, 2, 3, respectively. The scores are summed separately, with a higher score indicating a higher level of anxiety or depression. If a mother scores a value of 10 or above on either the GAD-7 or PHQ-9, she is included in the sample of 28 mothers who surpass the threshold for moderate levels of depression or anxiety.

The KPCS is used to detect levels of parenting skills and confidence, for those with young children. It involves 15 statements (e.g. "If my baby has a common cold or slight fever, I am confident about handling this"), each of which requires a response of "No, hardly ever", "No, not very often", "Yes, some of the time", "Yes, most of the time" which are scored as 0, 1, 2, 3, respectively. The scores are summed, similarly to the GAD-7 and PHQ-9, with a higher total score indicating higher parenting confidence.

Appendix 3

The ASSIS version used is a shortened, 14-item version, which will capture these outcomes:

a) Total support network size
b) Total satisfaction with network
c) Number of members for each of the (7) social needs
d) Satisfaction with each of the (7) social needs

Appendix 4

For each of the 20 statements, respondents were required to rank on a 5-point scale how much they agreed that the statement described their experience of MUMSPACE (1 indicating 'strongly disagree' and 5 indicating 'strongly agree'). Where respondents didn't feel like they could comment, they either ticked '3 – Neutral/No opinion' or omitted the statement and left it blank (for example if they were not a 'Parent Champion', they may not feel they could comment on the training programme of 'Parent Champions').

TOPIC	AREA	Specific behaviour	Rating
STAFF	Friendly and committed staff	1. Staff welcome mothers when they arrive	
		2. Mothers who do not attend are (gently) followed up	
		3. Staff say goodbye to mothers as they leave	
	Trained and active volunteers and parent champions	4. Training programme for volunteers organised	
		5. Parent champions trained	
	Good relationships with other participants	6. Separate space is organised for mothers to interact with other mothers	
		7. Opportunities for mothers to share experiences	
		8. Opportunities for mothers to choose activities e.g. advice	
SETTING	A space where mothers can share their feelings without being judged	9. Group is run in a place not associated with services	
		10. Mothers do not need to worry about legal issues e.g. immigration status, children being taken away	
	Involving mothers from all different backgrounds, specifically hard to engage mothers.	11. Mothers are similar but also from different diversities (culturally and in terms of motherhood experience)	
	Location is embedded in community	12. Intervention is run close to mothers' homes	
	Other setting issues	13. Flexibility for mothers to attend re lateness, text reminders,	
SET-UP	Provide childcare to allow mothers time away from children	14. Crèche provided at the groups, run by volunteers	
	Validating and interesting educational opportunities	15. Educational and fun activities for mothers e.g. parenting skills	
	Beneficial offerings for children	16. Activities for child which are helpful e.g. play and socialising	
	Groups work with local services	17. MUMSPACE groups are linked with local civic and statutory services	
	Groups work with local services Provide tangible/material assistance	18. Signposting to services (eg. Statutory services) available	
		19. Free equipment offered (e.g. food, baby gear)	
	Organise regular events	20. Weekly groups provided at various times of the day and week	

Appendix 5

Table 6. The differences in scores for GAD, PHQ and KPCS between baseline and follow-up, with the p values indicating the significance of any of these changes.

	Baseline		Follow-up		Significance
	M	SD	M	SD	p^{8}
GAD	6.39	5.04	5.71	4.26	0.23
PHQ	5.76	5.32	5.13	5.11	0.25
KPCS	39.83	4.64	40.81	3.82	0.18

[8] p values reach significance level at p=0.05

Table 7. The differences in scores for GAD, PHQ and KPCS between baseline and follow-up for those scoring above threshold at baseline. P values are included as an indication of the significance of any of these changes.

	Baseline		Follow-up		Significance
	M	SD	M	SD	p^{9}
GAD	13.4	4.4	10.2	4.9	0.03
PHQ	12.4	6.3	9.7	7.4	0.01
KPCS	33.3	6.5	39.4	4.9	0.06

[9] p values reach significance level at p=0.05

Appendix 6

The following list details a few possible benefits from book-sharing. To what extent do you think there have been the following benefits? (Please tick)

	None at all	A little	Quite a lot	Very much so
My child has learned new words				
My child has been better able to talk about emotions				
My relationship with my child has improved				
My child's behaviour has improved				
My child has been more social and empathetic				
My knowledge of my child has improved				
I have been able to talk about difficult issues with my child				
My child has been playing better with other children				
My child has been participating better in other educational activities				

Appendix 7

Book-Sharing Survey

Date:_____   **Child name:**_____

Please answer the following questions as carefully and honestly as you can. Your responses will be used to improve the course for other families in the future. If you enjoyed the course, it is because families before you gave feedback! If you didn't enjoy the course, help us do a better job for families in the future.

1. In the last week, think carefully about the days on which you have been book-sharing. Indicate on the table below the days in which you used book-sharing in the last week, and how much time you spent on each day.

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Did you use book-sharing?							
For how long?							

2. On how many days over the past <u>two weeks</u> did you do book-sharing with your child (inclusive of the above)?

	Days

Appendix 8

The following is a list of challenges that some parents have reported about using book-sharing with their own children. To what extent have you experienced these challenges?

	None at all	A little	Quite a lot	Very much so
It has been difficult to find time to do book-sharing				
My child never wants to do book-sharing				
My child does not want to do book-sharing when I want to do book-sharing				
I do not have enough books at home that I can use for book-sharing				
I do not enjoy book-sharing				
My child is very chaotic and unfocussed during book-sharing				
I am not confident with using the book-sharing techniques				

Toddler Language Scale (CDI)

Date completed: _____   **Child Name:** _____

The following is a list of words which we would like you to complete for your child. Don't worry at all if your child only knows a few of them at the moment, as the list is used for children across a wide age range.

For words that your child **understands but does not yet say,** place a tick in the first column, labelled 'U'.

For words that your child **understands and also says,** place a tick in the second column, labelled 'US'.

For words that your child **does not understand or say**, leave the item blank.

Please only tick **one** of the columns (i.e. U if your child understands the words but does not say it yet; US if your child both understands *and* can say the word), or leave the item blank.

Animals

	U	US
Bear		
Butterfly		
Elephant		
Giraffe		
Hen		
Monkey		
Penguin		
Squirrel		
Turtle		
Zebra		

Food and Drink

	U	US
Banana		
Cereal		
Cheese		
Crisps		
Fish		
Juice		
Melon		
Orange		
Potato		
Sandwich		

Quantifiers/Others

	U	US
Every		
None		
Same		
Some		
Another		