10 Years On

An Evaluation of Lambeth Early Action Partnership

Impact of Lambeth Early Action Partnership on Parents: Combined Service Analysis September 2024 Dartington Service Design Lab 2

Contents

| Executive summary | 4 |
|---|----|
| Introduction | 8 |
| Study aim, objectives & research questions | 10 |
| Methods | 12 |
| Results | 16 |
| Limitations of the analysis | 42 |
| Summary | 44 |
| References | 46 |

5

This study sought to assess how the LEAP programme contributed to changes in parental mental wellbeing and knowledge and application of positive, sensitive and responsive parenting for its participants. The outcome measures identified as relating to these two areas were combined for the analysis. Changes in outcomes with respect to service user characteristics were also appraised.



Key findings

Positive change experienced by service users

Where LEAP services sought to improve parental knowledge and application of positive, sensitive and responsive parenting, a positive change was experienced by service users



Mental wellbeing

Engagement with LEAP services working with families on their mental wellbeing was associated with a positive improvement as reported by parents



Parents aged 20 to 39 saw the greatest improvements in outcomes across both measurement domains



Parents from Black & White ethnic backgrounds benefited most

from engagement with LEAP services across both outcome domains



most consistent improvements"

in outcomes were observed for parents who were observed to White ethnicities, Who spoke English, Were part of twoparent families or were from the most deprived

Areas of greatest deprivation

People living in areas of greatest deprivation experienced the greatest changes before and after participating in the LEAP programme in both outcome domains







The Lambeth Early Action
Partnership (LEAP) is one of five
local partnerships which make
up A Better Start, a national tenyear (2015-2025) test-and-learn
programme funded by the National
Lottery Community Fund that
aims to improve the life chances of
babies, very young children, and
families.

The LEAP programme is comprised of more than 30 services involving a wide range of early years practitioners and specialists who work with families through pregnancy and early childhood with the aims of improving developmental outcomes for the infants and reducing inequalities by supporting those most at risk of poor developmental outcomes.

In 2021 Dartington Service Design Lab was engaged by LEAP to undertake both formative and summative evaluations of the programme. This report forms part of the summative evaluation focusing on how the programme contributed to quantitative changes in parent outcomes related to mental wellbeing and parental knowledge and application of positive, sensitive and responsive parenting practices.

In 2019 LEAP developed and implemented a shared outcome measurement system focused on infant and parent outcomes across a wide variety of services being provided by the programme. A variety of psychometric measures were introduced across the services aimed at measuring specific outcome domains for the programme. The two domains identified in relation to parental outcomes were:

- Mental wellbeing
- Knowledge and application of positive, sensitive and responsive parenting

The measurement instruments used within each outcome domain are described in the Methods section. The LEAP Team have undertaken analyses of the change in these individual measures within and across services as part of their impact evaluation and continuous monitoring activities. We were engaged to conduct a domain-level analysis combining the various measurement instruments employed across each outcome domain to study how LEAP services have contributed to changes in parental outcomes. The study aims and objectives, research method, results and conclusions are presented below.

Study aim, objectives & research questions

Aim

This project aimed to evaluate associations between changes in outcomes and engagement with the services delivered by the LEAP programme on parental mental wellbeing and parental knowledge and application of positive, sensitive and responsive parenting.



Research questions

Overall domain change

- Was there a positive change in the combined outcome measures of parental mental wellbeing, and how large was this change?
- Was there a positive change in the combined outcome measures of knowledge and application of positive, sensitive and responsive parenting, and how large was this change?

Impact of parental characteristics

- Were any differences observed for parents of different ages?
- Were any differences observed for parents of different ethnicities?
- Did the local level of deprivation impact on the change in combined outcome?
- Were any differences observed for parents who spoke different first languages at home?
- Did being a lone parent impact on the change in combined outcome?

LEAP service dosage

 Did the dosage of LEAP services received by the parents influence their outcomes?



Introduction

Data collection instruments

The outcome measures of the two domains were comprised of several standard instruments which are described below. Any data and instruments collected by Empowering Parents, Empowering Communities (EPEC) were excluded from this study. This was due to the EPEC-collected data only being available in an aggregated format not at the individual person level. The aggregated format of the data meant that it was not comparable to the other data sources and was not suitable for a pre-post analysis matched at the level of the individual.

Parental mental wellbeing

The outcome measures for this domain were comprised of three standardised instruments.

Clinical Outcome Routine Evaluation (CORE-10)1

- Collected by Domestic Abuse Enhanced Caseworkers (Gaia)
- 10-item instrument using Likert scale responses with a minimum possible score of 0 and maximum possible score of 40. A lower score indicates a more positive outcome.

Short Warwick Edinburgh Mental Well-being scale (SWEMWBS)²

- Collected by Baby Steps
- 14-item instrument with Likert scale responses with a minimum possible score of 14 and a maximum possible score of 70. A higher score indicates a more positive outcome.

Whooley Questions for Depression Screening³

- Collected by Baby Steps and used to identify concerns around parental mental health and refer to other appropriate services
- 2-item binary response instrument with a minimum possible score of O and a maximum possible score of 2. A lower score indicates a lower likelihood that someone is experiencing depression.

Parental knowledge and application of positive, sensitive and responsive parenting

There were two standardised instruments that were suitable for inclusion in this analysis.

Mothers Object Relations Scale (MORS)4

- Collected by Baby Steps, Circle of Security Parenting (COSP), PAIRS (One to One, Together Time)
- 14-item Likert scale instrument comprised of two measures, warmth (7 items) and invasion (7 items). Each measure has a minimum possible score of O and a maximum possible score of 35. For the warmth measure a higher score is more positive and for the invasion scale a lower score is more positive.

Prenatal Attachment Inventory (PAI)⁵

- Collected by Baby Steps
- 21-item Likert scale instrument with a minimum possible score of 21 and a maximum possible score 84. A higher score indicates a more positive outcome.

Brief service descriptions

Baby Steps

- Delivery organisations: Lambeth Council, Evelina London Children's Hospital, Guy's and St Thomas' NHS Foundation Trust
- Description: A nine-week parent education service designed to prepare for the transition to parenthood.

Parent and Infant Relationship Service

- Delivery organisations: South London and Maudsley NHS Foundation Trust
- Description: A system-wide service providing 1-2-1 psychotherapeutic services to promote responsive parenting, group-based sessions and workforce development on infant mental health.

Domestic Violence Enhanced Casework

- Delivery organisations: The Gaia Centre (Refuge)
- Description: Enhanced casework support for local LEAP families at risk of or experiencing domestic abuse.

Data cleaning and transformation

The steps in the preparation of the data prior to the analysis were as follows:

- Data from the Baby Steps services were removed from the MORS data
- The MORS data were separated by the assessment tool type
- The scores from each measurement instrument

were aggregated into a total score, and, where necessary, the total scores were inverted so that a positive outcome was always represented by a higher score value. SWEMWBS scores were adjusted using the conversion table. Incomplete scores were removed from the data.

 Within each measure, pre and post measurement instances were flagged using the categorical identifier of measurement point and checked using the assessment date. Where multiple assessments were present for a single individual, the most recent pre measure and the most recent post measure were used.

Sample size

Prior to data cleaning the number of unique individuals present in the data for each measurement instrument was:

- Core 10 = 160
- MORS = 340
- PAI = 242
- SWEMWBS = 243
- Whooley = 243

Following the cleaning of the data and identification of those with pre-post outcome measurements the numbers of unique individuals included in the final analysis for each measure were:

- Core 10 = 151
- MORS = 152
- PAI = 95
- SWEMWBS = 109
- Whooley = 110

Analysis procedure

The data was collected through the shared measurement system that is stored on LEAP's Data Integration Platform. This platform was developed to bring together pseudonymised data from across LEAP's different services and enable a programme-level view.

The platform captured individuals' journeys through LEAP's services allowing LEAP to see the combination and sequencing of services accessed by families, and the effect of this engagement on outcomes. Data shared with LEAP was pseudonymised, had personal identifiable information removed and uploaded to the platform. While processed, the platform linked individuals across LEAP services, creating a unique ID . This enabled identification of the same individual across each service or dataset.

For this project, the platform was accessed via Open Database Connectivity (ODBC) in Stata. Queries were run to create a view of the data necessary for data transformation and analysis. For the current project, a person ID was used to join multiple tables: - User table (unique users and their characteristics) -Engagement table (engagement with LEAP services and activities) - Outcomes table (stores information about assessments and validated tools) - Locality table (geographical information such as LSOA, Ward, Borough). Data was extracted and uploaded to a secure file transfer system to share with Dartington Service Design Lab. The data was transferred and stored with access restricted to only those conducting the analysis and in accordance with GDPR and data protection principles.

The data cleaning, transformation, analysis and visualisation code is available at https://github.com/Dartington-SDL/leap_quant.

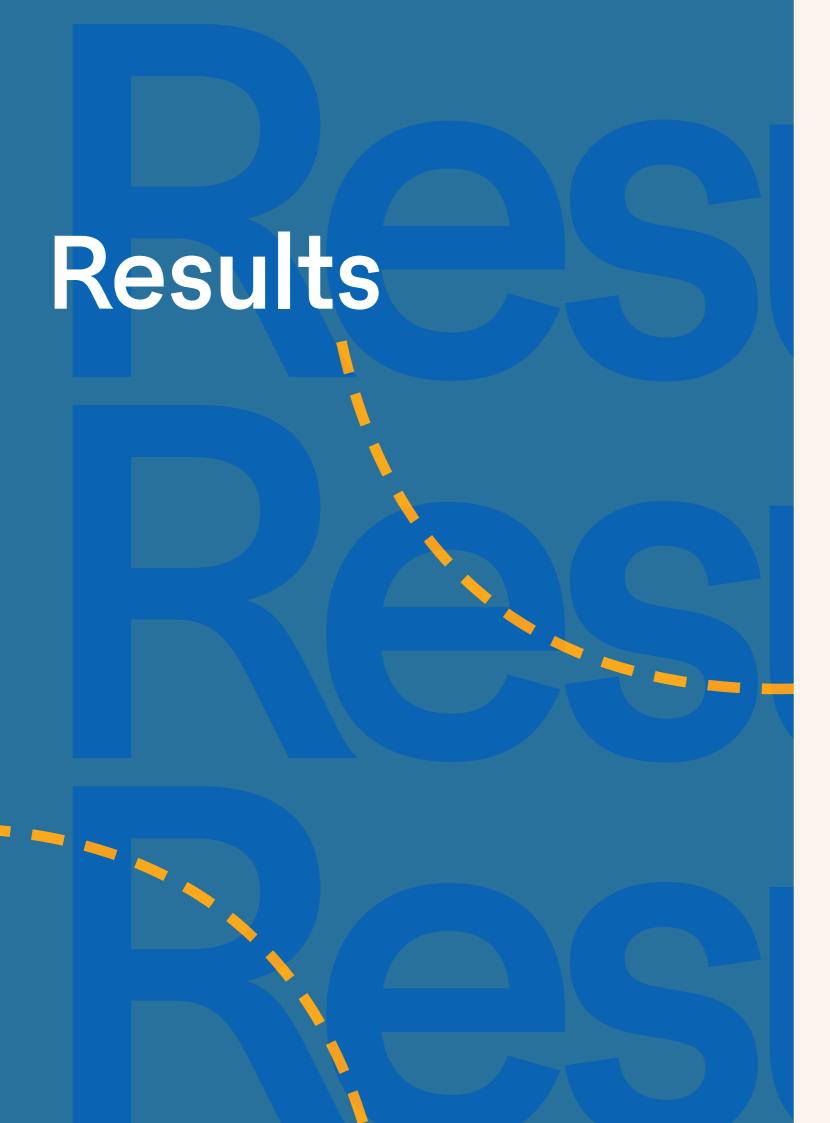
The analysis was conducted on the combined parental wellbeing and parental knowledge and application of positive, sensitive and responsive parenting measurements. To enable the different measurement

instruments to be combined, the pre and Postscores within each instrument were converted to standardised values between 0 and 1 using a min-max scaling approach. In this approach the maximum possible value for a measurement instrument is represented by 1 and the minimum possible value represented by 0. The actual scores are then scaled to a relative value between 0 and 1.

For each outcome domain, the means and standard errors were calculated for the pre and post measurements. Boxplots were produced to describe the distributions of the pre, post and difference between the pre and Post-scores.

Matched pairs T-tests were performed on the pre and Post-scores for each domain to test for statistically significant differences between the mean outcome measurements from before engagement with LEAP services to after engagement.





Parent mental wellbeing

Change in mean mental wellbeing for all service users

The combined overall outcome measure scores for domain 2 show a positive change in the mean from pre to post service interaction as seen in Figure 1. This is an overall improvement in the mean of 0.11 which is equivalent to 11.0%.

This difference between the means from pre (M = 0.32, SD = 0.29) to post (M = 0.44, SD = 0.41) was found to be statistically significant, indicating that parental mental wellbeing improved after interaction with LEAP services (t(366) = -9.701, p = 6.01e-20***).



Figure 1: The combined mean outcome score for mental wellbeing pre and post with standard error (N = 367)

Figure 2 describes the distribution of the combined outcome scores. The Post-scores show a high degree of variation with 50% of the scores spread between 0 and 0.89 compared to 0 and 0.55 for the Pre-scores. The average change in scores for an individual was 11.48%.

Change in mental wellbeing by service user age group

Across the age groups positive changes were observed between pre and post for all age groups with the exception of 45-49 year olds (Figure 3). This change was largest for the two youngest age groups 15-19 and 20-24 year old parents.

The change in combined domain level scores were statistically significant for all but the oldest age groups (45-49 and 50-54) as can be seen in Table 1.

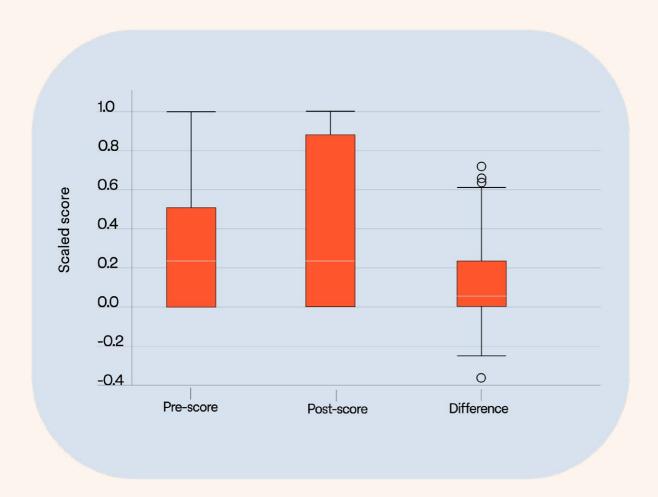


Figure 2: A boxplot of the combined outcome scores of mental wellbeing pre, post and the difference from pre to post (N = 367)

| Age group | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|-----------|-----|---------------------|----------------------|------------------|-------------|
| 15-19 | 9 | 0.40 (0.36) | 0.64 (0.41) | -3.544 | 0.00758** |
| 20-24 | 33 | 0.41 (0.29) | 0.63 (0.39) | -4.569 | 6.92e-05*** |
| 25-29 | 86 | 0.37 (0.31) | 0.52 (0.42) | -6.24 | 1.65e-08*** |
| 30-34 | 131 | 0.30 (0.29) | 0.39 (0.39) | -5.281 | 5.24e-07*** |
| 35-39 | 75 | 0.23 (0.25) | 0.30 (0.36) | -2.606 | 0.0111* |
| 40-44 | 22 | 0.42 (0.32) | 0.56 (0.43) | -2.454 | 0.023* |
| Other | 10 | 0.28 (0.34) | 0.27 (0.37) | 0.187 | 0.856 |

Table 1: Matched T-Test results for mental wellbeing by age group (*p <= 0.05, ** p <= 0.01, *** p <= 0.001)

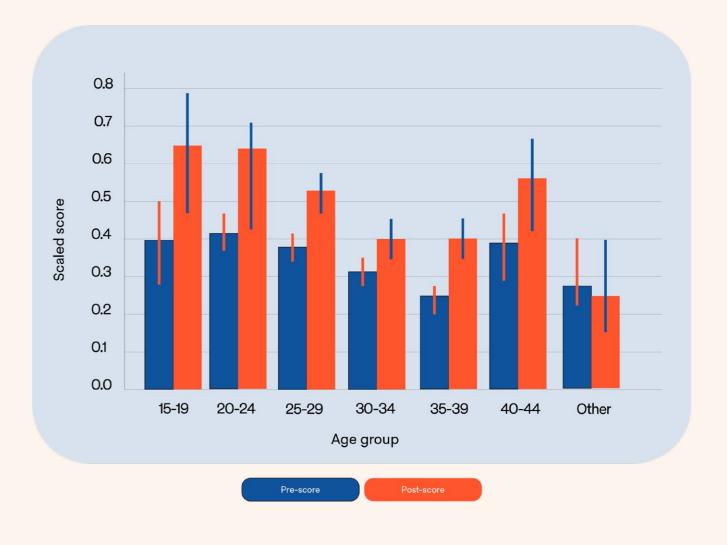


Figure 3: The combined mean outcome score by age group of mental wellbeing pre and post with standard error

Change in mental wellbeing by service user ethnicity

The greatest positive change in outcome scores from pre to post were observed for those of Black ethnicity as seen in Figure 4 and this change was highly significant (Table 2). Significant positive changes in combined outcome scores for mental wellbeing were also present for Asian and White ethnicities.



| Ethnicity | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|-----------|-------------|---------------------|----------------------|------------------|-------------|
| Asian | 9 | 0.40 (0.36) | 0.64 (0.41) | -3.544 | 0.00758** |
| | 22 | 0.28 (0.28) | 0.38 (0.40) | -2.787 | 0.011* |
| Black | 116 | 0.38 (0.31) | 0.54 (0.42) | -7.286 | 1.65e-08*** |
| | 4.32e-11*** | 0.30 (0.29) | 0.39 (0.39) | -5.281 | 5.24e-07*** |
| Mixed | 11 | 0.21 (0.26) | 0.20 (0.28) | 0.14 | 0.892 |
| Other | 12 | 0.18 (0.20) | 0.19 (0.24) | -0.121 | 0.906 |
| White | 165 | 0.23 (0.26) | 0.29 (0.35) | -3.823 | 0.000187*** |
| | | | | | |

Table 2: Matched T-Test results for mental wellbeing by ethnicity (* p <= 0.05, ** p <= 0.01, *** p <= 0.001)

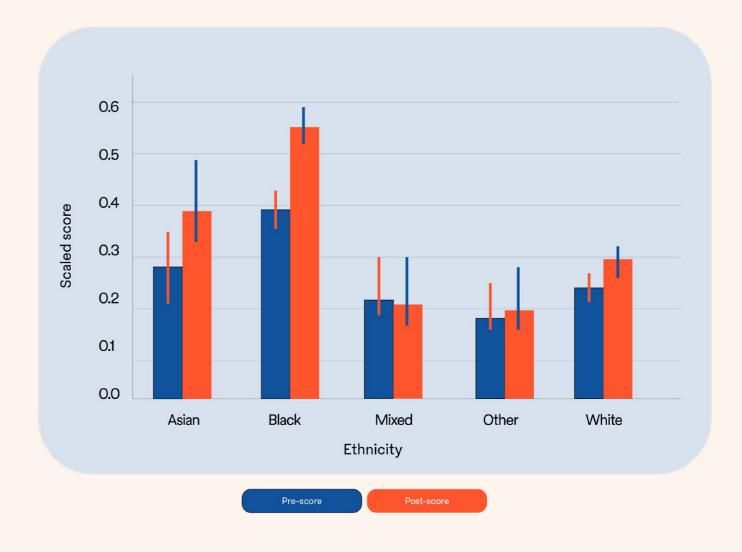


Figure 4: The combined mean outcome score by ethnicity of mental wellbeing pre and post with standard error

Change in mental wellbeing by the language spoken at home by service users

In Figure 5 we see large positive changes in the prepost outcome scores for English and the combined Other grouping. Due to the small sample sizes for many of the languages they were combined into a single grouping which stops us from being able to say anything meaningful about the impact of languages spoken at home on mental wellbeing. The only statistically significant pre-post improvements in outcome were for the language categories of English and Other (Table 3).



| Language | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|----------|-----|---------------------|----------------------|------------------|-------------|
| English | 237 | 0.35 (0.31) | 0.45 (0.41) | -7.472 | 1.53e-12*** |
| French | 10 | 0.25 (0.26) | 0.25 (0.33) | -0.041 | 0.968 |
| Other | 92 | 0.24 (0.25) | 0.35 (0.38) | -4.863 | 4.82e-06*** |
| Spanish | 11 | 0.20 (0.27) | 0.24 (0.38) | -0.573 | 0.579 |
| | | | | | |

Table 3: Matched T-Test results for mental wellbeing by language spoken at home (* p <=0.05, ** p <= 0.01, *** p <= 0.001

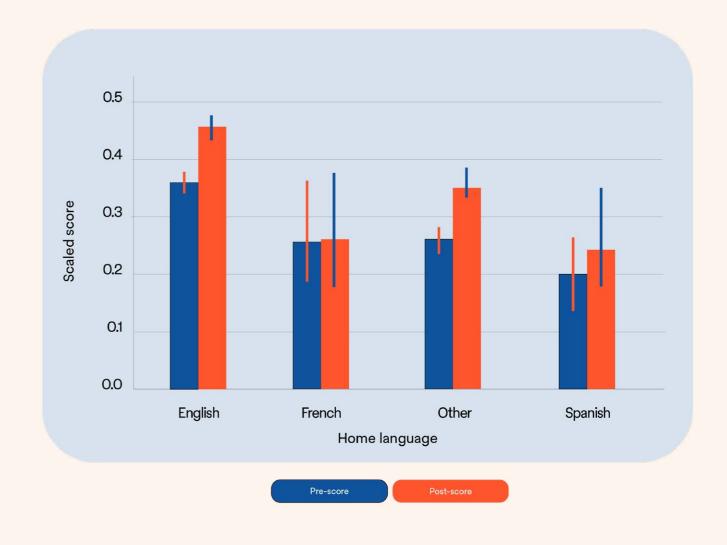


Figure 5: The combined mean outcome score by language spoken at home for mental wellbeing pre and post with standard error

Change in mental wellbeing by lone parent status

Due to a sample size of fewer than 5 people in one of two categories, we are not able to display the results for lone parent status.

Change in mental wellbeing by local level of deprivation

The combined outcome measures for mental wellbeing showed positive improvement for all 5 local-level Index of Multiple Deprivation (IMD) quintiles as seen in Figure 6. These changes were greatest for the most deprived in quintiles 1-3 and the change from pre to post was statistically significant (Table 4).



| Deprivation category | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|----------------------|-----|---------------------|----------------------|------------------|-------------|
| 1 | 143 | 0.32 (0.30) | 0.44 (0.39) | -6.658 | 5.64e-10*** |
| 2 | 73 | 0.36 (0.29) | 0.48 (0.41) | -4.274 | 5.78e-05*** |
| 3 | 75 | 0.33 (0.30) | 0.46 (0.42) | -4.817 | 7.53e-06*** |
| 4 | 33 | 0.27 (0.29) | 0.34 (0.38) | -2.037 | 0.05 |
| 5 | 16 | 0.15 (0.17) | 0.21 (0.32) | -0.904 | 0.38 |

Table 4: Matched T-Test results for mental wellbeing by local area deprivation (* p <= 0.05, ** p <= 0.01, *** p <= 0.001) (1 = most deprived, 5 = least deprived)

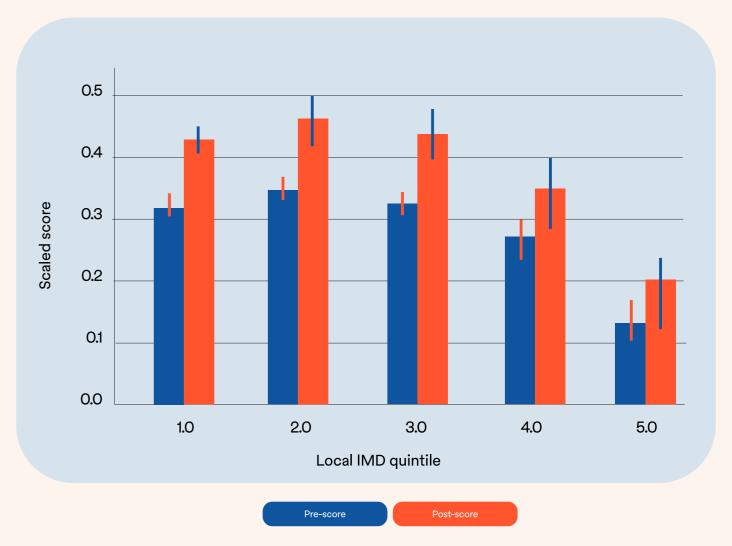


Figure 6: The combined mean outcome score by local area deprivation for mental wellbeing pre and post with standard error (1 = most deprived, 5 = least deprived)

Change in mental wellbeing by intervention dosage received by the service user

Dosage was defined as the minimum number of sessions or activities a typical participant would have to attend before they can expect to see an impact from the service. The number of sessions was dependent on the service, and the precise effects of the service will vary from participant to participant, but dosage is the threshold for expected impact. Figure 7 shows there was little difference from pre to post for those who received the full service dosage and those who did not. This is reflected in Table 5, where the difference in pre-post outcome measures for those who did and did not receive the full service dosage is not significant.



| Dosage reached | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|----------------|-----|---------------------|----------------------|------------------|--------|
| Partial | 41 | 0.14 (0.16) | 0.15 (0.16) | -0.447 | 0.657 |
| Optimal | 166 | 0.12 (0.14) | 0.12 (0.14) | -0.035 | 0.973 |

Table 5: Matched T-Test results for mental wellbeing by service dosage received (* p <= 0.05, ** p <= 0.01, *** p <= 0.001)



Figure 7: The combined mean outcome score by service dosage received for mental wellbeing pre and post with standard error

29

Knowledge and application of positive, sensitive and responsive parenting

Results

The combined overall outcome measure scores for knowledge and application of positive, sensitive and responsive parenting show a positive change in the mean from pre to post service interaction as seen in Figure 8. This is an overall improvement in the mean of 0.05 which is equivalent to 5.0%.

This difference between the means from pre (M = 0.61, SD = 0.13) to post (M = 0.67, SD = 0.14) was found to be statistically significant, indicating that knowledge and application of positive, sensitive and responsive parenting improved after interaction with LEAP services (t(247) = -7.622, p = 5.39e-13***).

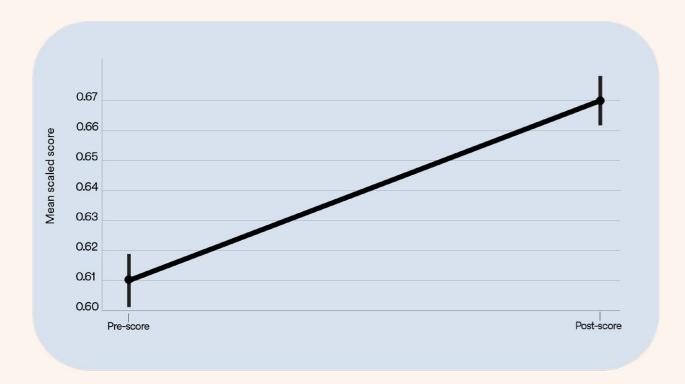


Figure 8: The combined mean outcome score for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error (N = 247)

The distribution of the pre and Post-scores in Figure 9 shows that the majority of the Post-scores have shifted in a positive direction. This can be seen in the higher minimum and maximum values, higher interquartile range, median and mean. The mean change at the individual level was 5.41%.

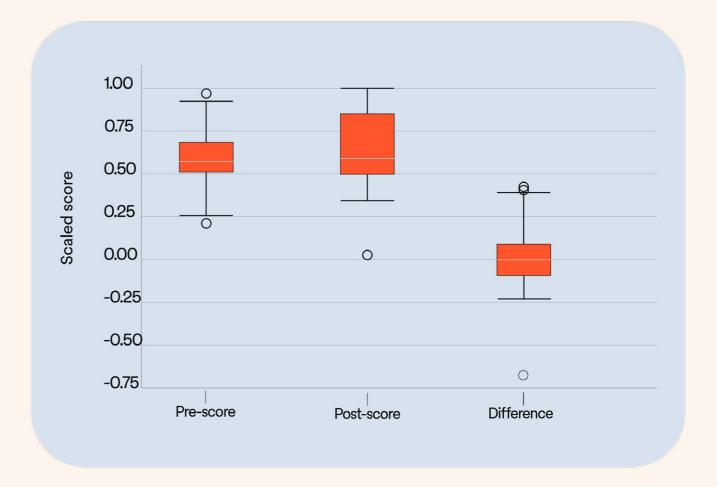


Figure 9: A boxplot of the combined outcome scores for knowledge and application of positive, sensitive and responsive parenting pre, post and the difference from pre to post (N = 247)

Change in knowledge and application of positive, sensitive and responsive parenting by service user age group

All age groups show similar pre-Post-scores or a positive change in the combined knowledge and application of positive, sensitive and responsive parenting outcome score pre to post (Figure 10). As can be seen in Table 6, this change is significant for those aged 25-29, 30-34 and 35-39. The lack of significance for the other age groups is likely due to the small sample sizes for those age groups.



| Ethnicity | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|-----------|----|---------------------|----------------------|------------------|-------------|
| 15-19 | 5 | 0.61 (0.23) | 0.61 (0.21) | 0.064 | 0.952 |
| 20-24 | 11 | 0.68 (0.11) | 0.72 (0.13) | -1.852 | 0.0937 |
| 25-29 | 41 | 0.63 (0.11) | 0.69 (0.17) | -2.437 | 0.0194* |
| 30-34 | 90 | 0.60 (0.12) | 0.67 (0.14) | -5.943 | 5.36e-08*** |
| 35-39 | 60 | 0.60 (0.12) | 0.65 (0.12) | -4.193 | 9.36e-05*** |
| 40-44 | 22 | 0.59 (0.14) | 0.61 (0.13) | -1.66 | 0.112 |
| 45-49 | 5 | 0.62 (0.20) | 0.62 (0.13) | -0.044 | 0.967 |
| Other | 13 | 0.66 (0.11) | 0.70 (0.10) | -1.984 | 0.0706 |

Table 6: Matched T-Test results for knowledge and application of positive, sensitive and responsive parenting by service user age group (* p <= 0.05, ** p <= 0.01, *** p <= 0.001)

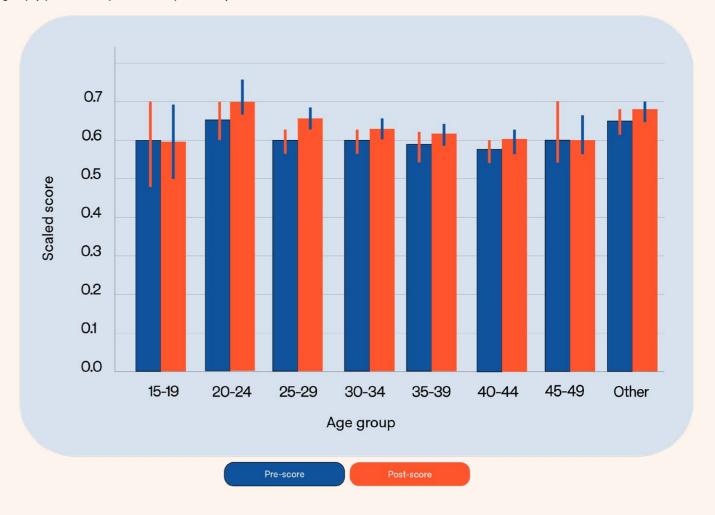


Figure 10: The combined mean outcome score by age group for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error

Change in knowledge and application of positive, sensitive and responsive parenting by service user ethnicity

All ethnicities show a positive change in the combined outcome score from pre to post as can be seen in Figure 11. This change is statistically significant for all ethnicity groups with the exception of the Other group (Table 7).



| Ethnicity | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|-----------|-----|---------------------|----------------------|------------------|-------------|
| Asian | 16 | 0.59 (0.13) | 0.63 (0.13) | -2.249 | 0.04* |
| Black | 56 | 0.62 (0.13) | 0.66 (0.14) | -2.566 | 0.013* |
| Mixed | 13 | 0.58 (0.11) | 0.65 (0.12) | -3.079 | 0.00955** |
| Other | 14 | 0.61 (0.11) | 0.63 (0.21) | -0.254 | 0.804 |
| White | 127 | 0.59 (0.13) | 0.66 (0.13) | -7.99 | 7.34e-13*** |

Table 7: Matched T-Test results for knowledge and application of positive, sensitive and responsive parenting by service user ethnicity (* p <= 0.05, ** p <= 0.01, *** p <= 0.001)

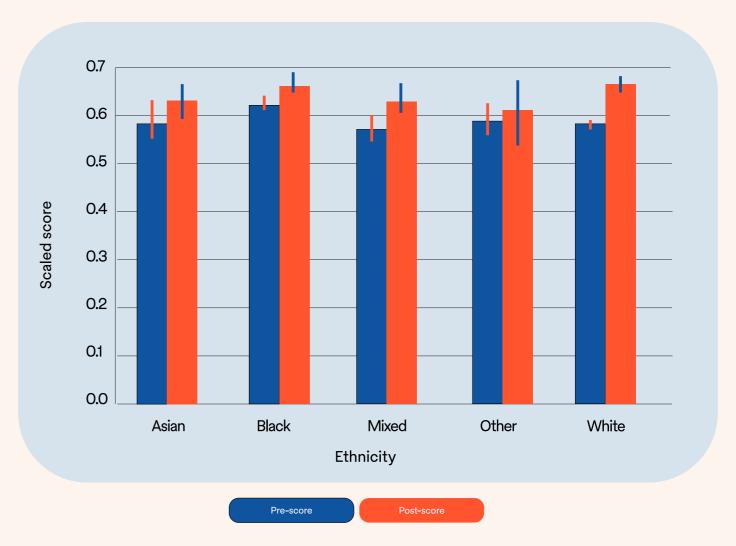
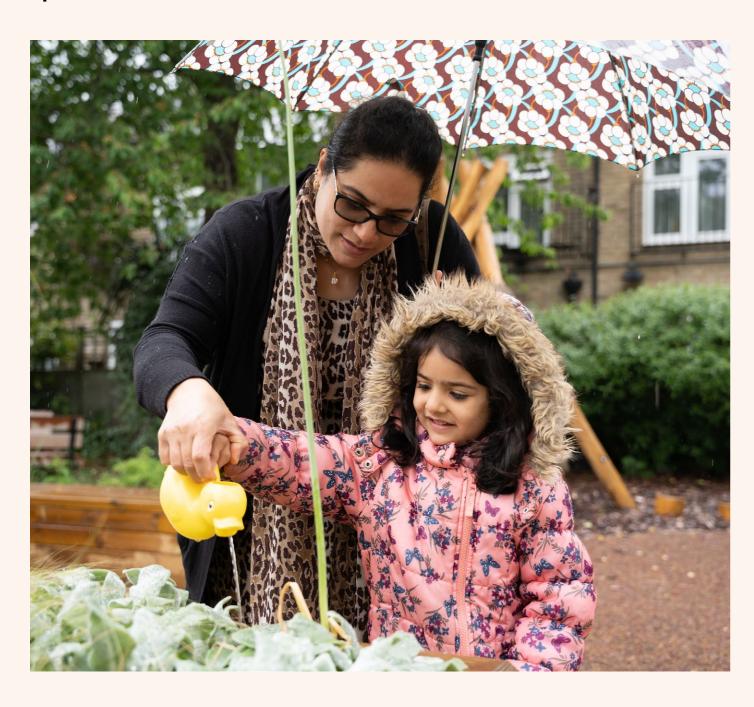


Figure 11: The combined mean outcome score by ethnicity for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error

Change in knowledge and application of positive, sensitive and responsive parenting by language spoken at home

The sample size for the majority of the languages spoken at home groups is too small (< 5) to provide useful information about the trends within the group (Table 8). The majority of the sample fall into the English and Other categories. Both of these groups show a positive change in outcome as measured for domain 3 which is statistically significant (Figure 12).



| Language | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|------------|-----|---------------------|----------------------|------------------|-------------|
| English | 125 | 0.63 (0.14) | 0.70 (0.13) | -7.272 | 3.51e-11*** |
| Other | 98 | 0.60 (0.11) | 0.64 (0.13) | -4.405 | 2.73e-05*** |
| Portuguese | 7 | 0.58 (0.07) | 0.57 (0.03) | 0.663 | 0.532 |
| Spanish | 12 | 0.60 (0.12) | 0.62 (0.23) | -0.32 | 0.755 |
| | | | | | |

Table 8: Matched T-Test results for knowledge and application of positive, sensitive and responsive parenting by language spoken at home (* $p \le 0.05$, ** $p \le 0.01$, *** $p \le 0.001$)

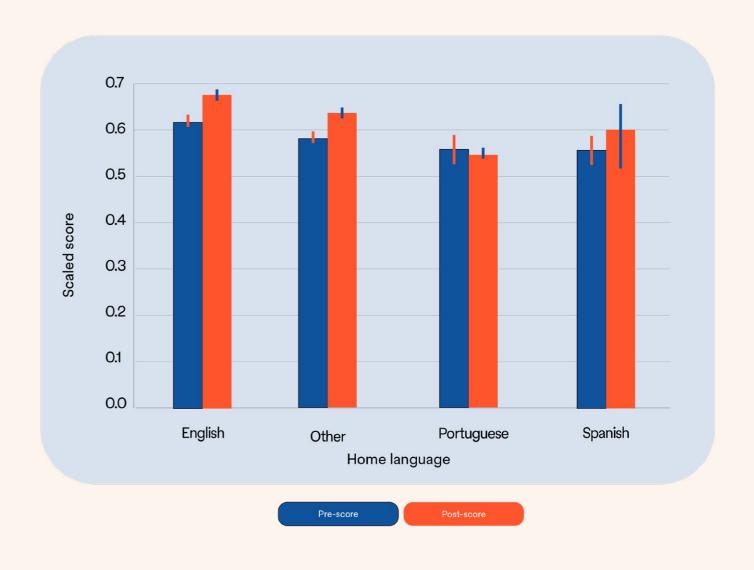


Figure 12: The combined mean outcome score by language spoken at home for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error

Change in knowledge and application of positive, sensitive and responsive parenting by lone parent status

An increase in the knowledge and application of positive, sensitive and responsive parenting outcome measures can be seen in Figure 13 for those people who are lone parents and not lone parents. The majority of the sample are not lone parents and we can see that their change in measured outcome from pre to post for knowledge and application of positive, sensitive and responsive parenting is statistically significant (Table 9). The lack of significance for people who are lone parents is likely due to the small sample size.

| Lone parent status | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|--------------------|----|---------------------|----------------------|------------------|-------------|
| No | 82 | 0.59 (0.13) | 0.70 (0.14) | -7.588 | 4.84e-11*** |
| Yes | 6 | 0.73 (0.05) | 0.76 (0.10) | -0.505 | 0.635 |

Table 9: Matched T-Test results for knowledge and application of positive, sensitive and responsive parenting by lone parent status (* $p \le 0.05$, ** $p \le 0.01$, *** $p \le 0.001$)



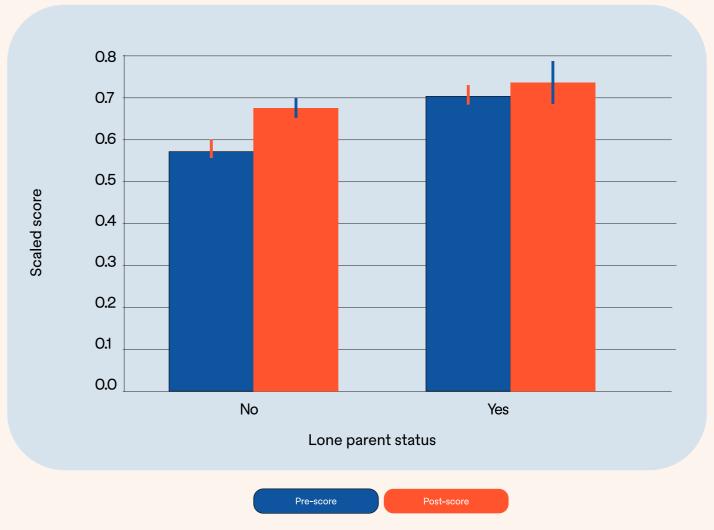


Figure 13: The combined mean outcome score by lone parent status for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error

Change in knowledge and application of positive, sensitive and responsive parenting outcome by level of deprivation

Across all levels of deprivation, we see a positive increase in the combined knowledge and application of positive, sensitive and responsive parenting outcome measures from pre to post in Figure 14. This change is statistically significant for all deprivation quintiles with the exception of quintile 4 (Table 10). This change is greatest and most significant for the most deprived parents in quintile 1.



| Deprivation category | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | Pvalue |
|----------------------|----|---------------------|----------------------|------------------|-------------|
| 1 | 75 | 0.60 (0.13) | 0.68 (0.14) | -6.047 | 5.53e-08*** |
| 2 | 50 | 0.60 (0.12) | 0.63 (0.13) | -2.661 | 0.0105* |
| 3 | 52 | 0.63 (0.13) | 0.67 (0.16) | -2.384 | 0.0209* |
| 4 | 28 | 0.61 (0.12) | 0.63 (0.11) | -1.585 | 0.125 |
| 5 | 18 | 0.60 (0.12) | 0.66 (0.12) | -2.226 | 0.0398* |

Table 10: Matched T-Test results for knowledge and application of positive, sensitive and responsive parenting by local area deprivation (* p <= 0.05, ** p <= 0.01, *** p <= 0.001) (1 = most deprived, 5 = least deprived)

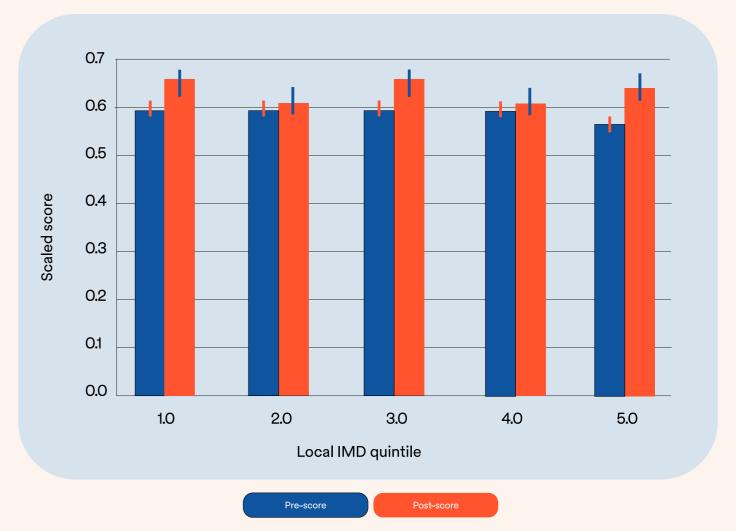


Figure 14: The combined mean outcome score by local area deprivation for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error (1 = most deprived, 5 = least deprived)

Those who did and did not achieve dosage showed an increase in knowledge and application of positive, sensitive and responsive parenting outcome measures which can be seen in Figure 15. Table 11 shows that this change was statistically significant for those who had achieved dosage, which is also the majority of the sample.



| Dosage reached | N | Pre-score mean (SD) | Post-score mean (SD) | T-test statistic | P value |
|----------------|-----|---------------------|----------------------|------------------|------------|
| Partial | 27 | 0.64 (0.11) | 0.68 (0.19) | -0.951 | 0.35 |
| Optimal | 196 | 0.59 (0.12) | 0.65 (0.13) | -8.344 | 1.3e-14*** |

Table 11: Matched T-Test results for knowledge and application of positive, sensitive and responsive parenting by service dosage received (* p <= 0.05, ** p <= 0.01, *** p <= 0.001)

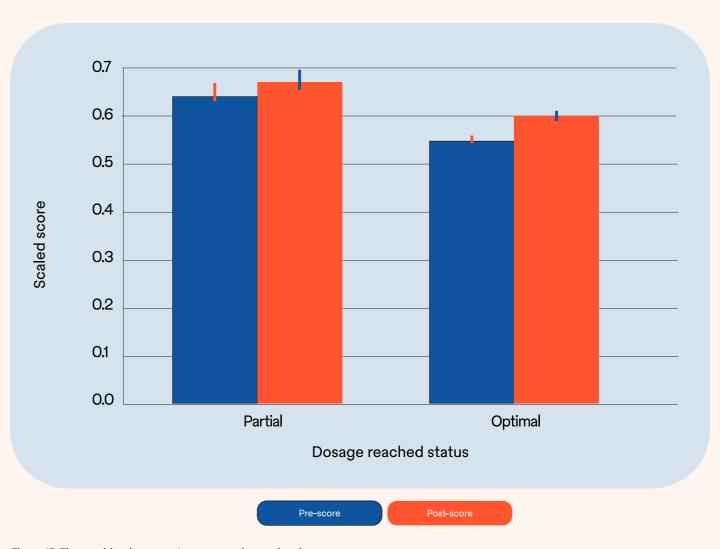
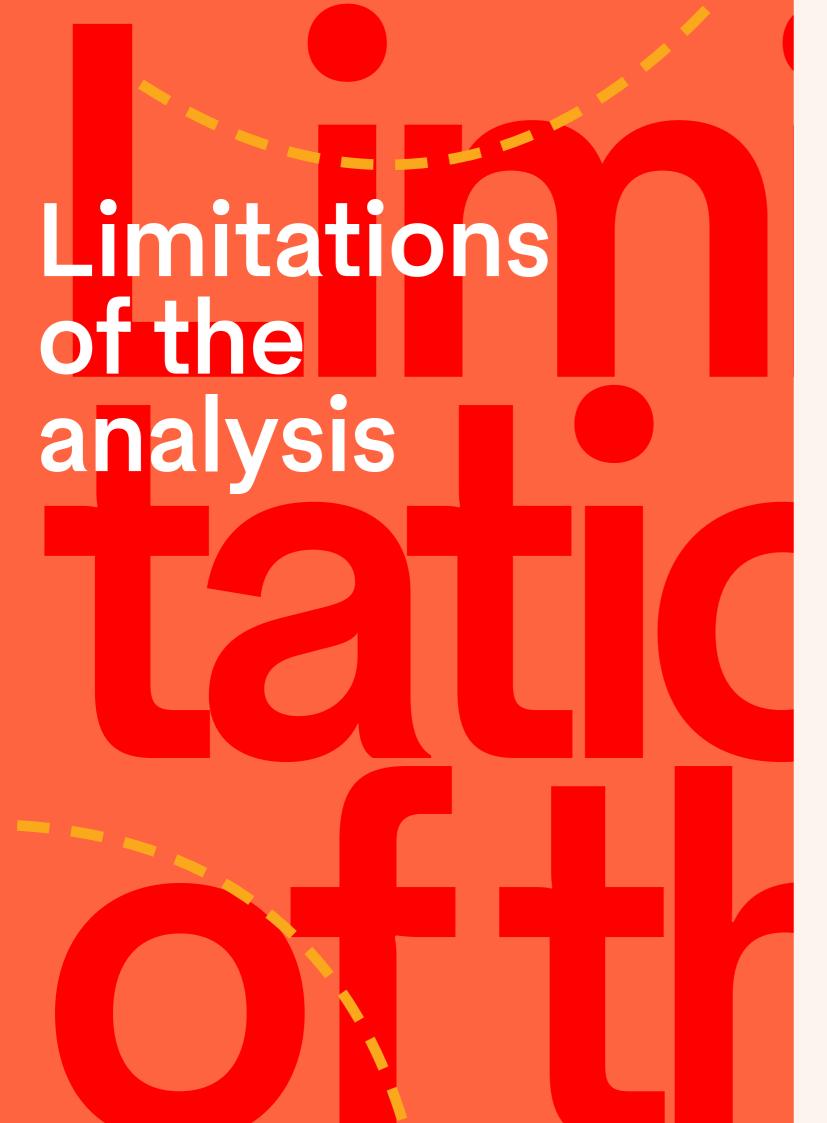


Figure 15: The combined mean outcome score by service dosage received for knowledge and application of positive, sensitive and responsive parenting pre and post with standard error





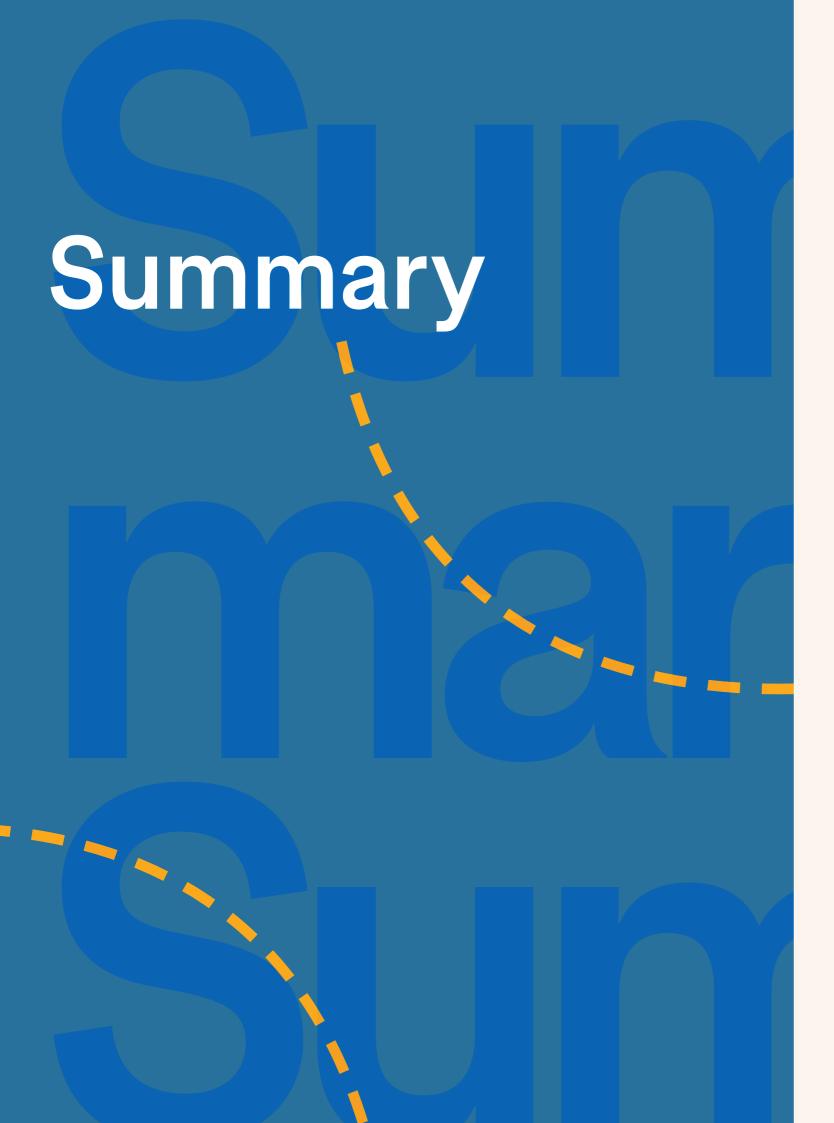
Data from two services (Becoming a Parent, Baby and Us) was not included in this analysis.

The data from these services was only available in an aggregated format and not available at an individual person level which was required for this analysis. This resulted in data from an estimated 56 people not being included in the analysis.

The overall sample size for this study was relatively small due to the requirement of having parents complete the measures both before and after having used the service. This further impacted on the analysis of parental outcomes by socio-demographic characteristics. For some of the socio-demographic

characteristics such as 'first language spoken at home', multiple characteristic categories had fewer than 5 people and were combined into a single 'Other' category. This reduced the amount of useful information available on the impact of demographic characteristics.

There was no control or comparison group available for this analysis. The analysis relied on understanding the change in parental outcomes from before to after engagement with LEAP services. The analysis would have benefited from having a control or comparison group to control for changes that might have occurred outside of the scope of LEAP services. Some of the measurement tools used by LEAP services are primarily for the purposes of screening service users. Such screening tools were not designed to be combined for the analysis of complex psychological constructs. These are confounding factors and important contextual information that should be taken into account when interpreting the results presented here.



Overall, engagement with LEAP services was associated with positive changes to mental wellbeing and knowledge and application of positive, sensitive and responsive parenting. This change was larger for mental wellbeing than knowledge and application of positive, sensitive and responsive parenting but in both domains positive changes were more consistently observed than neutral or negative impacts for parents.

Across both domains, parents aged between 20 and 39 saw the greatest changes in outcomes. A difference between the domains was observed in mental wellbeing also being positively improved for young parents aged 15-19 and older parents aged 40-44. Negative or no change was seen in both domains for those parents aged 45-49.

When looking at ethnicity, the most significant and consistent positive changes were seen for those of Black and White ethnicities. Positive changes were observed for all ethnicities across both domains with the exception of the mental wellbeing for mixed ethnicities, which remained the same.

It is difficult to say anything conclusive about the change from service interaction based on the language spoken at home due to the small sample sizes of the language categories. All that can be confirmed by the analysis was that those who spoke English or fell within the Other category demonstrated positive improvement in both domains.

When considering how being a lone parent influences outcomes, the only significant change was to knowledge and application of positive, sensitive and responsive parenting for those who were not lone

parents. Overall, the programme worked more often with two-parent families than lone parent families. Parents from all socioeconomic backgrounds saw a significant positive change, but the greatest and most consistent change was for those from the most deprived areas across both domains. LEAP also worked with more parents from those areas of greatest deprivation.

The majority of parents participating in the LEAP programme did achieve the desired service dosage. This was not associated with a significant change in mental wellbeing but was associated with a significant change for knowledge and application of positive, sensitive and responsive parenting for those who achieved the desired service dosage.







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