A Cluster Randomised Controlled Trial Evaluation of Booktime Northern Ireland: A Book Gifting Intervention for Children in Their First Year of Primary School

Paul Connolly, Liam O’Hare & Denise Mitchell

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Additional Contributors

The following members of the research team also made significant contributions to the research upon which this report is based: Whitney Wall Bortz, Tsvyata Donova and Joseph Diamond.

How to Cite this Report

Any citation of this report should use the following reference:

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Executive Summary

Booktime is a national free books programme for children in their first year of primary school (4-5 year olds), managed by independent charity Booktrust and Pearson, the world’s leading learning company. Booktime aims to give a free book pack to every eligible child soon after they first start primary school, with guidance for parents and carers on shared reading. The programme seeks to promote the pleasure of books by encouraging families to have fun reading together. This report presents the findings of an independent evaluation of Booktime in Northern Ireland conducted by the Centre for Effective Education at Queen’s University Belfast.

Methodology

The evaluation consisted of three elements:

- an assessment of the educational value and appropriateness of the Booktime Pack for children aged 4-5 years;
- telephone interviews with key stakeholders to ascertain their perspectives on and experiences of the programme. Interviewees included: five teachers; five parents; four representatives from Education and Library Board; and one representative from a public library; and
- a cluster randomized controlled trial involving 30 primary schools recruited from across Northern Ireland to ascertain the impact of the programme on the reading and literacy habits of parents/carers and children.

Outcomes

Through the cluster randomised controlled trial, the evaluation assessed whether the Booktime programme was having a measurable effect in relation to five outcomes:

- The frequency of shared reading between parents and children at home
- Relationships between parents and schools regarding the children’s reading
- Parents’ attitudes to reading for themselves
- Parents’ use of their local libraries
- Children’s use of their local libraries

Sample and Data Collection

A total of 30 schools were recruited during the 2011/12 academic year to the trial, with similar numbers from each of the five Education and Library Boards in Northern Ireland. Once recruited, the schools were then randomly assigned to either the intervention group or the control group. Prior to
the distribution of the Booktime Packs, all parents/carers were asked to complete a questionnaire that was distributed through their child’s class teacher. Once the questionnaires were completed, those 15 schools in the intervention group were then given Booktime Packs to distribute to all of their Primary One children while the remaining 15 schools in the control group continued as normal. Eight weeks later, the parents were asked to complete a second questionnaire. Once the second questionnaires were collected, the 15 schools in the control group received the Booktime Packs.

Of the 30 schools recruited to the trial, three withdrew leaving a final achieved sample of 27 schools. From an initial potential of 736 children eligible to take part in the trial from the 30 original schools, 475 pre-test questionnaires were returned from parents/carers (64.5%) and 275 (37.4%) post-test questionnaires were returned as well. While the final response rate was low, this did not appear to introduce any noticeable biases into the trial, with the characteristics of the intervention and control groups remaining well matched at pre-test on the five key outcome measures.

**Findings**

It is clear from the evidence that the Booktime Packs were very much welcomed and highly valued by teachers, parents/carers and children. For the parents/carers, the vast majority (90%) reported that they really enjoyed reading the book contained in the Pack and also a similar proportion reported that they had fun reading it together with their children. The potentially positive effects of Booktime were also indicated through the interviews with parents with some reporting how it encouraged them to read more with their children and others explaining how it was giving them more confidence as readers.

The book itself – Eric Carle’s “Slowly, Slowly, Slowly,” said the Sloth – was found to be colourful and brightly illustrated in a way that would appeal to young children. Moreover, the book was found not only to have the potential to extend the child’s knowledge about animals, but the illustrations and text were found to provide important opportunities to enhance and consolidate young children’s emergent reading skills. It was noted, however, that the book contained a number of difficult words and that this may present a problem for those parents/carers who have difficulty reading themselves. This point was also corroborated through some of the interviews with the teachers and parents.

In relation to the perceived impact of the programme on parents/carers and their children, opinions differed among the stakeholders interviewed. While some felt that the Booktime Packs had significant potential to have a positive effect, others expressed skepticism that this would happen unless schools made substantial efforts to follow up the distribution of the Packs with additional events and activities linked to the book.

The evidence from the cluster randomized trial would seem to bear these concerns out. Overall, the trial found no evidence that the Booktime Packs were having any effects on parents/carers or the children in relation to the five outcomes specified. Moreover, further exploratory analysis of the data found no evidence that the programme was at least having positive effects for particular subgroups of parents/carers and children.
Finally, the evidence suggests that most intervention schools did not engage in many follow-up activities and events with parents/carers around the distribution of the Booktime Packs. Of the parents/carers in the intervention group schools, only a very small proportion (15%) reported having contact with the school about the Booktime Pack. An even smaller proportion reported visiting the Booktime website (just 9%) and only one in five (21%) recognised the Booktime character, “Booky”. These findings tend to corroborate the concerns raised by some of the stakeholders in the telephone interviews that the Booktime programme may not be eliciting sufficient support and follow-up by schools.

**Discussion**

In line with the views of a number of stakeholders, and based on the evidence provided in this evaluation, it is suggested that a plausible explanation for the lack of effects of the programme is the fact that schools tended not to support the distribution of the Booktime Packs with additional events and activities for parents/carers. It is suggested that the simple distribution of one reading book to a child’s parents/carers is unlikely, in itself, to have a positive and measurable effect on the literacy habits of the parents/carers and their children. Rather, for a programme like Booktime to be effective it would be necessary for it to be treated as a catalyst that is used to encourage a wider range of events and activities by schools with the aim of engaging parents/carers and encouraging a love of books, shared reading at home and greater use of local libraries.

**Recommendations**

The report notes the findings of available evidence internationally that book-gifting programmes can have a positive effect on parent/carer and child outcomes. Given this – together with the fact that the Booktime programme has been so well received among educationalists, parents/carers and the children – it is recommended that the Booktime programme continue in Northern Ireland.

However, given the lack of effects found for the programme in its present form, it is also recommended that the Booktime programme should be developed further so that schools are encouraged strongly to play a key role in supplementing the distribution of the Booktime Packs with a range of additional events and activities for use in the classroom with the children and also with the aim of engaging parents/carers directly. It is with this in mind that the report makes the following specific recommendations:

1. Booktrust and Pearson should consider enhancing the Booktime Packs with additional support materials for parents, including an enhanced information leaflet/booklet providing advice and guidance and additional activities that a parent/carer could undertake with their child related to the book that is gifted.

2. Booktrust and Pearson should consider providing additional resources to schools that they can use to follow up the distribution of the Booktime Packs. These resources could include guidance on organising events for parents/carers in relation to the Booktime Packs and a set of additional activities that they can use with the children in class as well as those that they can send home for use by parents/carers. These events and activities should be thematically related to the book that is gifted in the Packs and the resources should be made available
free of charge to download from the Booktime website for teachers to photocopy and use as necessary.

3. Booktrust and Pearson, in conjunction with the Education and Library Boards and local libraries, should consider how best they might provide further encouragement and support to schools to undertake additional events and activities and make use of the additional resources recommended above.

In addition, two other specific issues were raised through the stakeholder interviews that are worth considering further and thus give rise to two further recommendations:

4. Booktrust and Pearson should give some consideration to the timing of the distribution of the Booktime Packs. In particular, it would be worthwhile considering the benefits of distributing the Packs at the beginning of the school year which may present more opportunities to encourage schools to undertake events and activities aimed at engaging more effectively with parents/carers.

5. Booktrust and Pearson should give some consideration to the choice of book to be included in the Booktime Packs in future years. While there are benefits to including a book that can stretch children in terms of the words used, this can present difficulties for those parents/carers who are poor readers themselves. Should it be decided to continue to use a book like Eric Carle’s “Slowly, Slowly, Slowly,” said the Sloth then it would be advisable to consider what additional support may be needed to be provided for parents/carers.
Acknowledgements

The research team would like to thank the principals and Primary One teachers of the 30 schools that participated in the trial for the help and support. We are also extremely grateful to the parents/carers of the children in these schools for the time they gave in completing the two questionnaires. The team would also like to express its gratitude to the individuals who agreed to be interviewed. Unfortunately, because of the need to maintain anonymity, it is not possible to name any of the individuals or schools. Finally, the research team is indebted to Booktrust for commissioning the evaluation and also for the help and support they gave throughout the research process.

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1. Introduction

1.1 Background

Booktime is the national free books programme for children in their first year of primary school, providing a free book pack for every child aged 4-5 years in Northern Ireland to share and enjoy with their family and friends.

Booktime aims to promote the pleasure of books by encouraging families to have fun reading together. The programme supports, encourages and enables reading for pleasure in the home at an important transition stage in a child’s learning and development. As a universal bookgifting programme, Booktime aims to deliver high quality books for every eligible child and their family to keep.

Booktime is run by Booktrust, the independent charity empowering people through reading and writing, and Pearson, the world’s leading learning company. The programme was launched in 2006 by Pearson in partnership with Booktrust, and is supported by the Department of Education.

The Centre for Effective Education at Queen’s University Belfast was commissioned by Booktrust Northern Ireland to undertake a rigorous and independent evaluation of the effectiveness of the Booktime programme as delivered in Northern Ireland during the school year 2010/11.

1.2 The Booktime Programme

Booktime is delivered by Booktrust and the learning company Pearson. It is gifted through schools to pupils in their first year of primary school. The Booktime intervention consist of a pack containing a book and associated reading materials provided in a bag and presented by a school teacher to all primary one children in their class which they can bring home to their parents.

The Booktime pack contains the following items:

- A bright coloured nylon satchel style bag with the Booktime logo (Booky character) and web address
- One book (Eric Carle’s “Slowly, Slowly, Slowly,” Said the Sloth)
- A Booktime Flyer including the Booktime web address
- A ‘reading week’ poster which identifies daily literacy activities for parents and children

There have been three completed independent evaluations of the Booktime programme to date. These evaluations have focused on the delivery of the programme in Northern Ireland (Devlin, 2010), Wales (Howard, 2010) and the delivery of packs into libraries around England (Jones & Dubber, 2010). These evaluations have included a range of methods and have also reported high levels of satisfaction with the programme as well as perceived improvements in reading behaviour.
Evaluation of Bookstart among parents. However, none of these evaluations has explored the measurable effects of the programme.

1.3 The evidence base on reading interventions

Initially, it is worth locating the Booktime intervention within the wider set of interventions that exist aimed at improving early reading outcomes among young children. A recent review of effective beginning (non-remedial) reading programmes by Slavin, Lake, Chambers, Cheung, & Davis (2009) identified four main approaches:

- Reading Curricula
- Instructional Technology
- Instructional Process Programmes
- Combined Curriculum and Instructional Process Programmes

In their review, Slavin et al., analysed 63 experimental studies and found that these four approaches tended to have differing effects, on average, with Instructional Process Programmes having the greatest effects ($d = +.37$), then Combined programmes ($d = +0.29$), Reading curricula ($d = +.012$) and finally Instructional technology ($+0.09$).

Book-gifting programmes such as Booktime do not sit easily within any of these four categories identified by Slavin et al. However, it is possible to gain some sense of the size of the effects that can be expected from such a programme by looking in more detail at the findings of one particular trial covered in the Slavin et al. review of an intervention called ‘Little Books’ (Phillips, Norris, Mason, and Kerr, 1990). As they explain:

Little Books is an approach to early literacy in which specially written mini-books are read by teachers or parents to kindergarten children to build their language and print concept... Effect sizes adjusted for pre-tests were +0.33 for the home/school version, +0.19 for school only, and +0.14 for home only. Averaging across the three variations, the mean effect size was +0.22.

Slavin, Lake, Chambers, Cheung & Davis (2009: 65)

In this case Booktime can be regarded as being most similar to the home version of the Little Books programme which has a corresponding effect size of +0.14. While the size of this effect is clearly smaller than those associated with some of the other approaches identified by Slavin et al., it is important to note that these larger effects have been gained with correspondingly much larger levels of investment in terms of time and resources. As such, an effect within the range of +.10 to +.20 for a low-intensity intervention such as Booktime should be regarded as noteworthy in relative terms. Such comparisons and benchmarking of the potential effect sizes of book-gifting interventions are important to bear in mind when interpreting the findings to be reported in this present study.
1.4 Previous evaluations of book-gifting programmes

Book-gifting programmes have a growing research base. Probably the most widely researched book-gifting programme is ‘Bookstart’, which is gifted to children of one year of age by health visitors (Bookstart, 2010). Several studies by Wade and Moore, (1993, 1996, 1998 and 2000) have examined the impact of ‘Bookstart’, followed by a number of observational, qualitative and quasi-experimental investigations (Collins, Svensson, Mahony 2005; Moore & Wade, 2003; Hines and Brooks, 2005; Hunn, 2007; Spratt & Philip, 2007). All of these studies have reported positive outcomes among parents and children participating in the programme and these positive outcomes also appear to have been replicated through the international versions of the ‘Bookstart’ programme (Kovalik, 2010; Vanobbergena, Daems and Van Tilburg, 2009).

A similar picture is also evident in relation to another of Booktrust’s book-gifting programmes – The Letterbox Club – that is aimed at older primary school children (aged 7-11) who are in foster care. Four evaluations have been conducted to date, two in England and two in Northern Ireland, and have made use of a variety of methods including the collection of qualitative data as well as quantitative before and after measures of the children’s reading and number skills (see: Griffiths et al., 2008, 2010a, 2010b; Winter et al., 2011). Consistently positive results were also found across all four of these evaluations, with the children participating in The Letterbox Club showing notable gains in reading and number skills over the duration of the programme.

While there now exists a significant body of research evaluating the impact of the various book-gifting programmes few of the evaluations to date have used research methods capable of producing robust evidence of the actual effectiveness of the programmes in improving outcomes among parents and/or children. This is regrettable as the small body of randomised trial evidence that does exist, most notably the Little Books intervention described above (Phillips et al., 1990), suggests such programmes are capable of having a positive impact. Moreover, a longitudinal follow up study showed that the effects continued over the next four years (Philips, Norris and Mason, 1996).

One Booktrust programme to date that has been evaluated using a randomised controlled trial methodology is Bookstart+ in Northern Ireland (O’Hare & Connolly, 2010). The evaluation found robust evidence of a positive effect on parental attitudes to reading (d = +.19) and an encouraging movement, although not statistically significant, in relation to parents’ attitudes to reading with their children.
2. Methodology

The current evaluation of Booktime in Northern Ireland consists of three strands: an educational assessment of the value and appropriateness of the book contained in the Booktime pack; telephone interviews with key stakeholders; and a cluster randomised controlled trial involving 30 primary schools selected across Northern Ireland.

2.1 Assessment of the Educational Value of the Booktime Packs

At the heart of the Booktime packs gifted to children across Northern Ireland in their first year of primary school is the book “Slowly, Slowly, Slowly,” Said the Sloth by Eric Carle. This book was assessed in relation to its educational value and appropriateness for Primary 1 children (aged 4-5 years). The findings of this evaluation are reported in Section 3 of this report.

2.2 Telephone Interviews with Key Stakeholders

In order to understand how the Booktime packs were perceived and experienced by key adult stakeholders, a total of 15 telephone interviews were conducted with the following:

- Five parents who were randomly selected from those who indicated in the post-test questionnaire of the randomized trial (see below) that they would be willing to be contacted for a follow-up interview;
- Five teachers from intervention schools; and
- One person identified from four different library board areas and one individual from a public library (a total of five interviews).

Unfortunately, the resources available for the evaluation did not allow for interviews to be conducted with the children directly. The questions covered during these telephone interviews were agreed with Booktrust and are listed in Appendix A1.

2.3 Cluster Randomised Controlled Trial

A cluster randomised controlled trial involving 30 primary schools was undertaken to assess, specifically, whether the Booktime programme was having any measurable effect on parents and children in relation to their literacy-related activities.

2.3.1 Outcomes and Measures

The purpose of the trial was to assess the actual effects of the Booktime programme on the following five outcomes:

- The frequency of shared reading between parents and children at home
• Relationships between parents and schools regarding the children’s reading
• Parents’ attitudes to reading for themselves
• Parents’ use of their local libraries
• Children’s use of their local libraries

The above five outcomes were measured before the Booktime programme began (pre-test) and then again at the end of the programme (post-test) through a self-complete questionnaire sent home to parents. The full questionnaire is provided in Appendix A2.

A single numerical measure was created for each of the five outcomes listed above by calculating the average responses to a range of related questions contained in the questionnaire. The five outcomes, and the respective questions that contributed to the composite score for each of these outcomes, are listed in Table 1. As can be seen, the reliability of each outcome measure calculated was high (Cronbach’s Alpha > .80 in each case). Each outcome measure was also found to be internally valid with principal components analyses conducted on each group of items showing only one significant component.

Table 1. Outcome Measures and Contributing Items Used for the Trial

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Reading at Home</td>
<td>I feel confident explaining letters and sounds to my child</td>
<td>.838</td>
</tr>
<tr>
<td></td>
<td>Sometimes I don’t enjoy reading with my child</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I enjoy taking time to talk about books with my child</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I think reading together with my child is very important</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading together with my child is a priority in my day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other family members in our home enjoy reading with my child</td>
<td></td>
</tr>
<tr>
<td></td>
<td>When I read with my child, I am not sure that he or she is getting the most out of it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I feel confident reading out loud with my child</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I really enjoy reading with my child</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I worry about whether I am choosing the right books for my child</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I worry about putting my child off reading</td>
<td></td>
</tr>
<tr>
<td>Parent/School Relationships</td>
<td>I fully understand what my child’s teacher is doing in class to help them read.</td>
<td>.806</td>
</tr>
<tr>
<td></td>
<td>My child’s teacher always keeps us informed about how my child is doing with their reading.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I am not sure what I am supposed to be doing with my child’s homework.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I could contact my child’s teacher at any time if I had any questions about their reading.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I’m not sure what books my child is reading at school.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The only time I can talk to my teacher about my child’s reading is during the parent/teacher interviews.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My child’s teacher has explained clearly how we can help our child read at home.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I wish I could talk to my child’s teacher more about their reading</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My child’s school organizes special events for parents to attend to learn how they can help their children read.</td>
<td></td>
</tr>
<tr>
<td>Parent Attitudes to Reading for Themselves</td>
<td>I like reading</td>
<td>.858</td>
</tr>
<tr>
<td></td>
<td>I find it hard to finish books</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It is important for me to be a good reader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I often read books</td>
<td></td>
</tr>
</tbody>
</table>

/Continued Overleaf
Table 1 (Continued)

<table>
<thead>
<tr>
<th>Parent Library usage</th>
<th>How often do you visit the public library?</th>
<th>.825</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How often do you borrow books from the public library?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often do you borrow CDs, DVDs or computer games from the public library?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often do you use public facilities at the local library (such as the internet, toys, board games, the study area)?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child Library Usage</th>
<th>How often does your child visit the public library?</th>
<th>.858</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How often does your child borrow books from the public library?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often does your child borrow CDs, DVDs or computer games from the public library?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How often does your child use public facilities at the local library (such as the internet, toys, board games, the study area)?</td>
<td></td>
</tr>
</tbody>
</table>

2.3.2 Sample

A total of 30 primary schools were recruited to take part in the evaluation. These schools agreed to take part in the trial, not knowing whether they were to be randomly assigned to the control or intervention groups. As indicated in Table 2, similar numbers were recruited across the five Education and Library Board areas across Northern Ireland.

One recruited, the schools were randomly assigned to either the control or intervention groups within each of the Board areas. The random assignment was undertaken blindly without knowledge of which schools were being assigned to which of the two groups.

Table 2. Questionnaire returns by the five education board areas

<table>
<thead>
<tr>
<th>Education Board Area</th>
<th>Number of schools randomised</th>
<th>Schools providing pre-test data</th>
<th>Schools providing post-test data</th>
<th>Schools providing pre- and post-test data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast Education and Library Board</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>North Eastern Education and Library Board</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>South Eastern Education and Library Board</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Southern Education and Library Board</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Western Education and Library Board</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>29</strong></td>
<td><strong>28</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

As can be seen from Table 2, one school dropped out before pre-testing took place and a further two schools dropped out of the trial before post-testing, leaving a final achieved sample of 27 schools. The randomisation process is illustrated diagrammatically by Figure 1.
Table 3 shows how many children were recruited from each of the five board areas. As can be seen, of the initial 30 schools randomised there were a total of 736 children that could be potentially involved in the trial. Of these, 475 returned pre-test questionnaires (64.5%) and 275 (37.4%) returned the post-test questionnaire as well.

Table 3. Number of families and pre and post questionnaires completed for health visitors by region

<table>
<thead>
<tr>
<th>Board Area</th>
<th>Number of pupils in total</th>
<th>Families providing pre-test data (% of total)</th>
<th>Families providing pre- and post-test data (% of total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belfast Education and Library Board</td>
<td>85</td>
<td>56 (65.9%)</td>
<td>32 (37.6%)</td>
</tr>
<tr>
<td>North Eastern Education and Library Board</td>
<td>139</td>
<td>99 (71.2%)</td>
<td>55 (39.5%)</td>
</tr>
<tr>
<td>South Eastern Education and Library Board</td>
<td>233</td>
<td>113 (48.5%)</td>
<td>53 (22.7%)</td>
</tr>
<tr>
<td>Southern Education and Library Board</td>
<td>132</td>
<td>104 (78.8%)</td>
<td>64 (48.9%)</td>
</tr>
<tr>
<td>Western Education and Library Board</td>
<td>147</td>
<td>103 (68.0%)</td>
<td>71 (48.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>736</td>
<td>475 (64.5%)</td>
<td>275 (37.4%)</td>
</tr>
</tbody>
</table>

Table 4 compares the characteristics of all 475 children at pre-test in the control and intervention schools in relation to their mean scores on the five outcome variables. As can be seen, the two groups were well matched with no statistically significant differences in relation to any of these five outcome variables. This, in turn, provides confirmation that the initial randomisation process worked well in creating two matched groups.
Table 4. Comparison of Intervention and Control Group Schools at Pre-Test (n=475)

<table>
<thead>
<tr>
<th></th>
<th>Control Group</th>
<th>Intervention Group</th>
<th>Significance of Differences*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Reading at Home</td>
<td>4.23 (.51)</td>
<td>4.26 (.54)</td>
<td>.621</td>
</tr>
<tr>
<td>Parent/School Relationships</td>
<td>3.99 (.62)</td>
<td>4.07 (.60)</td>
<td>.560</td>
</tr>
<tr>
<td>Parent Attitudes to Reading for Themselves</td>
<td>3.92 (.89)</td>
<td>3.98 (.94)</td>
<td>.537</td>
</tr>
<tr>
<td>Parent Library Usage</td>
<td>.89 (.91)</td>
<td>.91 (.86)</td>
<td>.895</td>
</tr>
<tr>
<td>Child Library Usage</td>
<td>1.07 (.97)</td>
<td>1.14 (.102)</td>
<td>.704</td>
</tr>
</tbody>
</table>

*Significance of differences in mean scores calculated to take into account clustered nature of the data.

However, with a final response rate of just 37.4%, there was a notable proportion of parents who did not respond and this, in turn, could have resulted in the two groups no longer being matched. To test for this, Table 5 compares the characteristics of the intervention and control groups against the same five variables but only for those families who remained in the trial until the end, and thus for whom full data were gathered. As can be seen, the relatively high levels of non-response appear to have been evenly matched across the two groups and do not appear to have introduced any systematic differences or biases between them. As shown in Table 5, the differences in mean scores across the five outcome variables remained minor and none were statistically significant.

While there remains the possibility that there may be bias introduced to the trial due to these levels of attrition, Table 5 suggests that we can remain fairly confident in the internal validity of the trial. Moreover, the approach used to analyse the data controls for any remaining differences between the two groups at pre-test and so ensures that we are comparing like-with-like at post-test.

Table 5. Means, standard deviations and significance of difference on variables at pre-test only for families for whom pre-test and post-test data were collected (n=275)

<table>
<thead>
<tr>
<th></th>
<th>Control Group</th>
<th>Intervention Group</th>
<th>Significance of Differences*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Reading at Home</td>
<td>4.28 (.48)</td>
<td>4.37 (.54)</td>
<td>.146</td>
</tr>
<tr>
<td>Parent/School Relationships</td>
<td>4.06 (.60)</td>
<td>4.13 (.56)</td>
<td>.492</td>
</tr>
<tr>
<td>Parent Attitudes to Reading for Themselves</td>
<td>3.92 (.88)</td>
<td>4.03 (.95)</td>
<td>.339</td>
</tr>
<tr>
<td>Parent Library Usage</td>
<td>.97 (.95)</td>
<td>1.03 (.86)</td>
<td>.754</td>
</tr>
<tr>
<td>Child Library Usage</td>
<td>1.29 (1.01)</td>
<td>1.12 (.98)</td>
<td>.405</td>
</tr>
</tbody>
</table>

*Significance of differences in mean scores calculated to take into account clustered nature of the data.

2.3.3 Procedure

A letter of invitation explaining the purpose and procedure of the research was sent to all schools in Northern Ireland that had a primary one (P1) class with between 15-30 pupils. Of the responding schools the first 30 schools to respond, distributed across the Education and library board areas, were asked to agree to participate in the study knowing that they had a 50/50 chance of being in the control or intervention group. Schools from each of the board areas were then randomly selected to
be in the intervention group (15 schools in total) and the remaining 15 schools became the control group.

The procedure was then as follows:

- All schools not involved in the trial across Northern Ireland were sent the Booktime packs as normal for distribution to their children;
- For the 15 schools in the intervention group, pre-testing of parents/carers via questionnaires took place prior to the schools receiving the Booktime packs. The questionnaires were distributed in class by the teacher with a cover letter from the school.
- Concurrently, all parents/carers from schools in the control group received pre-testing in the same way via the Primary one class teacher. Following pre-testing, the classes in these control schools did not receive the Booktime packs but carried on as normal.
- A period of eight weeks was then given before post-test questionnaires were sent out to parents/carers via all 30 schools.
- The 15 control group schools were then sent the Booktime packs after the post-test questionnaires were completed.
- All schools that participated in the study received a free large pack of books for their library as a thank you for taking part in the research.

### 2.3.4 Statistical Analysis

The main analysis was conducted using multi-level regression modelling in order to account for the clustering of children/parents (level one) within schools (level two). The use of multilevel modeling is considered appropriate and necessary for the analysis of cluster randomised trials of the kind used here. The main effect that clustering has on data is to reduce the standard errors and if this is left uncorrected this can result in misleading results with more findings being deemed to be statistically significant than should be the case (Goldstein, 2003; Raudenbush and Bryk, 2002).

Alongside the substantive analysis of the effects of the intervention as a whole on the three outcomes identified, further exploratory analyses were undertaken to assess whether Booktime was having differential effects on children/parents depending upon:

- The gender of the child;
- The initial pre-test scores for the child (i.e. was the programme having greater effects for those who started from a lower position);
- The socio-economic background of the child’s family (measured using multiple deprivation scores for the child’s home address); and
- The catchment area of the school, measured in terms of the proportion of children in each school eligible for free-school meals.

This further analysis involved developing the main multilevel models by including the appropriate interaction terms. Full details of all the models estimated in this analysis can be found in Appendix A3.
Effects were calculated using the multilevel models described above to estimate the post-test mean scores for the intervention and control groups once pre-test scores were controlled for. The specific effect size measure used here is the standardised mean difference calculated as the difference in these two mean scores divided by the pooled standard deviation for the post-test scores for both groups (i.e. Cohen’s d), and after controlling for any differences in pre-test scores. This method therefore generates effect sizes measures that allow for direct comparability with the effects of other programmes reported in Sections 1.3 and 1.4 above.
3. Educational Assessment of the Book

The Northern Ireland Curriculum Primary (2007:20) states that at the Foundation Stage 'children should be encouraged to develop a love of books and the disposition to read.' This can be developed by children listening to and joining in with stories read to them by adults. For children to become readers, Waugh and Joliffe (2008) stipulate that they need to have first hand experience of the joy associated with books. Booktime, through its book-gifting project, supports this view by presenting families of Primary 1 pupils with a picture book which can be shared and read together for pleasure. Moreover, for some children this may be the first book that they have ever owned and proprietary is established with the child having to respond to the statement, 'This Booktime book belongs to ......' at the beginning of the book.

The picture book used for 2011 is “Slowly, Slowly, Slowly,” said the Sloth by Eric Carle, written in 2002. The story is about a sloth which spends all its time hanging on a branch of a tree. It performs some movements such as eating a leaf but does everything slowly. The sloth is challenged by some animals as to why he is slow, quiet, boring and lazy and, after some thought, he responds, 'I am relaxed and tranquil and I like to live in peace ... I like to do things slowly'.

Picture books, according to Beard (1990) and Riley (2006), are now regarded as a separate category of literature. Within this category are traditional stories, poetry, fantasy, thrillers, science fiction, contemporary themes and information books. On a simple level, it is a category which brings together art and literature with illustrations enhancing and often providing a subtext to the writing on the page or, as Riley (p.184) states, 'the interdependence of the illustration with the written text' which makes the story.

3.1 Illustrations

Throughout the story of “Slowly, Slowly, Slowly,” said the Sloth, the illustrations enhance and elaborate the text with the same colour scheme of bright blues, greens and reds used for the environment. The blue sky, the green grass and the colourful and superbly detailed tree depict a bright, sunny, peaceful and attractive environment, giving a very positive feel to the book. Most of the animals and creatures are darker in colour by comparison. For over half of the book the tree containing the sloth is centred across both pages, a double-paged spread which serves to emphasize and highlight the importance of the tree and the sloth to the story.

The reader is first introduced to the Sloth on the front cover. The sloth is illustrated hanging on a tree, body wide and exposed facing the reader, making eye contact, thus developing an immediate open relationship. Throughout the book the sloth takes up different positions on this branch with
the illustrations supporting the accompanying text. For example, there are pictures on different pages of the sloth crawling along a branch, eating a leaf and falling asleep, all of which match the text on the relevant page. A myriad of other creatures is depicted in the illustrations.

Gamble and Yates (2008) refer to the power of the 'turning page' for the child to see and hear what is happening next. In “Slowly, Slowly, Slowly,” said the Sloth, each page introduces several animals around the tree: a porcupine and two postman butterflies on first double spread, two macaws and an anaconda on the second, a puma and a cock of the rock on the third. Other creatures in the first half of the book include an armadillo, a tapir, a peccary, a bat, a coati, a bat, a double crested basilisk, a hummingbird and two poison dart frogs. Most of the bigger animals are on the right of the tree, about to pass or having passed it by. None of the creatures is referred to in the text and none (except for a macaw who looks at the sloth) has anything to do with the sloth other than pass by the tree from which it hangs. These creatures are going about their everyday lives whilst the sloth does nothing but hang on the same branch, offering a contrast of inactivity to the busyness of the other creatures. The reader becomes aware that the sloth's environment is alive with a rich and varied species of exotic animals and not ones which are met in everyday life in Northern Ireland. The names of all the animals accompany their pictures at the end of the book and this introduces the children to the concept of an Index.

According to Gamble and Yates (2008), talking about illustrations with the children provides opportunities to describe and examine what they see. It brings the realization that the pictures can be 'read' and can provide a separate story line. For example, an adult could ask 'What is the snake doing up the tree?' or 'Where do you think the Coati is going?' or 'How does the peccary feel in the rain?' 'What do you do when the rain comes on?' Such questions develop the child's reasoning, projecting and predicting language strategies (Tough 1976) and helps the child relate some of the experiences to her/his own. The leaflet entitled 'Our Family Reading Week' which accompanies the book recognizes the importance of questioning and suggests that on Friday the activity should be to 'Talk about the pictures together'.

The nature of the story changes in the middle of the book and this is reflected in the illustrations. The tree with the sloth which was the central page spread is now on the right hand page, however, the sloth is still hanging on the lower left branch in a variety of positions. A palm tree is now located on the left hand page with a creature in its vicinity suggesting the creature has a role to play. As before, each page introduces a different creature, but now the animals are not content to let the sloth alone rather they seek to interact with it. There is a howler monkey, a caiman, an anteater, and a jaguar each of which is integrated into the story through the accompanying text. Each asks a question of the sloth and most look directly at it. A yellow spotted river turtle, a hoitzin, a quetzal, leaf cutting ants and two toucans are also depicted around the tree, thus continuing the theme of exotic creatures.

3.2 Text

In Year One of primary school the reading process will be initially developed through modelled and shared reading (CCEA, 2007). Modelled reading is when the adult reads and the child listens. Shared reading is a much more interactive process when the text is initially read by the adult, with the child participating in each following reread. Booktime favours the shared reading approach whereby the
child is engaged with a family member in the reading of the picture book. Goodwin (2008) argues the importance that the enthusiasm and interest of an adult reading to a child has for a child's reading development. The family involvement model promoted by Booktime can consolidate and promote further the range of emergent reading skills and strategies being developed in school. Furthermore, shared experiences with picture books will represent, for many children, a time of warmth, security and pleasure, developing a motivation to engage with books and also promoting concentration and listening skills.

According to Merchant (1999) there are a number of aspects to learning to read that are of central importance to those working with young children in the early years. These include: literacy awareness, phonological awareness, word recognition and syntactic awareness.

Children will already have had experiences involving print in Year One and developed some understanding of how print works. As “Slowly, Slowly, Slowly,” said the Sloth is read to them, their Literacy knowledge will be further consolidated in that they can point to words, see the one-to-one correspondence between the printed word and the spoken and follow the left to right directionality of the text.

**Phonological awareness** can be described as knowledge about the sound structures of the language. Research has shown how an ability to rhyme, alliterate and identify sounds in words is influential in later reading success (Bryant and Bradley, 1985; Goswami and Bryant, 1990). Within the title of the picture book by Carle there is alliteration “Slowly, Slowly, Slowly,” said the Sloth. The reader is hearing the initial phoneme ‘s’ and ‘sl’ consonant blend being repeated and becoming familiar with that sound pattern. The final consonant blend ‘ly’ also becomes familiar to the child. Listening to these phonemes and also seeing and talking about the visual features of the words enable the child to understand how letters and letter strings are used to represent words.

Sharing the story “Slowly, Slowly, Slowly,” said the Sloth, should encourage an interest in the printed word and **Word Recognition.** Several words and phrases are repeated throughout the book, such as: ‘slowly’; ‘said the sloth’; ‘All day long’; ‘upside down in the tree’; and ‘But the sloth didn't answer’. Through repetition, the core vocabulary of the book should become familiar to the child. Repetition, according to Perkins (2008), means that children can and indeed feel compelled to join in, particularly when they become well acquainted with the story after several revisits. Clarke (1988) argues that revisits are essential for children to gain an understanding of story structure and build confidence to participate in the reading process.

Also of note is the way in which

```
'slowly
slowly
slowly'
```

is presented on several pages. This not only does draws attention to the particular phrase, but also emphasizes how each word has to be read very slowly depicting the way in which a sloth moves. This technique also occurs towards the end of the book:
'The sloth thought' and thought and thought'
Again this indicates how the phrase might be read and gives the feeling of a slow thinking process. The essential learning for the child is that words and phrases have a familiar shape and pattern.

**Syntactic awareness** is increased in that there is a particular repetitive structure and pattern in how a sequence of language is set out in *“Slowly, Slowly, Slowly,” said the Sloth*. For example, the physical and syntactical structure of pages 1-8 is very similar. All start with an adverb repeated 3 times, then a noun which is the subject of the sentence, the verb, and then on some pages the direct object.

'Slowly, Slowly, Slowly,'
the sloth ate a leaf
(p.3)

Although different in their syntax and placement on the page pages 9-14 have a consistency in that they are set out over 4 lines with each line having a self-contained phrase or thought unit.

All day long
the sloth hung upside down
in the tree
(p.15)

Similar to the first eight pages, here is a pattern of text which is easy for a child to join in with and simple to remember.

The repetitive style changes again on pages 15-20 with a question being asked on the first line, the speaker on the second line, third line is blank and the sloth’s response appears on the fourth:

“Why are you so slow?”
the howler monkey asked one day.

But the sloth didn’t answer.
(p.19)

Within this text sequence the child is introduced to punctuation through the use of quotation marks, a question mark and contraction for the word did not. *“Slowly, Slowly, Slowly,” said the Sloth*, introduces a child to a range of text structures and patterns. The last page of text is completely different to what has gone before with 17 lines of writing and no repetition. It has some wonderful vocabulary for the child to hear, savour and repeat, for example, ‘unflappable’; dillydally’; lackadaisical’; and ‘mellow’. The book ends with the familiar phrase:
slowly, slowly, slowly
leaving the child able to join in and be content in the knowledge that the sloth has not changed.

Therefore, it would appear that the book “Slowly, Slowly, Slowly,” said the Sloth, promotes and develops emergent reading and operates effectively at the literal level (Barrett, Gray). However, according to Goodwin (2008), books also need to take a child beyond the literal level in that it extends their experiences. As Perkins (2008) suggests, picture books should offer the opportunity to think about a different way of doing something. As the Sloth is questioned by other animals about its lifestyle there is a realization that it has its own way of moving and engaging with life. Children thus can perceive things from another perspective and can engage in critical reflection. ‘What if I spent time moving slowly?’

### 3.3 Family Engagement

One of the purposes of the Booktime book-gifting is for a family to share and read together a book for pleasure. In Northern Ireland CCEA (2010) results for English at Key Stage 3 indicate that 20% of the pupils are at Level 4 or below. This suggests that reading levels for a fifth of the population are at a level expected from a child leaving primary school. The National Literacy Trust agrees that at least one in six adults struggle with Literacy, particularly those from disadvantaged backgrounds. Therefore, picture books selected for Booktime should be easily read by adults.

The book “Slowly, Slowly, Slowly,” Said the Sloth contains a number of exotic animals which some adults would not know and may have great difficulty in reading their names, such as ‘hoatzin’, ‘quetzal’ and ‘caiman’. Furthermore, the last page of the book contains the following words to describe the sloth and its nature: ‘lackadaisical’ ‘dawdle’, ‘languid’, ‘stoic’, ‘lethargic’ and ‘tranquil’. Again, and as will be seen from the interviews with parents in the following section, some adults may feel inadequate in reading these with their child and may not have the knowledge or vocabulary to explain what they mean. Whilst these words will extend a child’s vocabulary, the adult may not always be in a position to mediate the knowledge which accompanies the language. This might give rise to adult modelling of investigative process, such as using a dictionary or the Internet to find out more about the animals.

### 3.4 Conclusions

As the discussion above indicates “Slowly, Slowly, Slowly,” said the Sloth, is a picture book characterised by what Merchant and Thomas (1999, p2) refer to as ‘the dynamic relationship between print and visual image’. It is a colourful, brightly illustrated book which should appeal to young children. The book not only has the potential to extend the child’s knowledge about animals, but the illustrations and text provide important and age-appropriate opportunities to enhance and consolidate young children’s emergent reading skills.
As part of the investigation of the *Booktime* programme, telephone interviews were conducted to explore the perspectives of key stakeholders towards the Booktime programme. To this end interviews were conducted with: five parents; five teachers; four Education Library Board staff; and one public library staff member. The interview schedules agreed with Booktrust are detailed in Appendix A2. This section begins by looking briefly at the parents/carers’ attitudes to reading before then exploring the interviewees’ perceptions of what impact the Booktime programme was having, the factors that may be hindering that impact and then suggests for how the programme may be improved further.

### 4.1 Attitudes of Parents/Carers

#### 4.1.1 Reading for Pleasure with their Children

All parents reported reading with their child almost every day. Furthermore, they felt that this time was enjoyed by their children and that children also enjoyed reading alone. Parents chose to read with their children both for enjoyment and also to promote learning. The following responses represent parents’ experiences of reading with their children:

To do both, because the homeworks this year at school have been obviously to build the reading skills, and I found then you have to make an effort to go back to the other books which I’m just reading to her and I’m not pointing at words, you have to make an effort to do both.

(Parent)

She enjoys it, but at the same time she’s learning the words. She would memorise, you know like the easier books, she would remember the whole book from start to finish after she went through it a couple of times with me. She doesn’t realise she’s actually learning the words too.

(Parent)

Clearly, parents see reading with their children as an important activity, but the ease with which they approached reading activities varied, as is seen in the following section.
4.1.2 Reading for Pleasure on their Own

Parents varied in their assessments of their own reading ability as well as the degree of confidence with which they approached reading with their child. While several parents claimed to be avid readers themselves and thus very confident reading with their child, others expressed difficulty with some of the vocabulary in the Booktime materials and claimed that they would not read regularly on their own. Concerns about the accessibility were also expressed by teachers and ELB employees, which may suggest the value of re-evaluating the support provided to parents. These attitudes are demonstrated by the following comments from one parent:

What I found was behind the book was a lot of words [that] I wouldn’t know. You know I couldn’t pronounce them to be honest with you, and ... well to be honest with you, I’m not a great reader myself, you know. I read from certain limits.

(Parent)

This parent was not alone in feelings of inadequacy. The following quote demonstrates that by many parents’ definitions of reading, they may feel as if they are poor models for their children:

You find a lot of parents read newspapers and magazines and that and they don’t think that’s reading, but it is reading. Their attitude to reading is you have to sit down and have this big book in front of you.

(ELB)

4.2 Impact of the Programme

4.2.1 Parent and Child Reading

Although some parents reported already having a regular routine of reading with their children, many attested to the benefits gained from participating in the Booktime programme. In addition, all parents claimed that their children enjoyed the specific book included in the Booktime bag:

Yes, definitely, no he liked reading them now, so more books like that would be good like and different stories, it would. He would enjoy looking at them and reading them.

(Parent)

It just makes it fun. You can interact with the pictures in terms of making your own stories up as well, because that’s what my daughter does anyway so she tells the story from the pictures.

(Parent)
She loved it, I mean she just enjoyed the character as well, and because it said the same words over and over again, after a few pages she was able to read it herself.

(Parent)

Benefits were not limited to the child, two parents reported growth in reading for pleasure, while others communicated benefits in terms of the help they could provide to their children:

I do enjoy it because she loves reading the books and it’s great she’s learning from it as well. And I was never good at reading school so I’m kind of getting used to reading as well.

(Parent)

The example above demonstrates that the child and parent can learn together through reading the Booktime materials. Moreover, the following statement suggests that the Booktime materials helped the parent choose age appropriate reading material for the child:

Yes, I would say the Booktime books have reminded me of what level she should be at because I had started reading to her probably books that were too old for her, and they reminded me that as a four-year-old she still should be looking at picture books. I was reading her books that were all script with very few pictures in them.

(Parent)

Parents were generally positive about the resources provided through Booktime, and some teachers also reported the potential for a positive impact on parents’ and children’s reading:

I think some of our parents would do a book time at home with the children where they would read at the same time over the dinner table, things like that. Not during dinnertime, but just that they would have a set-down time where they do that. I think it helps ... it influences the child obviously to see a parent read, even if it’s a newspaper or a novel, or whatever it is, you know.

(Teacher)

It’s very hard to tell. You’d like to hope it would [impact parent-child reading], that the children are putting pressure on the parents to, you know let’s get a book here mummy and read it.

(Teacher)

4.2.2 In-Class Reading

Teachers’ opinions varied on the impact of the Booktime programme on children’s reading for pleasure in class. One teacher expressed that if children did not already have a habit of reading and
in particular, if they came from a home where reading was not encouraged, one free book could not stand up to this cultural barrier:

It’s a bit too much too late type of thing, or too little too late really because if parents aren’t interested in books themselves, they’re not going to read them to the children, and it needs to be started long before they come to P1.

(Teacher)

However, two other teachers felt that the programme could encourage reading even in families where it was not regularly practiced and that this would then link nicely with in-class reading. As one teacher expressed:

I certainly think they went home, even if they hadn’t had time to read it with their parents, they went home, and especially linking a homework to it, they had to go home and find the book and work with [it]. I have to say that with the nature of the children we would be working with, we are running into the problems of illiteracy with parents as well. So sometimes children are taking homeworks home, it actually meant that the [children] then were able to tell their parents the story, so that was quite nice.

(Teacher)

4.2.3 Library Use

A main aim of the Booktime programme was to encourage parents and children to utilise library services on a regular basis. Although most of the parents stated that they were already members at the local library, many of them also felt that that Booktime programme had encouraged even them to take advantage of the service more often. This is demonstrated by the following statements from parents:

Oh definitely like yeah because with the Booktime pack like you know he just asked me: “Mummy can we go to the library tomorrow,” or something, to see if we could get the same ones [books], you know, something the same. I said: “Yeah we can, we can go surely, yeah.”

(Parent)

She was always a member anyway, but she really, really enjoyed this wee pirate pack [that she received in nursery school], but when she also got your pack as well it just gave her a lot more independence [with] books, like to own her own books like from the one you gave, she just treasured as her own.

(Parent)

Well it just reminded you that that facility is there, that service is there. Like it’s been a while from we have used it, so it just reminds you that it’s there, you know for you and it’s free and you know the kids enjoy it.
On the other hand, teachers did not feel that the Booktime programme increased usage of the school library, since they claimed to have already regularly taken their children to the library to take out books.

### 4.2.4 Relationships between Education and Library Board (ELB) and Schools

ELB employees were asked whether they felt the programme strengthened links between the ELB and individual schools. Responses varied: while two staff members felt the connections were already strong, two other respondents thought the programme had fortified these relationships:

I think it has, I think it has. Now I would say particularly in those schools where myself and some of my staff were able to go down and do a wee session like I’m talking about, it definitely has. [It’s] given us a higher profile as well.

(ELB)

Yes, like any programme that gets in touch with some schools that we don’t have an opportunity to contact before always strengthens it, yes… it gives us a reason to phone up a school that maybe we haven’t had much contact with before.

(ELB)

The two previous statements support the benefits of Booktime to ELB-school relationships, but the following statements provide a direct contrast:

Well, I don’t honestly know because we have the schools’ library service, we have very good links with the schools anyway, so the impact of Booktime on our links would be minimal.

(ELB)

I’m not necessarily sure that it has, because we would be in and out of those schools every two or three days anyway and I think really, unless you’re building it in as some kind of a programme, it’s just a delivery mechanism. They’re really only seeing our driver, and they see him anyway… what you’d need to be doing would be actually making direct contact with the teacher. When you’re just dropping stuff off with the secretary, which is really what we do, it doesn’t make a big difference.

(ELB)

Both staff members report already having strong relationships with the schools, and the second minimises their role in the Booktime programme to simply delivering materials and does not see how the relationship can be strengthened when very little contact is made.
4.2.5 Relationships between Parents/Carers and Schools

It is described in a later section that parents did not always participate fully in the activities of the school. However, there was evidence to suggest that the Booktime programme could encourage parent involvement:

I think the programme definitely, it does... you know there is the chance there to link with the parents about the child’s reading, and about reading for pleasure. It’s a very good starting point, I think.

(ELB)

Oh definitely yeah. You always get feedback from the school you know with the learning of your child and how well he’s getting on and all, and they do have a library in school as well and they get new books every Friday to take home to read you know for the week, so you do definitely get feedback from the school, yeah.

(Parent)

But this was not always the case, as is seen in several statements from the interviews. For example, the following teachers attributed parents’ feeling involved to other factors:

Definitely... we have a couple of open days where the parents would come in and ask questions. We also have an open-door policy here so any parent can come at any time or give a little ring to the teachers to chat about their learning. Also we send home notes at the start of every six weeks so the parents know what their topic work is and what they are doing in their maths and English.

(Teacher)

Yes, they do, but it’s because I send home homeworks, I wouldn’t say it has anything to do with the bookclub [Booktime]. You know, again, half of the parents don’t even read the notes that go home, but they’re involved in that I send homeworks home every night and a lot of it...sometimes a lot of the homework is practical and encourages interaction and talking with the parents, so through things like that they would get involved.

(Teacher)

According to this second teacher, parents miss a lot of the communication sent home with children, but if it is a graded assignment like homework, they are motivated to participate. An ELB staff member made a similar observation:

I would say yes it probably has had an impact, but in schools where it was just handed out and the child takes it home, then I would doubt if it has made an impression at all. Teachers seem to be quite vague sometimes even about what it is.
This was confirmed by statements from some of the parents who felt they had received little communication from the school about the Booktime packs. These statements also imply that little follow-up occurred from the teacher or the school.

I just received the pack with (son’s name), took it home from school one day and that was it then, yeah.

(Parent)

I didn’t even know where it came from because I work you see to half eight at night sometimes, so my sister would bring her home, and she just told me they got free books from school really. That’s all I knew about it.

(Parent)

4.3 Hindrances to the Impact of the Programme

Although respondents did report perceptions of positive effects on children’s and parents’ reading as a result of Booktime, several also expressed skepticism. Several reasons were offered as to why the programme did not have as much impact on reading as intended.

In a few of the houses it didn’t happen, you could see that it didn’t happen. The children themselves did not enjoy that particular book, and I would have to say I also didn’t enjoy that book.

(Teacher)

The teacher above claimed that not only did book time not always take place in the home, neither she nor her children enjoyed the book itself. This was an isolated case of dislike for the book, but this was not the only claim that some parents did not do their part in the implementation of the programme:

One of the biggest issues with this class, this year, and it changes every year, when we asked the parents to come in around October time to talk about how we were going to be working with their children, nobody turned up. One parent turned up, whereas the year before I had every parent, so it changes from year to year. It just depends and you know sometimes the mindset is: “It’s the teacher’s job to do this, it’s not up to us,” and I think we got a wee group this year who have that mindset, you know.

(Teacher)
The Booktime programme rests on parent involvement yet, according to this teacher, the link between the school and the parent cannot be made if parents are not willing to become involved. The variability of this issue from year to year implies the unpredictability of the degree of support that will be needed in order for the programme to succeed. That is, some parents may take the initiative on their own whereas others may need more outreach from schools and teachers. Similar observations about the variability of parent involvement were made by other respondents:

I think it would vary a lot between schools. Some are very good at involving the parents, and keeping them up-to-date. I would say from what I’ve...just over the years that some would have not...not as good really

(ELB)

... we also then would send books home for enjoyment with parents, and we would do maybe a book review to see how the child had liked the book, and you’d find very often it hadn’t been read. So you know if you say: “What did you think about this book?” [they say]: “My mummy didn’t read it with me.” ...You’ll always get a small group of children that their parents are working with them, but there’s a move away from reading books for pleasure and it’s very much setting them in front of the TV or giving them a computer and some games, you know.

(Teacher)

... what you find in the schools, when I go out and talk to parents, the ones that are really into it are the ones that don’t need to be converted, if you know what I mean.

(ELB)

...you always have the parents that think it’s the school’s job full-stop

(ELB)

On a similar note, the following teacher described difficulty reaching parents who did not have English as a primary language:

It was very hard to reach those parents, and especially...if both parents are working. You know, even though I did have in the child minder for those parents, it was a lot of nagging on my part to try and get them to return their form - their initial form... I only have a small class of ten children, and within that ten I think I got three back, and the three parents that I have got back the form are the parents...or the children who would be readers and you would know that they have been read to.

The next two quotes imply that it may not always be the parent who is not making sufficient effort to promote healthy lines of communication between the parents/carers and the school:

... apart from the homeworks she gets, we don’t really know what she’s doing in the school you know.
Well they usually give us homework every day, but apart from reading over the homework, there’s not very … there’s no other involvement really.

Similarly, the following quote from an ELB employee emphasizes the imperative role of the school:

But if it’s just a book going home, I wouldn’t think so … If the schools aren’t promoting the book or bringing the parents in, going through it say with the children and then sending it home to be read by the parents. If there’s any kind of a fuss made about it in school … or maybe if it’s given out at a parents’ evening or something and they speak to the parents directly, but I would say if you just drop it in the child’s schoolbag and send it home.

The following statement demonstrates that even when parents were willing to participate, some lacked the ability to participate fully alongside their children. Yet, the Booktime programme could be beneficial in such situations:

I have to say that with the nature of the children we would be working with, we are running into the problems of illiteracy with parents as well. So sometimes children are taking homeworks home, it actually meant that the parents [children] then were able to tell their parents the story, so that was quite nice.

Similar evidence of the issue of parents’ reading abilities was seen in two of the parent interviews in which parents described themselves as weak readers, who would not read for pleasure apart from when reading with their children. The following teacher also described the challenges of working with parents who were not accustomed to reading on their own or with their children:

It’s just basically you know … it’s a bit too much too late … because if parents aren’t interested in books themselves, they’re not going to read them to the children, and it needs to be started long before they come to P1. You know, they need to have books when they’re two years-of-age, and be shown picture books and read picture books at that age… and I would say the books that were sent home to those late-developing children whose parents don’t have an interest in books, the book may not have even been read, you know. So … one book being sent home is not going to change attitudes or you know encourage parents to read or anything like that really, you know.
The statement above implies that when the problem is rooted in family culture, a simple programme, which provides the student with a free book may not have an impact. Therefore, the teacher suggests supporting families earlier. As will be seen later in a section on suggestions for future development, timing was a common theme in the interview data.

4.4 Suggestions for Future Development

Although many respondents spoke favourably of the Booktime programme, many also offered suggestions for how it could be improved. Suggestions covered areas such as communication, distribution, timing and support offered to parents and teachers. The following statements represent several recurring themes.

4.4.1 Roll Out of the Programme with Accompanying Activities or Events

Two of the ELB staff praised one school for purchasing and incorporating a sloth puppet into their story times to accompany the book, but in general, respondents noted that schools should put more effort into promoting the programme:

The only, not concern, but the only thing, as I said before, a lot of schools, they don’t make a fuss. I mean every child getting a free book, there should be a whole razzmatazz, a whole thing towards it somehow to encourage schools to do that more, unless they...even if they can bring parents...or it’s not always possible.

(ELB)

As a potential solution, it was suggested that schools should promote the implementation of the Booktime programme through events or activities to engage students and parents:

I think if you make more of an event of it you know they do remember it, and they do ... we ran a wee, let’s just say we ran a competition alongside it as well in the schools, and the child got a prize, and the school got 100 books for their central collection

(ELB)

If [the schools] can be encouraged to have some kind of event where they bring parents along, talk a bit more about the programme ... we were able to do something like that in a few schools, you know, six or seven... if they could be encouraged to arrange something along with the parents where the packs are given out and explained a wee bit more, I think that would help.

(ELB)

I think open days would be good, like if you did an open day for nursery school, coming into P1. At that stage they’ll all be coming into P1, I think it would be good to get them used to reading and stuff, and the nursery wouldn’t really ... they’re more just playing in nursery, rather than doing a bit of reading and stuff.

(Parent)

We could have had an evening or something, but sometimes it’s hard to get parents out, it just depends on what you’re organizing ... there are other evenings through the year that
are subject-based, or some of them are health-based – things like that, so I suppose it could be slotted into one of those evenings.

(Teacher)

The following response from an ELB employee emphasizes the role of an event in securing more parent involvement:

I think the schools should try and have an event. You know not just give out the packs to the children, if they can be encouraged to have some kind of event where they bring parents along, talk a bit more about the programme ... if they could be encouraged to arrange something along with the parents where the packs are given out and explained a wee bit more, I think that would help.

(ELB)

One parent suggested having local authors speak to the children in schools:

Are there authors [that] go round primary schools, because I think that’s something children would benefit from...authors that write some of the books actually go round the primary schools.

The following suggestion came from a public library employee, who specifically suggested library involvement in an event:

If there was capacity it would still be nice to offer a visit from the school or tie in the Booktime packs and a visit to their local library and do it as part of a... a kind of an event almost in schools.

On a similar note, one teacher also suggested a stronger link to the local library, but she felt that children would benefit from a visit to the library rather than the librarians coming to the school.

We try to encourage the children to use the library outside of school, you know so something along those lines maybe incorporating a trip to the library. As I said, P2s here do visit it, but some children don’t avail of the service, you know, and it’s there for everybody.

4.4.2 Timing

Many respondents commented on the timing of the distribution of the Booktime packs and suggested some changes to maximize participation and benefits. The two main suggestions around this theme were to plan in advance so that the distribution was not so rushed and to reconsider the time of year during which the packs were given out. For example, several ELB staff suggested gifting the book at the beginning of the year, as is represented by the following statements:

Well the only thing, I know it wasn’t their fault they got funding very late, so the Booktime packs actually went into schools you know quite late on in the year so really ideally you know I think September-time is the best time, you know September October-time.

(ELB)
If you went in [in the] first term ... we would do quite a lot of work with P1 parents in the first term, and if you were in building it in as this is part of ‘what we will be delivering to your child now that you’ve all started out on this great journey together’, that it would make more sense I would think. It would have maybe more meaning to the parents at that stage of the year, where they’re learning about everything, if they learnt about that at the same time.

(ELB)

However, when the interviewer explained the reasoning for gifting the book nearer to the summer holidays, the second respondent offered a compromise:

...so maybe if there was maybe a programme leading up to the gifting of the book, [that] would maybe make a difference

(ELB)

One of the parents interviewed wished that books could be gifted more frequently, and even suggested that students receive a book each year following a sequential series with books increasing in difficulty level each year:

Well to have more than one a year actually, but I’m just being greedy as a parent! Do you actually at Booktime give one to ... like I know you give it to P1s at the moment here in Northern Ireland, but will you be going to P2, P3, P4? It would be great to actually acknowledge that each and every child throughout the year, dependent on what class they are actually in, gets a book that would benefit their reading age. Maybe even to carry on the story

(Parent)

Another parent offered a similar idea:

Well, it is good for the child, and she enjoyed it ... if it was done maybe once a year with a different book, you know to keep them interested

(Parent)

4.4.3 Changes to the Materials in the Packs

Overall, responses were very positive about the style of the packs and parents and teachers thought students enjoyed receiving them. One example typifies this:

The packs and the wee bags are very attractive. The children are very excited when we give those out you know, and they kind of think they have to bring them back. You know, they get very excited when we say they can keep them! So, in terms of that, it’s very attractive, and you know the children do enjoy them.

(Teacher)
However, several respondents critiqued the difficulty level of the reading material, as is demonstrated by the following examples:

The book was ... that was chosen was actually quite difficult, “Slowly, slowly, slowly,” said the Sloth is actually quite a difficult book for children to understand. A lot of the words ... a lot of the literature in that, that children wouldn’t have been able to understand. You know you had words like lethargic and ... You know, and there’s a lot of parents may not even be able to read those words you know, so an easier book, a more straightforward, simple book. That book to me to be honest would be aimed at P3 and above. I thought it was a wee bit complex for the age group so maybe an easier book.

(Teacher)

We had a lot of comments about the last page, and several of them were our own! I think you might be looking for maybe more able parents to be able to maximise the use of it.

(ELB)

We would tend to work a lot with the less-able parents and we were concerned that if you had parents who had poor literacy of their own that the end of that book might put them off, and if they came to it without reading it first you know if you picked up a book and started reading it with your child and got to that last page and discovered you couldn’t read it, we were concerned about that.

(ELB)

Furthermore, two teachers requested activities that could be photocopied, while another teacher noted a lack of correspondence amongst one of the matching worksheets on the website and the book itself. One teacher described requested changes in detail:

I think if teachers were given some of the worksheets along with the books. I, you know, took the time and went in, into the website. I’m sure you would know that as teachers sometimes we’re very busy, and to have to even ... some classes would have computers in the rooms, and linked to printers and whatnot, we don’t, so I have to go off in my own time and, you know access things like that. So I think if they were available. I think if we were given a pack, downloaded and all we had to do was go away and photocopy, it would be pretty good.

(Teacher)

It was also suggested that improvements could be made to the informational materials provided for the parents:

I think that leaflet could be expanded a good bit. I think it’s the leaflet, or the wee ... there actually used to be more of a leaflet in the pack. I think now, is it a card just? They could do more with that, I really think they could improve that.

(ELB)
I think ... that information to parents could be ... could be expanded and developed a bit, maybe with some suggestions for reading for different age groups or something. Just something to sort of build on ... they’ve got this one wee book you know.  

(ELB)

I think because of our other Bookstart programmes ... we know that inserting library information into the pack has a ... makes a difference, so I suppose if there was a way of putting something about library services into the Booktime pack so that it was local and informed parents of things that were happening locally and perhaps even included a library membership form that that would be potentially one way of getting to parents and letting them know about what’s happening in their own public library.  

(Public)

4.4.4 Support Networks

It was suggested by ELB staff that schools may benefit from more follow-up from Booktime fieldworkers or ELB employees:

Maybe more encouragement [of] direct contact ... we only have the newsletter and the website and that. It’s more maybe the fieldworker from Booktime maybe phoning schools or writing: “What are you doing, what date are you handing out your books?”—more contact.  

(ELB)

Now I think in the past whenever we were able to receive the packs here and give them out with a wee flyer you know so it’s emphasising our role, that did I think really help now ... if we had a bigger staff we could go into more schools and do more sessions and that would obviously reinforce the links.  

(ELB)

... we actually did a couple of sessions whereby we had staff [that] went out and did...read the story to the children and had asked you know if the parents would be there as well, and to support it we also took you know out some of the other Eric Carle books I bought a couple of pop-ups of ‘The Hungry Caterpillar’. So we actually left other stuff in the classroom [so] that they could actually see that it wasn’t the only book written by this author, that there were other books they could dip into as well.  

(ELB)

The responses above emphasise the importance of personal contact for ascertaining the programme’s implementation and the third statement specifically highlights the potential impact of such contact on parent involvement when they are invited to come along. One ELB employee also suggested strengthened communication between ELB staff, advisory teachers and classroom teachers and assistants so that the teachers were well-prepared for utilising the programme, even for children with special needs.
These suggestions were supported by the following statement from a teacher claiming to represent the opinions of the majority of the teaching staff at the school:

...interaction, you know, it would have been great if someone else had come out. That was one of the reasons we were sort of excited, we sort of thought now it would be good to get new ideas, you know, to teach lessons and maybe make it more interesting and exciting, so you know, I'd certainly say that.

(Teacher)

4.5 Conclusions

Overall, it is clear from the interviews that the Booktime packs are very well received by teachers and schools. While there were differing views regarding whether the Booktime programme was having a direct impact on the parents/carers and children, it was clear that most teachers certainly felt that it had the potential to do so if delivered in the right way. In relation to the parents/carers and children, there was certainly evidence that they also appreciated the Booktime packs and found them attractive and enjoyable. It also appeared that the packs were being used at home and, for some parents, were encouraging them to read more with their children and were also potentially increasing their own confidence as readers.

Perhaps the key issue to emerge from the interviews was the importance of developing good relationships between schools and parents. There was certainly a significant level of scepticism regarding whether the Booktime programme could achieve an impact on parents/carers and children if packs were simply sent home and not followed through by schools. However, the comments made by many of the interviewees suggested that the Booktime packs may not have been sufficiently followed up. A number of teachers, for example, spoke at length regarding the difficulties they continue to face in relation to engaging parents and encouraging them to attend any events. Similarly, a number of parents also commented on how they received the Booktime packs but very little else in relation to follow up letters, activities or homework or invitation to attend an event relating to the packs.

Within this, the interviewees made a number of suggestions regarding how the Booktime programme could be developed further and many of these related to how it could strengthen the role of schools in following up the distribution of packs with parents/carers. In this regard suggestions included: organising special events around the time the packs are distributed; including more activities and materials in the packs themselves; and Booktrust and the ELBs themselves providing more support to schools in their efforts to reach out to parents/carers. Beyond this, some parents and teachers also commented on the challenging nature of the book itself and how some parents/carers might struggle with it. This, in turn, suggests that it may be worth considering the use of alternative books and/or how schools need to provide more support to those parents who may be poor readers themselves.
5. Effectiveness of the Programme

The previous section examined the perspectives of key stakeholders and whether they felt that the Booktime programme was having a positive effect on parents/carers and their children. As was seen, the perceptions of the interviewees were mixed and, for many, the success of the programme was dependent on the extent to which schools followed up the distribution of the Booktime packs with additional activities and events.

This section considers the evidence regarding whether the programme actually had a measurable effect in relation to five specific outcomes:

- The frequency of shared reading between parents and children at home
- Relationships between parents and schools regarding the children’s reading
- Parents’ attitudes to reading for themselves
- Parents’ use of their local libraries
- Children’s use of their local libraries

The section also presents the findings regarding how much parents who received the Booktime programme said they used the pack with their children and to what extent the schools did follow up the packs with additional events and activities.

5.1. Impact of the Programme on Parent/Carer and Child Outcomes

In relation to the actual effectiveness of the programme, Table 6 summarises the findings in relation to the five outcomes specified above. It was explained in Section 2 that for each of the five outcomes, a single numerical score was calculated based on parents’ responses to a range of questions. Table 6 presents and compares the mean (average) scores for the intervention and control groups in relation to each of these five outcomes, together with their corresponding standard deviations. A non-technical explanation of the findings contained in the table is provided in Appendix A4 for those unfamiliar with the statistics presented.

As can be seen, after controlling for pre-test scores, no differences were found in the mean scores of the parents in the control and intervention schools in relation to any of the five outcomes listed. In other words, the trial found no evidence that the Booktime programme was having any measurable effect on: the levels of shared reading at home; relationships between parents and schools regarding their children’s reading; parents attitudes to their own reading; and parents’ and children’s use of their local libraries.
Table 6. Comparison of Intervention and Control Group Schools at Post-Test Controlling for Differences at Pre-Test¹

<table>
<thead>
<tr>
<th>Outcome Measures</th>
<th>Mean Scores (with SDs)</th>
<th>Effect Size (d)</th>
<th>95% Confidence Interval</th>
<th>Significance of Difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control Group</td>
<td>Intervention Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Reading at Home</td>
<td>4.22 (.46)</td>
<td>4.25 (.57)</td>
<td>+.07</td>
<td>[.11, +.24]</td>
</tr>
<tr>
<td>Parent/School Relationships</td>
<td>3.96 (.63)</td>
<td>3.98 (.63)</td>
<td>+.04</td>
<td>[-.16, +.25]</td>
</tr>
<tr>
<td>Parent Attitudes to Reading for Themselves</td>
<td>3.96 (.87)</td>
<td>3.98 (.90)</td>
<td>+.02</td>
<td>[-.13, +.17]</td>
</tr>
<tr>
<td>Parent Library Usage</td>
<td>.92 (.93)</td>
<td>.94 (.90)</td>
<td>+.02</td>
<td>[-.13, +.17]</td>
</tr>
<tr>
<td>Child Library Usage</td>
<td>1.15 (.10)</td>
<td>1.12 (.98)</td>
<td>-.03</td>
<td>[-.18, +.12]</td>
</tr>
</tbody>
</table>

*Significance of differences in mean scores calculated to take into account clustered nature of the data.

5.2. Evidence of Differential Impact of the Programme on Parent/Carer and Child Outcomes

While no evidence has been found that the Booktime programme was having any measurable effect on parent/carer or child outcomes overall, this does not mean that the programme may have been having a positive impact on particular subgroups of parents/carers and their children. For example, it could be hypothesized that the programme may be effective for boys rather than girls or that it may be effective for those who start from a much lower point.

To test this, a set of further exploratory analyses were conducted to test whether any of the following factors influenced the effectiveness of the Booktime programme:

- The gender of the child;
- The initial pre-test scores for the child (i.e. was the programme having greater effects for those who started from a lower position);
- The socio-economic background of the child’s family (measured using multiple deprivation scores for the child’s home address); and
- The catchment area of the school, measured in terms of the proportion of children in each school eligible for free-school meals.

The details of the additional analyses are provided in Appendix A3. Overall, no evidence was found that the programme was have any effect for any particular subgroup of parents/carers or their children. In other words, the programme was not found to be having any effect regardless of whether: the child was a boy or a girl; the child had very low initial pre-test scores; the child came from a socially deprived background; or the child attended a school that served a deprived neighbourhood.

¹ For each of the five outcome measures used, this table compares the mean (or average) post-test scores of parents in the intervention group (i.e. those whose children received the Booktime Packs) with those in the control group (i.e. those that did not).
5.3. Parent/Carers’ Perspectives on the Booktime Pack

The parents in the intervention group were asked a series of additional questions at post-test about their views on the Booktime Pack and how they used it. The questions and the parents’ responses to these are summarised in Table 7. As can be seen, and reflecting the qualitative stakeholder interviews, the overwhelming response of parents to the Packs and the book contained within it were extremely positive. For example, over 90% stated that their child really enjoyed reading the book and also a similar proportion that they had fun reading it together.

Table 7. The Views of Parents in the Intervention Group About the Booktime Pack (%)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My child really enjoyed reading the book.</td>
<td>50</td>
<td>43</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>We had fun reading the book together.</td>
<td>50</td>
<td>45</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>As we read my child was interested to see what was on the next page.</td>
<td>44</td>
<td>46</td>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>My child and I explored some of the words and/or animals by talking or using other resources.</td>
<td>32</td>
<td>42</td>
<td>9</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>The book was just right for my child.</td>
<td>36</td>
<td>48</td>
<td>10</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>I will buy further books by this author (Eric Carle) for my child.</td>
<td>25</td>
<td>32</td>
<td>38</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>My child read the book with another adult or family member.</td>
<td>25</td>
<td>42</td>
<td>10</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>My child read the book on their own.</td>
<td>8</td>
<td>28</td>
<td>13</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>We used the other resources in the Booktime pack.</td>
<td>20</td>
<td>41</td>
<td>23</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>My child used the other resources in the Booktime pack on their own.</td>
<td>12</td>
<td>33</td>
<td>24</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>I have had some contact with my child’s school about the Booktime pack other than this questionnaire.</td>
<td>3</td>
<td>12</td>
<td>13</td>
<td>53</td>
<td>19</td>
</tr>
<tr>
<td>I explored the Booktime website highlighted in the Booktime pack.</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>59</td>
<td>25</td>
</tr>
<tr>
<td>I have heard of the character ‘Booky’.</td>
<td>5</td>
<td>16</td>
<td>18</td>
<td>44</td>
<td>18</td>
</tr>
</tbody>
</table>

*Percentages may not sum to 100% due to rounding.

Beyond these extremely positive responses, the three key points to note from Table 7 are:

- The very low percentage of parents who reported having contact with the school about the Booktime Pack (just 15%);
- The small proportion of parents who reported visiting the Booktime website (just 9%); and
- The small percentage of parents who recognised the Booktime character, “Booky” (21%).

These findings tend to corroborate the concerns raised by some of the stakeholders in the telephone interviews that the Booktime programme may not be eliciting sufficient support and follow-up by schools.
6. Summary and Recommendations

6.1 Summary

It is clear from the evidence provided in this present evaluation that the Booktime Packs circulated through schools in Northern Ireland are very much welcomed and highly valued by teachers, parents/carers and children. For the parents/carers, the vast majority (90%) reported that they really enjoyed reading the book and also a similar proportion that they had fun reading it together with their children. The potentially positive effects of Booktime were also indicated through the interviews with parents with some reporting how it encouraged them to read more with their children and others explaining how it was giving them more confidence as readers.

The book itself – Eric Carle’s “Slowly, Slowly, Slowly,” said the Sloth – was found to be colourful and brightly illustrated in a way that would appeal to young children. Moreover, the book was found not only to have the potential to extend the child’s knowledge about animals, but the illustrations and text to provide important opportunities to enhance and consolidate young children’s emergent reading skills. It was noted, however, that the book contained a number of difficult words and that this may present a problem for those parents/carers who have difficulty reading themselves. This point was also corroborated through some of the interviews with the teachers and parents.

In relation to the perceived impact of the programme on parents/carers and their children, opinions differed among the stakeholders interviewed. While some felt that the Booktime Packs had significant potential to have a positive effect, others expressed skepticism that this would happen unless schools made substantial efforts to follow up the distribution of the Packs with additional events and activities linked to the book.

The evidence from the cluster randomized trial itself would seem to bear these concerns out. Overall, the trial found no evidence that the Booktime Packs were having any effects on parents/carers or the children in relation to the five outcomes specified. Moreover, further exploratory analysis of the data found no evidence that the programme was at least having positive effects for particular subgroups of parents/carers and children.

While it is beyond the scope of the trial to determine why there were no effects found, one plausible explanation would certainly seem to relate to the concerns raised through the stakeholder interviews regarding the need for schools to play a key role in supporting the Booktime Packs with additional events and activities aimed at parents/carers. As the findings from the post-test questionnaire indicate, for the most part participating schools did not seem to follow up the distribution of the Packs. Only a small minority (15%) of parents/carers reported having contact with their child’s school about the Booktime Packs. An even smaller proportion (just 9%) visited the Booktime website and only one in five parents (21%) were able to recognize the Booktime character “Booky”.


In line with the views of a number of stakeholders, it seems reasonable to conclude that the simple distribution of one child’s reading book to their parents/carers is unlikely, in itself, to have a positive and measurable effect on the literacy habits of parents/carers and their children. Rather, for a programme like Booktime to be effective it would appear necessary for it to be viewed as a catalyst that is used to encourage a wider range of events and activities by schools with the aim of engaging parents/carers and encouraging a love of books, shared reading at home and greater use of local libraries.

6.2 Recommendations

It is clear from the available evidence internationally that book-gifting programmes can have a positive effect on parent/carer and child outcomes. It is certainly evident from the present evaluation that the Booktime book-gifting programme is very well received among educationalists, parents/carers and the children. The Booktime Packs do appear to be liked and used extensively by the vast majority of parents/carers and children.

The key issue however, as highlighted through this present evaluation, is that it is unrealistic to expect that the simple distribution of Booktime Packs, in itself, will have a clear and demonstrable impact on parents/carers and children. For this to take place, it would seem critical that the emphasis for the Booktime programme, going forward, is for it to be viewed as a catalyst that seeks to encourage greater relationships between parents/carers and schools with regard to the support and development of children’s early reading habits.

It is with this in mind that the following recommendations are made:

1. Booktrust and Pearson should consider enhancing the Booktime Packs with additional support materials for parents, including an enhanced information leaflet/booklet providing advice and guidance and additional activities that a parent/carer could undertake with their child related to the book that is gifted.

2. Booktrust and Pearson should consider providing additional resources to schools that they can use to follow up the distribution of the Booktime Packs. These resources could include guidance on organising events for parents/carers in relation to the Booktime Packs and a set of additional activities that they can use with the children in class as well as those that they can send home for use by parents/carers. These events and activities should be thematically related to the book that is gifted in the Packs and the resources should be made available free of charge to download from the Booktime website for teachers to photocopy and use as necessary.

3. Booktrust and Pearson, in conjunction with the Education and Library Boards and local libraries, should consider how best they might provide further encouragement and support to schools to undertake additional events and activities and make use of the additional resources recommended above.

In addition, two other specific issues were raised through the stakeholder interviews that are worth considering further and thus give rise to two further recommendations:

4. Booktrust and Pearson should give some consideration to the timing of the distribution of the Booktime Packs. In particular, it would be worthwhile considering the benefits of distributing the Packs at the beginning of the school year which may present more
opportunities to encourage schools to undertake events and activities aimed at engaging more effectively with parents/carers.

5. Booktrust and Pearson should give some consideration to the choice of book to be included in the Booktime Packs in future years. While there are benefits to including a book that can stretch children in terms of the words used, this can present difficulties for those parents/carers who are poor readers themselves. Should it be decided to continue to use a book like Eric Carle’s “Slowly, Slowly, Slowly,” said the Sloth then it would be advisable to consider what additional support may be needed to be provided for parents/carers.
References


Clarke, M. (1988) Young Literacy Learners, Leamington Spa: Scholastic


Appendices

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Appendix A1. Telephone Interview Schedules

A1.1 Parents

Introduction

As you know, we recently conducted a survey of parents in relation to the effects of Booktime gift pack. We would like to talk a little more about what you thought about the pack and get some ideas for improving this book-gifting programme. Before we start, let me just say that I am not assessing you in any way and that no individual will be named in the final report. That said, may I record this interview? The interview will last for about 10-15 minutes.

Attitudes and habits of parents/carers regarding reading for pleasure with their child (including impact on frequent and non-frequent readers)

- How often do you read or share books with your child?
- Do you think your child enjoys reading or sharing books with you?
- Do you think your child enjoys reading or looking at books alone?
- Do you read with your child for pleasure or to build their reading skills?
- Can you expand on your thinking on this point?
- Do you think the Booktime pack has influenced reading for pleasure in your child?
- Can you explain why this is the case?
- Are you confident about reading with your child?
- Can you expand on this?
- Has the Booktime pack influenced your choice of books or authors in any way?
- Can you expand on this?

Impact on library use (occurring and intended) before and after receipt of the Booktime packs

- Are you currently a member of the library?
- Is your child a member of the library?
- Do you intend to become a library member in the future?
- Do you think that Booktime has influenced your library usage now?
- Can you explain why this is the case?
- Do you think that Booktime will influence your library usage in the future?
- Can you explain why this is the case?

Impact on relationships between parents/carers and their child’s school

- Do you feel involved in your child’s learning at school?
- Can you explain why this is the case?
- Do you think that Booktime has had an influence on this involvement?
- Can you explain why this is the case?

Parents’/carers’ attitudes to reading for pleasure themselves

- Are you a frequent reader?
- Do you think that Booktime has influenced your reading for pleasure?
- Can you explain why this is the case?
Future Development

- As I said, we have been specifically asked by the Booktime team to give recommendations for future improvements to the programme, what would you say to them/suggest?
- Is there anything else you would like to add?

Thanks very much for your time.

A1.2 Teachers

Introduction

As you know, we recently conducted a survey of parents in relation to the effects of Booktime gift pack. We would like to talk a little more about what you thought about the pack and maybe get some ideas for improving this book-gifting programme. Before we start, let me just say that I am not assessing you in any way and that no individual will be named in the final report. That said, may I record this interview? The interview will last for about 10-15 minutes.

Attitudes and habits of parents/carers regarding reading for pleasure with their child (including impact on frequent and non-frequent readers)

- How was the Booktime programme gifted in your class?
- Where the parents present during the gifting?
- Was there any tasks completed in the classroom or tasks sent home for parents and children to complete together?
- Do you think the Booktime programme has influenced reading for pleasure in the children in your class?
- If yes, then in what ways?
- (Alternatively) If no, why not?

Impact on school library use (occurring and intended) before and after receipt of the Booktime packs

- Does your school have a library?
- Do you think that the Booktime programme has influenced the school library usage, of children in your class?
- If yes, then in what ways?
- (Alternatively) If no, why not?

Impact on relationships between parents/carers and their child’s school

- Do you think parents feel involved with their child’s learning at school?
- Why do you think this is?
- Do you think that the Booktime programme has had an influence on this involvement?
- Can you think of other ways in which the Booktime programme could be used to encourage this involvement?

Parents’/carers’ attitudes to reading for pleasure themselves
• In what ways do you think the Booktime programme has influenced parents reading for pleasure?
• Why do you think this has happened?

Future Development

• As I said, we have been specifically asked by the Booktime team to give recommendations for future improvements to the book gifting programme, what would you say to them/suggest?
• Is there anything else you would like to add?

Thanks very much for your time.

**A1.3 Education and Library Board School Library Staff**

**Introduction**

As you know, we recently conducted a survey of parents in relation to the effects of Booktime gift pack. We would like to talk a little more about what you thought about the pack and maybe get some ideas for improving this book-gifting programme. Before we start, let me just say that I am not assessing you in any way and that no individual will be named in the final report. That said, may I record this interview? The interview will last for about 5-10 minutes.

**Attitudes and habits of parents/carers regarding reading for pleasure with their child (including impact on frequent and non-frequent readers)**

• How do you think the roll out of the programme could be changed in order to strengthen links between school libraries and parents?
• Do you think the Booktime programme has influenced links between SLS teams and individual schools?
• In what way?

**Impact on relationships between parents/carers and their child’s school**

• Do you think parents feel involved with their child’s learning at school?
• Do you think that the Booktime programme has had an influence on this involvement?

**Parents’/carers’ attitudes to reading for pleasure themselves**

• Do you think that the Booktime programme changes parents’/carers’ attitudes to their own reading in any way?
• If yes, in what way?
Future Development

- As I said, we have been specifically asked by the Booktime team to give recommendations for future improvements to the book gifting programme, what would you say to them/suggest?
- Is there anything else you would like to add.

Thanks very much for your time.

A1.4 Public Library Staff Member

Introduction

We have recently conducted a survey of parents in relation to the effects of the Booktime gift pack. Public libraries have not been involved in the roll out of Booktime this year but have done in the past. Before we start, let me just say that I am not assessing you in any way and that no individual will be named in the final report. That said, may I record this interview? The interview will last for about 5-10 minutes.

Impact on library use (occurring and intended) before and after receipt of the Booktime packs

- Do you think there’s any difference between Booktime this year, with no public library involvement, and previous years when libraries have been more involved?
- How do you think the roll out of the programme could be changed to strengthen links between public libraries and schools?
- How do you think the roll out of the programme could be changed to strengthen links between public libraries and parents?

Future Development

- As I said, we have been specifically asked by the Booktime team to give recommendations for future improvements to the book gifting programme, what would you say to them/suggest?
- Is there anything else you would like to add?

Thanks very much for your time.
Appendix A2. Questionnaire Used with Parents

Dear Parent/Carer,

Please could you spare 5-10 minutes to complete this short form? It will help us evaluate the Booktime programme that your child’s class is involved in.

Booktime is a national programme that gives a free book pack to every P1 child, as well as providing activities for P1 teachers to follow with their children in class. Your child will receive their book pack either in April or in June of this year.

The Centre for Effective Education at Queen’s University Belfast has been asked to evaluate the Booktime programme to see if it is working. Your child’s school is among 30 primary schools across Northern Ireland that have agreed to help us do this. For the evaluation we are asking all parents/carers of P1 children in these 30 schools to fill out two short forms – one now and another in June.

The answers that you provide in the forms will be kept strictly confidential and will not be shown to the school. A report of the findings of the evaluation will be produced and published towards the end of the summer. However, no individual schools or parents/children will be named or identified in the report.

The first form is attached and should only take between 5-10 minutes to complete. We would therefore be extremely grateful if you could:

1. Complete the form attached
2. Put the form in the envelope provided, seal the enveloped and write your child’s name on it
3. Return it to your child’s class teacher within the next three days (the teachers will not open returned envelopes)

Completing the form is entirely voluntary. Your child will still receive the Booktime book pack whether you complete the form or not. However, we would very much appreciate your help in completing this form. The information you provide will be very important in helping Booktrust see whether the book packs are working and where they could be improved.

If you have any questions about Booktime and/or about the evaluation then please do not hesitate to contact Dr Liam O’Hare at the Centre for Effective Education on: (028) 9097 5973 or by email at: l.ohare@qub.ac.uk
Evaluation of the Impact of the Booktime Programme

(First Form)

A) Consent

Thank you for agreeing to complete this short form. Your help is very much appreciated and the information you provide will be important in helping Booktrust improve the Booktime programme.

Please tick each of the following boxes if you agree with what is said and sign below to give your consent to taking part in this evaluation:

- I give consent for the Centre for Effective Education to use the information I provide in this form as part of their evaluation of Booktime.
- I understand that this information will be treated in the strictest of confidence and will not be shown to my child’s school.
- I understand that no school or child will be identified in any reports or publications that are produced from the evaluation.
- I understand that my involvement in the evaluation is entirely voluntary and that I do not have to complete this questionnaire if I do not want to.
- I understand that I can withdraw my consent at any time by telephoning or emailing Dr Liam O’Hare (see covering letter for contact details).
- I understand that not completing the forms will have no effect on my child receiving the free Booktime book pack or participating in the Booktime activities that the class teacher will be organizing.
- I understand that I will be asked to complete a similar form to this one in June.

Signed: ____________________________ Date: ____________________________
B) Follow-up telephone interviews

We would also like to talk with a small number of parents over the telephone about the Booktime programme. The phone calls should take no more than 10 minutes. You do not need to take part in these phone calls if you do not wish to. However, if you are willing for us to contact you then please tick the box below and provide a contact phone number:

☐ Contact phone number: 

If you have ticked the above box, please provide details of the times/days during the week when it would be best for us to contact you on the above number:

C) The form

1. Please provide your child's full name, date of birth and your postcode below:

(We need this information to make sure that we have forms from parents/carers from a range of areas, and also to match up this first form with the second one you will be asked to complete in June. Under no circumstances will we pass on any of these details to anyone else)

Child's full Name:

First name(s) Surname

Date of birth: 

Date Month Year

Your postcode:
2. Has your child received a free book from any other book programme at any time previously?  

(Please tick one box only)

<table>
<thead>
<tr>
<th></th>
<th>Yes – please provide details here:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Don’t know</td>
</tr>
</tbody>
</table>

3. Are you a member of the local library?  

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
</table>

4. Is your child a member of the local library?  

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
</table>

5. Please indicate how often your child does the following with you or with another family member or friend:

(Please tick just one box per row)

<table>
<thead>
<tr>
<th>How often does your child …</th>
<th>Not at all</th>
<th>Very rarely</th>
<th>A few times a year</th>
<th>Once or twice a month</th>
<th>Once or twice a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>… visit the public library?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… attend events at the public library? (e.g. rhymetimes and Storytimes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… borrow books from the public library?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… borrow CDs, DVDs or computer games from the public library?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… use public facilities at the local library (such as the internet, toys, board games, the study area)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. And how often do you do the following:

(Please tick just one box per row)

<table>
<thead>
<tr>
<th>How often do you …</th>
<th>Not at all</th>
<th>Very rarely</th>
<th>A few times a year</th>
<th>Once or twice a month</th>
<th>Once or twice a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>… visit the public library?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… borrow books from the public library?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… borrow CDs, DVDs or computer games from the public library?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>… use public facilities at the local library (such as the internet, toys, board games, the study area)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. How many books have you bought for your child over the last two months?

(Please tick just one box)

<table>
<thead>
<tr>
<th>None</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 or more</th>
</tr>
</thead>
</table>

8. How many times has your child asked you to buy a book for him/her over the last two months?

(Please tick just one box)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very rarely</th>
<th>Once or twice a month</th>
<th>Once or twice a week</th>
<th>Nearly every day</th>
</tr>
</thead>
</table>

9. Other than the books your child has to read for school, how often do you and your child read other books at home for pleasure?

(Please tick just one box)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very rarely</th>
<th>Once or twice a month</th>
<th>Once or twice a week</th>
<th>Nearly every day</th>
</tr>
</thead>
</table>
10. Just thinking of those books that you and your child read together for pleasure (and not the books they have to read from school), how many different books would you say you have read together over the last two months?

(Please tick just one box)

<table>
<thead>
<tr>
<th>None</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7 or more</th>
</tr>
</thead>
</table>

11. Again, just thinking of the books you and your child have read together for pleasure over the last two months, can you please write down the titles of these books?

(Please do not include those books that your child has to read for school. Please use as many or as few lines as required. Do not worry if you cannot remember the exact title. If your child has not read any books please just leave blank.)

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 

(Please continue on the back of this page if necessary)
12. What are your feelings about **reading for yourself?** Please say how much you agree or disagree with the following statements. *(Please tick just one box per statement)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find it hard to finish books</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for me to be a good reader</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often read books</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often buy books for myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. What are your feelings about **reading with your child?** Please say how much you agree or disagree with the following statements. *(Please tick just one box per statement)*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel confident explaining letters and sounds to my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sometimes I don’t enjoy reading with my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy taking time to talk about books with my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think reading together with my child is very important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading together with my child is a priority in my day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other family members in our home enjoy reading with my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I read with my child, I am not sure that he or she is getting the most out of it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel confident reading out loud with my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really enjoy reading with my child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I worry about whether I am choosing the right books for my child

I worry about putting my child off reading

<table>
<thead>
<tr>
<th>I worry about whether I am choosing the right books for my child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I worry about putting my child off reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
</tbody>
</table>

14. How often does your child choose a book from the school library to bring home to read for pleasure?

(Please tick just one box)

15. Have you spoken directly with your child’s teacher in the last month about their reading?

Yes  No  Don’t know

16. And finally, thinking of your child’s school, please say how much you agree or disagree with the following statements.

(Please tick just one box per statement)

<table>
<thead>
<tr>
<th>I fully understand what my child’s teacher is doing in class to help them read.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>My child’s teacher always keeps us informed about how my child is doing with their reading.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I am not sure what I am supposed to be doing with my child’s homework.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I could contact my child’s teacher at any time if I had any questions about their reading.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Statement</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>I’m not sure what books my child is reading at school.</td>
</tr>
<tr>
<td>The only time I can talk to my teacher about my child’s reading is</td>
</tr>
<tr>
<td>during the parent/teacher interviews.</td>
</tr>
<tr>
<td>My child’s teacher has explained clearly how we can help our child</td>
</tr>
<tr>
<td>read at home.</td>
</tr>
<tr>
<td>I wish I could talk to my child’s teacher more about their reading</td>
</tr>
<tr>
<td>My child’s school organizes special events for parents to attend to</td>
</tr>
<tr>
<td>learn how they can help their children read.</td>
</tr>
</tbody>
</table>

Thank you very much for your time. Your answers are very important to us.

Please place this completed form in the envelope provided, **write your child’s name on the back** and seal the envelope before passing it back to your child’s class teacher as soon as possible.

END.
**Additional Post-Test questions for the intervention group**

17. Thinking about the Booktime pack you received in April can you answer the following questions?

*(Please tick just one box per statement)*

<table>
<thead>
<tr>
<th>Have you and your child read the book “Slowly, Slowly, Slowly,’ said the Sloth,” together.</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

If **yes** please provide responses to the statements on the next page, if **no** then please jump to Question 18.

*Please indicate how much you agree or disagree with each of the following statements about reading the book “Slowly, Slowly, Slowly,’ said the Sloth” with your child:*

<table>
<thead>
<tr>
<th>My child really enjoyed reading the book.</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>We had fun reading the book together.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As we read my child was interested to see what was on the next page.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My child and I explored some of the words and/or animals by talking or using other resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The book was just right for my child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will buy further books by this author (Eric Carle) for my child.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
18. Some more statements about the Booktime Pack.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>My child read the book with another adult or family member.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My child read the book on their own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We used the other resources in the Booktime pack.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My child used the other resources in the Booktime pack on their own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have had some contact with my child’s school about the Booktime pack other than this questionnaire.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I explored the Booktime website highlighted in the Booktime pack.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have heard of the character ‘Booky’.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
19. And finally, we would be very interested in your overall views of the book you have received and the Booktime pack. In the space below, could you please write down your overall impressions. It would be very helpful if you could point out what you particularly liked about the book and the Booktime Pack as well as anything you feel could be improved.

Please write your views here:

Thank you very much for your time. Your answers are very important to us.

Please place this completed form in the envelope provided, write your child’s name on the back and seal the envelope before passing it back to your child’s class teacher as soon as possible.

END.
### Table X. Statistical Models for Child Library Use outcome

<table>
<thead>
<tr>
<th>Independent Variables in the Model</th>
<th>Main Model</th>
<th>Sub-group analyses testing whether the following variables had an impact on the effectiveness of the intervention:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Differences in Pre-test Scores</td>
</tr>
<tr>
<td>Pre-test Score</td>
<td>.849 (.034)</td>
<td>.872 (.044)</td>
</tr>
<tr>
<td>Intervention</td>
<td>-.030 (.074)</td>
<td>.038 (.112)</td>
</tr>
<tr>
<td>Pre-test*Intervention</td>
<td>-.056 (.069)</td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td></td>
<td>-.042 (.087)</td>
</tr>
<tr>
<td>Boy*Intervention</td>
<td></td>
<td>.104 (.141)</td>
</tr>
<tr>
<td>MDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDS*Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM*Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.217 (.060)</td>
<td>.192 (.067)</td>
</tr>
<tr>
<td>Variance (School)</td>
<td>.005 (.008)</td>
<td>.004 (.008)</td>
</tr>
<tr>
<td>Variance (Child)</td>
<td>.293 (.026)</td>
<td>.293 (.026)</td>
</tr>
<tr>
<td>-2LL</td>
<td>435.8</td>
<td>435.2</td>
</tr>
<tr>
<td>Total N</td>
<td>268</td>
<td>268</td>
</tr>
</tbody>
</table>

### Table X. Statistical Models for Parent Library Use outcome

<table>
<thead>
<tr>
<th>Independent Variables in the Model</th>
<th>Main Model</th>
<th>Sub-group analyses testing whether the following variables had an impact on the effectiveness of the intervention:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Differences in Pre-test Scores</td>
</tr>
<tr>
<td>Pre-test Score</td>
<td>.840 (.035)</td>
<td>.856 (.043)</td>
</tr>
<tr>
<td>Intervention</td>
<td>.017 (.069)</td>
<td>.064 (.101)</td>
</tr>
<tr>
<td>Pre-test*Intervention</td>
<td>-.046 (.074)</td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td></td>
<td>.050 (.083)</td>
</tr>
<tr>
<td>Boy*Intervention</td>
<td></td>
<td>-.095 (.134)</td>
</tr>
<tr>
<td>MDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDS*Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSM*Intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>.163 (.055)</td>
<td>.147 (.060)</td>
</tr>
<tr>
<td>Variance (School)</td>
<td>.003 (.008)</td>
<td>.003 (.008)</td>
</tr>
<tr>
<td>Variance (Child)</td>
<td>.264 (.024)</td>
<td>.265 (.024)</td>
</tr>
<tr>
<td>-2LL</td>
<td>407.0</td>
<td>406.6</td>
</tr>
<tr>
<td>Total N</td>
<td>268</td>
<td>268</td>
</tr>
</tbody>
</table>
### Table X. Statistical Models for Parental Attitudes to Reading outcome

<table>
<thead>
<tr>
<th>Independent Variables in the Model</th>
<th>Main Model</th>
<th>Sub-group analyses testing whether the following variables had an impact on the effectiveness of the intervention:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Differences in Pre-test Scores</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-test Score</td>
</tr>
<tr>
<td>Pre-test Score</td>
<td>.815 (.035)</td>
<td>.825 (.046)</td>
</tr>
<tr>
<td>Intervention</td>
<td>.017 (.066)</td>
<td>.110 (.291)</td>
</tr>
<tr>
<td>Pre-test*Intervention</td>
<td></td>
<td>-.023 (.071)</td>
</tr>
<tr>
<td>Boy</td>
<td></td>
<td>.036 (.084)</td>
</tr>
<tr>
<td>Boy*Intervention</td>
<td></td>
<td>.126 (.135)</td>
</tr>
<tr>
<td>MDS</td>
<td></td>
<td>-.000 (.000)</td>
</tr>
<tr>
<td>MDS*Intervention</td>
<td></td>
<td>.000 (.000)</td>
</tr>
<tr>
<td>FSM</td>
<td></td>
<td>-.002 (.002)</td>
</tr>
<tr>
<td>FSM*Intervention</td>
<td></td>
<td>.002 (.005)</td>
</tr>
<tr>
<td>Constant</td>
<td>.743 (.144)</td>
<td>.704 (.187)</td>
</tr>
<tr>
<td>Variance (School)</td>
<td>.001 (.006)</td>
<td>.001 (.007)</td>
</tr>
<tr>
<td>Variance (Child)</td>
<td>.263 (.024)</td>
<td>.263 (.024)</td>
</tr>
<tr>
<td>-2LL</td>
<td>392.8</td>
<td>392.7</td>
</tr>
<tr>
<td>Total N</td>
<td>261</td>
<td>261</td>
</tr>
</tbody>
</table>

*Multilevel model would not converge. The model reported here is the single-level equivalent (thus not accounting for the clustered nature of the data). Adjusted $R^2$=.514.

### Table X. Statistical Models for Shared Reading outcome

<table>
<thead>
<tr>
<th>Independent Variables in the Model</th>
<th>Main Model</th>
<th>Sub-group analyses testing whether the following variables had an impact on the effectiveness of the intervention:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Differences in Pre-test Scores*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-test Score</td>
</tr>
<tr>
<td>Pre-test Score</td>
<td>.729 (.044)</td>
<td>.675 (.059)</td>
</tr>
<tr>
<td>Intervention</td>
<td>.034 (.045)</td>
<td>-.484 (.385)</td>
</tr>
<tr>
<td>Pre-test*Intervention</td>
<td></td>
<td>.120 (.088)</td>
</tr>
<tr>
<td>Boy</td>
<td></td>
<td>-.000 (.056)</td>
</tr>
<tr>
<td>Boy*Intervention</td>
<td></td>
<td>-.059 (.091)</td>
</tr>
<tr>
<td>MDS</td>
<td></td>
<td>-.000 (.000)</td>
</tr>
<tr>
<td>MDS*Intervention</td>
<td></td>
<td>.000 (.000)</td>
</tr>
<tr>
<td>FSM</td>
<td></td>
<td>-.002 (.002)</td>
</tr>
<tr>
<td>FSM*Intervention</td>
<td></td>
<td>.006 (.003)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.124 (.189)</td>
<td>1.350 (.252)</td>
</tr>
<tr>
<td>Variance (School)</td>
<td>.000 (.000)</td>
<td>.001 (.004)</td>
</tr>
<tr>
<td>Variance (Child)</td>
<td>.127 (.011)</td>
<td>.122 (.011)</td>
</tr>
<tr>
<td>-2LL</td>
<td>206.7</td>
<td>187.7</td>
</tr>
<tr>
<td>Total N</td>
<td>266</td>
<td>266</td>
</tr>
</tbody>
</table>
### Table X. Statistical Models for Teacher Support outcome

<table>
<thead>
<tr>
<th>Independent Variables in the Model</th>
<th>Main Model</th>
<th>Sub-group analyses testing whether the following variables had an impact on the effectiveness of the intervention:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Differences in Pre-test Scores</td>
</tr>
<tr>
<td>Pre-test Score</td>
<td>.777 (.046)</td>
<td>.747 (.058)</td>
</tr>
<tr>
<td>Intervention</td>
<td>.027 (.065)</td>
<td>-.291 (.401)</td>
</tr>
<tr>
<td>Pre-test*Intervention</td>
<td>.077 (.096)</td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td></td>
<td>-.118 (.069)</td>
</tr>
<tr>
<td>Boy*Intervention</td>
<td></td>
<td>.096 (.111)</td>
</tr>
<tr>
<td>MDS</td>
<td></td>
<td>.000 (.000)</td>
</tr>
<tr>
<td>MDS*Intervention</td>
<td></td>
<td>-.000 (.000)</td>
</tr>
<tr>
<td>FSM</td>
<td></td>
<td>.002 (.002)</td>
</tr>
<tr>
<td>FSM*Intervention</td>
<td></td>
<td>.002 (.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>.825 (.193)</td>
<td>.948 (.240)</td>
</tr>
<tr>
<td>Variance (School)</td>
<td>.008 (.009)</td>
<td>.010 (.009)</td>
</tr>
<tr>
<td>Variance (Child)</td>
<td>.178 (.016)</td>
<td>.177 (.163)</td>
</tr>
<tr>
<td>-2LL</td>
<td>305.7</td>
<td>304.4</td>
</tr>
<tr>
<td>Total N</td>
<td>266</td>
<td>266</td>
</tr>
</tbody>
</table>

-2LL = 2 log-likelihood
Appendix A4. Non-technical Explanation of Statistical Findings

A4.1 Outcome Measures

A single measure was calculated for each parent in relation to each of the five outcomes listed. The method used to calculate the measures is described in Appendix One.

A4.2 Mean Scores (with Standard Deviations)

For each of the five outcome measures used, these two columns compare the mean (or average) post-test scores of parents in the intervention group (i.e. those whose children received the Booktime Packs) with those in the control group (i.e. those that did not). By way of illustration, the average score for parents whose children received the Booktime Packs at the end of the trial in relation to shared reading was 4.25 compared to an average score for parents whose children did not receive the packs at the end of the trial of 4.22.

The figures in brackets underneath the mean scores are known as ‘standard deviations’ and they provide a sense of who spread the parents’ scores are within each group. As a rough guide, about two thirds of parents’ scores tend to lie within one standard deviation of the mean. Thus, to take the example of the mean shared reading score of parents in the control group (4.22), its standard deviation can be seen to be .46. This means that we can deduce from this that about two thirds of parents have a shared reading score of 4.22 ± .46 i.e. between 3.76 and 4.68.

In relation to the standard deviations shown in Table 3, they are very similar for the intervention and control groups and this suggests that not only are the mean post-test scores similar for both groups but also that the spread of scores in both groups are similar for all five outcomes.

A4.3 Effect Sizes (d)

The effect size is a standardized measure of the size of the difference in mean scores between the control and intervention groups or, in other words, the size of the effect of the Booktime programme. Effect sizes tend to run from 0 (indicating that there is no effect at all) to +1 (indicating that there is a very large positive effect) or -1 (indicating that there is a very large negative effect). In education, effects in the range of .20 or .30 tend to be considered meaningful and those of around 0.50 or higher tend to be viewed as ‘large’. Those below .10 tend to be considered very small.

In relation to the data presented in Table 2 it can be seen that all of the effects are extremely small, ranging from -.03 to +.07.

Effect sizes are actually measured in units of standard deviations. Thus an effect size of +.50 would actually indicate that the mean score of the intervention group is half of a standard deviation higher than that of the control group. Using effect sizes in this way allows us to compare the relative effects of the programme across different outcome measures. This is particularly useful when the outcome

---

1 These mean scores have been adjusted to control for any differences between the two groups in relation to their pre-test scores. The scores have also been calculated using an advanced statistical technique called multilevel modeling to account for the fact that parents are clustered into 27 different schools.
measures themselves may be calculated on different scales and thus where it is not possible to directly compare raw differences in scores.

**A4.4 95% Confidence Intervals**

For each estimated effect size, a 95% confidence interval is also provided. As this trial is based on a sample of children (rather than on the total population) then the effect sizes reported can only ever be viewed as estimates and, as such, will carry a level of sampling error. The confidence intervals give a sense of the sampling error associated with each effect size quote. More specifically, the confidence intervals tell us that there is a 95% chance that the true effect size for the Booktime programme lies somewhere between the two figures quoted. Thus, for shared reading at home, the effect size was estimated from this trial as being +.07 and the confidence interval indicates that we can be 95% certain that the true effect of the programme lies somewhere between -.11 and +.24.

**A4.5 Significance of Difference**

Because we are dealing with a sample, then there is a chance that the Booktime programme may have had no effect at all and that the effect sizes found could have just occurred by chance in terms of the random nature of the sample selected and the way the schools were split into intervention and control groups. The figures in this column tell us the actual probability of this occurring for each of the estimated effect sizes listed. In other words, these figures tell us the chance that the Booktime programme may have had no effect at all in reality and that the effect sizes found here have just occurred randomly as a product of sampling error.

For example, the effect size estimated for the shared reading outcome is +.07 and the significance of this effect is .445 (often reported as p=.445). Perhaps the best way to interpret this is to multiply this figure by 100 which then converts the probability into a percentage chance. In this case the findings tell us that there is a 44.5% chance that the Booktime programme had no effect at all and that this effect quoted (of +.07) could have occurred randomly. Similarly, in terms of the effect of the programme on parents’ usage of their local libraries (effect size = +.02), the findings suggest that there is a high chance (an 80.4% chance) that this effect could have occurred randomly and that, in reality, the programme has not had any effect at all in this area.

In relation to all of the effect sizes estimated for the five outcomes listed, the chances of these having occurred randomly are all relatively high. It is for this reason that we conclude that we do not have sufficient evidence that the Booktime programme has had any effect on parents and/or children in relation to these five outcomes.