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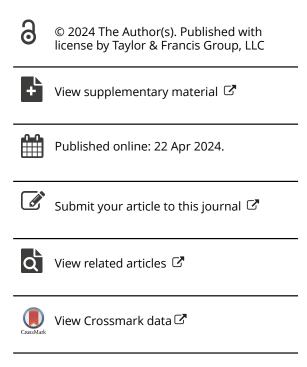
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The Impact of Shared Book Reading on Children and Families: A Study of Dolly Parton's Imagination Library in Tamworth, **Australia**

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ABSTRACT

This longitudinal cohort-study investigated the impact of Dolly Parton's Imagination Library (the Imagination Library) in Tamworth, Australia. The Imagination Library delivers age-appropriate books to children from the time of their birth until their fifth birthday. Caregivers of Tamworth children completed surveys about their experience with the program after receiving one book ("baseline;" N = 343) and then at six months (N = 116) and three years (N = 89). Their responses indicated that children in the Imagination Library were read to more frequently, for longer durations, and had more books in their homes than the average Australian child, as represented by large independent databases. Tamworth caregivers who read to their child at least once a day at baseline were nearly five times more likely to read daily after six months and three years than those who did not read daily at baseline (OR 4.9 (95% CI 1.8,13.7)). Further, children who were read to daily at three years showed more emerging literacy skills than those who were not read to daily. These outcomes suggest that shared book reading generally, and the Imagination Library specifically, encourages sustained reading practices that are associated with developing emerging literacy skills.

ARTICLE HISTORY

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KEYWORDS

Child development; emerging literacy skills; home literacy environment; shared book reading

Shared book reading occurs when one person reads a book to another person. Typically, the reader is an adult (e.g., a caregiver or teacher) and the listener is a child (e.g., at home) or group of children (e.g., in the classroom). Sometimes, shared book reading involves discussions about written words, pictures, or the meaning of the story, but this is not imperative (Celano et al., 1998).

Shared book reading exposes children to more advanced language than other everyday activities, such as play situations (Duursma, 2014; Sénéchal et al., 1996). In 2019, Logan et al. (2019) found that children who are read one picture book a day for the first five years of their lives are exposed to around 1.4 million more words than if they are read to less than two days a week. It is, therefore, unsurprising that shared book reading is associated with enhanced language and vocabulary growth (Dowdall et al., 2020; Noble et al., 2019), including phonological awareness (Parpucu & Ezmeci, 2023) and phonological memory (National Early Literacy Panel, 2008). Such emerging literacy skills have been found to relate to later reading success (Roberts et al., 2005), which is why some education jurisdictions have claimed that shared book reading is important for building skills that may benefit a child for the rest of their life (Kalb & van Ours, 2014; Theriot et al., 2003).

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Given the perceived importance of shared book reading for children (Debaryshe, 1993; Theriot et al., 2003), several community-based book gifting programs have been developed, including Reach Out and Read, BookStart, and Dolly Parton's Imagination Library. These programs give free books to caregivers via community book distribution and activities. Although these programs all involve the gifting of books, they differ significantly in the quantity and timing of delivery, and strength of supporting evidence.

Reach Out and Read was established in the United States of America (USA) in 1989 and is a national pediatric literacy program that promotes early literacy and school readiness in nearly 5,000 clinics nationwide. The program gifts books to children during their six-monthly "well-child" visits to a physician. Children receive up to 10 books by their fifth birthday (de Bondt et al., 2020). At the well-child appointment, the physician provides information on the importance of reading to a child from birth, as recommended by the American Academy of Pediatrics (Jimenez et al., 2019).

A variety of studies have examined Reach Out and Read. For example, in 1999, Golova et al. (1999) conducted a randomized controlled trial (N=65 intervention, N=70 control) with low-income Hispanic families using bilingual books. Interviews before and after the program suggested that caregivers (N=65) were 10 times more likely to read to their child at least three days per week than those who were not in the program. A few years later, Mendelsohn et al. (2001) collected interview and quantitative data from Hispanic or African American caregivers of children in the program for three years (N=49) or three months (N=73). The former was found to experience more frequent shared book reading than the latter and had superior receptive and expressive vocabulary. The following year, Sharif et al. (2002) reported that 100 children in New York who were in the program had higher scores for home literacy and receptive (but not expressive) vocabulary than 100 children who were not in the program.

Two years later, caregiver interview and observational data collected by Weitzman et al. (2004) suggested a positive relationship between the number of books (up to six) received by children and their home literacy environment, their preference/requests for shared book reading, and the frequency of shared book reading. A more recent caregiver survey study by Thakur et al. (2016) discovered that the proportion of caregivers (N = 210) who read to their children more than four days a week increased from 56% before the program to 80% during the program. In the same year, survey and quantitative data measures collected by Kumar et al. (2016) from adolescent caregivers suggested that participation in the program (N = 14) led to more frequent shared book reading and reduced maternal depression than those not in the program (N = 14). Finally, six years later, a survey study conducted by Crosh et al. (2022) found that Chicago caregivers in the program (N = 150) read more frequently to their children than caregivers outside the program (N = 50).

It is important to note findings from a systematic review by Yeager Pelatti et al. (2014), which aimed to assess the methodological quality of Reach Out and Read studies that examined experimental or quasi-experimental designs. This review, which included 11 appropriate studies, identified many methodological limitations, and suggested caution around interpreting the findings of such studies. Thus, research to date suggests that Reach Out and Read may help support the home literacy environment and some types of language development, but the strength of this support is currently limited by the mixed quality of studies conducted.

The BookStart program, which has been implemented in England, Northern Ireland, and Wales since 1992, is based on the rationale that young children read to every day will benefit educationally, culturally, socially, and emotionally. It sends one or two free books to a child's family soon after their birth and then when they are 3 to 4 years old. There are fewer studies about BookStart than Reach Out and Read. In 2000, Wade and Moore (2000) investigated a longitudinal sample of N = 43 children from Birmingham when they first received the books (at nine months). When they were in Year 2, the BookStart children achieved higher mean scores than a non-BookStart control group (N = 41) in reading and math on Standard Assessment Tests. More recently, O'Hare and Connolly (2014) conducted a randomized controlled trial with 96 families in Ireland who were sent a one-off BookStart pack when their child was 2 years old (two books, a coloring book, a pack of

crayons, a bedroom frieze, a set of bookplate stickers, a list of recommended toddler books, and a parent guide). The survey responses of BookStart caregivers indicated more positive attitudes to reading than those of 107 non-BookStart families. In the same year, van den Berg and Bus (2014) reported on the survey responses of 359 families who received a single BookStart package (a baby book, CD, and flyer about book sharing). These suggested that their children might have slightly better language development at age 15 months than 225 children who did not receive a package. In contrast, a very recent study by de Bondt and Bus (2022) found no difference between BookStart children (N = 293) and non-BookStart children (N = 178) for the home literacy environment at eight months or 5 years on language and literacy skills at 5 years. Considered together, the results of these studies are somewhat contradictory. For the home literacy environment, O'Hare and Connolly (2014) found a positive effect, while de Bondt and Bus (2022) found no effect; for language, van den Berg and Bus (2014) found an effect and de Bondt and Bus (2022) found no effect. Both studies included decent sample sizes; therefore, the association between the BookStart program and these variables is currently unclear.

Dolly Parton's Imagination Library (the Imagination Library) sends children an ageappropriate, culturally inclusive book every month from birth to 5 years (i.e., 60 books; Conyers, 2012). The program's purpose is to inspire a love of reading in children and build their own libraries before starting school (Neyer et al., 2021). In 2014, a quantitative survey study of 170 caregivers in New York reported that length of enrollment in the Imagination Library over 10 months was positively related to frequency of daily reading regardless of a child's or caregiver's demographics (e.g., age, gender, race, income, or level of education; Ridzi et al., 2014). In addition, qualitative data collected from a subgroup of 17 families suggested that families experienced an increase in communication, love of reading, and quality shared time, after just three months in the program (Neyer et al., 2021). A quantitative study by Samiei et al. (2016) revealed that kindergarten students (N = 143) who participated in the Imagination Library program prior to kindergarten had higher mean scores for early language skills than students who were not in the program (N=120). A more recent quantitative study by Waldron (2018) found that 114 kindergarten students who participated in the Imagination Library program for between 1 and 2 years had better concepts about print and letter identification than 280 children who were not in the program at age 5 years. Finally, a quantitative study by Tura et al. (2023) found that caregivers with children who were enrolled in the Imagination Library program for over a year (N = 204; 12-25+ months) reported more frequent and sustained reading practices than children enrolled for less than a year (N=75; 0-11 months). These findings suggest that participation in the Imagination Library may be associated with improved levels of shared book reading, book appreciation, family interactions, emerging literacy skills, and later academic outcomes.

It is particularly important to consider a recent systematic review of shared book reading in children (up to 9 years) by de Bondt et al. (2020) that included studies of Reach Out and Read, BookStart, and Dolly Parton's Imagination Library. A meta-analysis estimated that, on average, these programs are associated with higher metrics for the home literacy environment (Cohen's d = 0.31) and children's emerging literacy-related skills (d = 0.29). Three more meta-analyses – one for each program - estimated that the association between shared book reading and the home literacy environment is stronger for the Imagination Library (d = 0.50) than for Reach Out and Read (d = 0.28) and BookStart (d = 0.25). This may be because the Imagination Library (1) provides considerably more books (one book per month for 60 months) than Reach Out and Read and BookStart (four to 10 books in total), (2) does not require a caregiver to take a child to a medical appointment in order to receive a book but rather delivers the book to the home, (3) provides monthly support to caregivers through guided "tip sheets," and/or (4) all children within an entire community can be given the opportunity to join the program. However, de Bondt et al. (2020) also reported that the quality of evidence for the Imagination Library and BookStart programs was not as strong as for Reach Out and Read. Thus, there is a need for more methodologically sound studies of the potential impacts of the Imagination Library.

Current study

Our summary above of existing Imagination Library studies reveals three key methodological strengths and weaknesses. In terms of strengths, it is reassuring that, with just one exception (N=17; Neyer et al., 2021), previous studies have recruited reasonable sample sizes (N=114 to 204). Sample size helps define statistical power, which is particularly important for a new field of study with unknown effect sizes. It is also reassuring that prior studies have employed qualitative as well as quantitative analyses. Qualitative analyses can be particularly useful in a new area of study since they can explore and reveal knowledge to a depth that is beyond a quantitative study. This is why they often have smaller sample sizes.

In terms of weaknesses, most previous studies have researched the potential impacts of the Imagination Library over a limited period of time (3 months to around 1 year; Neyer et al., 2021; Ridzi et al., 2014) or have not reported length of enrollment (Samiei et al., 2016). Since the Imagination Library delivers one book per month, this equates to 3 to 12 books. This limited time period may underestimate the strength of the association between the Imagination Library and outcomes such as shared book reading frequency (Ridzi et al., 2014).

Considering these strengths and weaknesses, the current study was designed to use both quantitative and qualitative analyses, with adequate statistical power based from known effect sizes reported by previous studies with good sample sizes, to measure the strength of the association between the Imagination Library and three outcomes over three years: (1) the home literacy environment (shared book reading frequency, shared book reading duration, and the number of books in the home); (2) reading attitudes and interactions; and (3) children's emerging literacy skills (concepts about print, alphabet knowledge, receptive vocabulary, expressive vocabulary, phonological awareness, and phonological memory).

Methods

Ethics approval

The quantitative and qualitative survey data presented in this study were collected by United Way Australia (UWA) according to its ethical rules and regulations. UWA is a community impact organization distributing the Imagination Library books across Australia since 2014. UWA provided the authors of this study with de-identified data for analysis, which was approved by Macquarie University (HREC 12106).

UWA and Macquarie University created a joint PhD position in 2022 for the first author to address two related, but different, goals. Reading scientists at Macquarie University were interested in understanding if shared book reading has an impact on cognitive and socioemotional skills in young children – as has often been claimed without the support of strong evidence. UWA were interested in determining if the Imagination Library has an impact on cognitive and socioemotional skills in young children, as assessed by more rigorous scientific methods than used previously.

The Imagination Library

The Imagination Library mails an age-appropriate book each month from birth until the child's 5th birthday. In Australia, the books are chosen by a selection committee who come from a variety of backgrounds, including: librarians, early childhood teachers, academics, a speech pathologist, and Aboriginal and Torres Strait Islander Peoples. The books selected focus on a variety of cultures, including Aboriginal and Torres Strait Island culture, and the books also represent different disabilities. Each book is accompanied by tip sheets that provide information on ways to approach shared book reading and related activities.

In Tamworth, distribution of the Imagination Library is supported by the Central Northern Regional Library, which provides demonstrations during Baby Book Time on reading the Imagination Library books to children as well as support for caregivers to do the same.

For a detailed description of the implementation of Dolly Parton's Imagination Library in Tamworth, New South Wales (NSW), Australia, please see Appendix 1.

Location

A community-wide implementation of the Imagination Library commenced on January 1, 2019, in Tamworth. This region is approximately 410 kilometers northwest of Sydney and covers nearly 10,000 square kilometers (1 million hectares). It has a population of over 63,000, with 12.7% identifying as Aboriginal and/or Torres Strait Islander (3.2% for Australia) and includes many remote smaller communities (Australian Bureau of Statistics [ABS], 2021). Based on ABS census data, the proportion of people who speak English as a first language is similar in Tamworth to all of Australia (68% and 72%, respectively), as is the proportion of people working full time (53% to 56%). However, the proportion of those with a university degree is lower in Tamworth (12%) than the rest of Australia (26%) (ABS, 2021).

Recruitment

In Tamworth, a Child Health Nurse at Tamworth Hospital conducted a standard newborn hearing test on every child. During the study period, the nurse returned the results of the hearing test to the caregiver with a leaflet about the Imagination Library program, an introductory children's book, and an enrollment form. The latter was completed by the Child Health Nurse and caregiver together (98% uptake), which was delivered to the Tamworth City Library team, who then registered the child into the Imagination Library Book Ordering System (Dollywood Foundation, TN, USA). Registered families were sent a child's library membership card, a welcome letter from the mayor, and information about community connecting events at Tamworth City Library, such as Baby Book Time.

Procedure

The surveys were sent via e-mail by UWA staff using the online survey platform SurveyGizmo (now Alchemer); each took seven to 10 minutes to complete. Caregivers were asked to complete the survey for the first child enrolled into the Imagination Library in their household. Therefore, only one survey per household was completed for the same child at each time point. The survey was only available in English and all caregivers were required to be over the age of 18 years to participate. (See Appendix 2 Table A1 for a summary of the demographic data collected for both the caregiver and child at all three time points, along with the questions for each of the three sections: home literacy environment, reading attitudes and interactions, and emerging literacy skills.)

Statistical power

Sample size estimation was undertaken post-baseline survey data collection. With 80% power, a sample size of N = 85 at three years was calculated to ensure sufficient data, which enabled the investigation of moderate correlation coefficients (StataCorp, 2016). An attrition rate of 25% based on previous longitudinal studies on shared book reading (de Bondt & Bus, 2022; Senechal & LeFevre, 2002) was anticipated.

Sample

A total of 635 caregivers were enrolled in the program between January 1, 2019 and March 15, 2020. This time frame was chosen as Australia entered a nationwide lockdown due to COVID-19 on March 18, 2020.

Although the book distribution continued throughout the entire time of COVID-19, the surveying methodology was interrupted in March 2020.

There were 343 surveys completed by caregivers after they had received the Imagination Library book (the "baseline (B)" sample). Thirty-six months later (i.e., three years), 263 caregivers (77% of 343) were still enrolled in the program (Note: 80/343 = 23% attrition), with the clue being provided by returned books through Australia Post that were labeled "return to sender" (i.e., United Way Australia or Tamworth City Library) due to a change of address (this suggests that one key factor for drop-out is that children were no longer in Tamworth). Of these 263 caregivers, 89 (34%) completed the threeyear survey (the "baseline +36 months [B + 36]" sample). Within the overall sample, 56 (63% of 89) had also completed a survey at six months (the "baseline +6 months +36 months Figure 1 provides a flow chart of participation and attrition for each sample.

The retention rate of 77% in this study was slightly lower than a previous study on the Imagination Library (84%, Anderson et al., 2019). However, the Anderson et al. study only followed participants for 1 year. Considering shared book reading studies that followed participants for at least 2 years, the

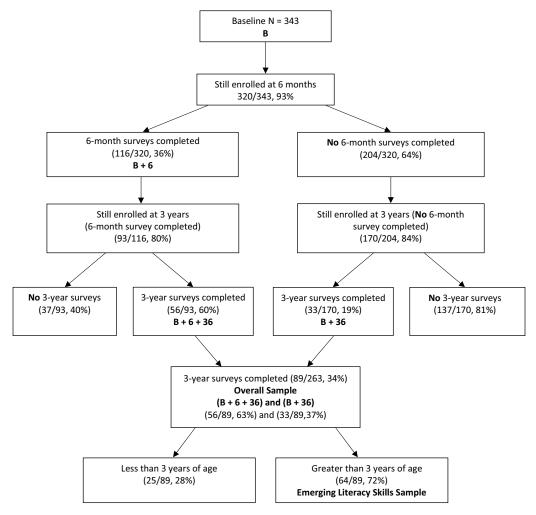


Figure 1. Participant flow diagram.



average retention rate is 72% (Attig & Weinert, 2020; Deckner et al., 2006; Farrant & Zubrikc, 2013; Marjanovič-Umek et al., 2017; Paulson et al., 2009; Tomopoulos et al., 2006). Thus, our retention rate of 77% is slightly better than previous studies on shared book reading.

Demographics

Table 1 reports descriptive statistics for the demographic data of the caregivers and their children for each stage of survey data collection. At baseline, caregivers identified their children as female (52%) or male (48%), with a mean age of 1.9 months, with 13% attending some form of early learning activities. At three years, the children were identified as female (45%) or male (55%), with a mean age of 39 months and 82% attending some form of early education.

At three years, all caregivers identified as parents (88% mothers), except one (a grandparent). Caregivers were aged 41–45 (9%), 36–40 years (36%), 31–35 years (33%), and 21–30 years (21%). All bar three caregivers reported English as the primary language in the home. In terms of occupation, 28/89 (32%) worked full-time, 40/89 (45%) worked part-time or casual, and 21/89 (24%) provided home duties. Forty-six percent of caregivers reported that their highest attainment of education level was high school/diploma/TAFE, and 54% stated that they had obtained a university degree.

Socioeconomic status was indexed at the Local Government Area (LGA) as recommended by the Australian government (see Appendix 1). All residents within the same postcode are assigned the same

Table 1. Descriptive statistics.

	Baseline (B) $(N = 343)$	6 months (B + 6) (N = 116)	3 years (B + 36) (N = 89)
Child demographics	N (%)	N (%)	N (%)
Gender			
Male	164 (48%)	53 (46%)	49 (55%)
Female	179 (52%)	63 (54%)	40 (45%)
Age Mean (SD)	1.9 m (2.1)	8.0 m (1.5)	39 m (3.5)
Early Learning Activities			
Ány	46 (13%)	39 (34%)	73 (82%)
None	297 (87%)	77 (66%)	16 (18%)
Disability			
Yes	_	_	4 (4%)
No	_	_	85 (96%)
Caregiver demographics			
Age bracket			
21–30 years	_	_	19 (21%)
31–40 years	_	_	29 (33%)
41–50 years	_	_	32 (36%)
>50 years	_	_	1 (1%)
Primary language spoken at home			
English	329 (96%)	114 (98%)	87 (98%)
Language other than English	14 (4%)	1(1%)	2 (2%)
Missing		1 (1%)	1 (1%)
Education			
High School/Diploma/TAFE	197 (57%)	24 (21%)	41 (46%)
University	129 (38%)	39 (34%)	48 (54%)
Missing	17 (5%)	53 (46%)	0 (0%)
Employment			
Full-time	_	_	28 (32%)
Part-time/casual	_	_	40 (45%)
Home duties	_	_	21 (24%)
Children in Household			
Enrolled	_	_	129
not enrolled	_	_	90

level using an Index of Relative Socio-economic Disadvantage (IRSD). Tamworth is represented by a single postcode and hence all caregivers had an index of 5/10, which represents a moderate level of disadvantage (Australian Bureau of Statistics, 2016).

When comparing the caregiver and child demographics in the three groups who (1) completed baseline but were no longer enrolled at three years, (2) completed baseline and were enrolled at three years but did not complete the survey, and (3) completed the baseline survey (see Supplementary Table S1), the only difference between the three groups was in the caregiver's highest education level. Specifically, those that were no longer enrolled were more often of lower education. Please note that 20% of the data for this variable was missing.

Books

A total of 3,242 age-appropriate and culturally sensitive books were delivered during the study. The median number of books per child was 39 (range 33-46). The word count for each book ranged from seven to 583 words per book. The median number of words per book was 285 (IQR 118-404).

Quantitative outcomes

The outcomes of this study were guided by the National Early Literacy Panel's (2008) review of studies of the home literacy environment and language development in preschool children (National Early Literacy Panel, 2008), as well as research conducted by Payne et al. (1994). These outcomes have been illustrated by the Dollywood Foundation in the Logic Model framework shown in Figure 2. The home literacy environment outcomes (shared book reading frequency, shared book reading duration, and the number of books in the home) and reading attitudes and interactions fall under the short-term outcomes, and children's emerging literacy skills (concepts about print, receptive vocabulary,

Logic Model Based on Imagination Library Research Findings and Literature Review.

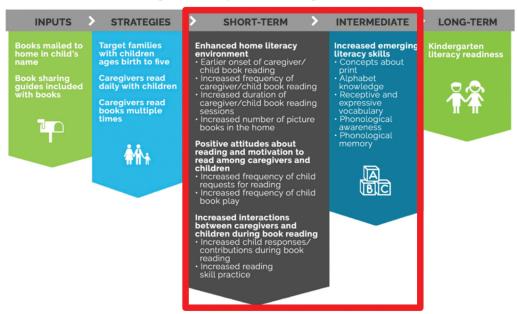


Figure 2. Dollywood Foundation logic model.

expressive vocabulary, phonological awareness, and phonological memory) fall under the intermediate outcomes. Appendix 2 Table A1 outlines what questions were asked and at which time points.

Home literacy environment

Caregivers responded to three survey items for the home literacy environment. Each item asked caregivers to respond using a different format, as described below. Responses produced skewed distributions due to low frequencies, and so were analyzed as dichotomized or ordinal outcomes. For frequency of book reading, dichotic values were less than daily versus daily or more, and ordinal values were less than three days per week, three to five days per week, or six or more days per week. Duration of shared book reading had just dichotic values (less than 10 minutes versus 10 or more minutes), as did number of children's books in the home (24 or less versus 25 or more) (see Appendix 2 Table A1).

Reading attitudes and interactions

Caregivers responded to nine survey items about the reading attitudes and interactions of children, caregivers, and the community. A variety of response options were used: five-point Likert scales, yes/no responses, and free-text writing (see Appendix 2 Table A1).

Emerging literacy skills

Caregivers responded to 11 items adapted from the Bailet Emergent Literacy Screener and the Early Language Scales (Bailet et al., 2018; Visser-Bochane et al., 2021). There were two survey items per skill except for phonological memory, which had one item. Caregivers responded to each item with rarely (score = 0), sometimes (1), or often (2). Each skill was represented by a summed score (i.e., a score of 0, 1, 2, 3, or 4, except for phonological memory, which was 0 or 1). The six summed scores were dichotomized, where caregivers reported often for both questions versus all other combinations of responses (see Appendix 2 Table A1).

Qualitative outcomes

One conclusion from Ridzi et al. (2017) was that future research into the Imagination Library should collect qualitative feedback to explore wider benefits from the program. The surveys for this study therefore included a single open-ended free-text statement: "If you would like to share additional feedback on the program or notes on this survey, you are welcome to do so here."

Quantitative analyses

Home literacy environment

For the three items administered at baseline, six months, and three years, we calculated the percentage of caregivers who selected each ordinal or dichotomized value on the relevant scale (e.g., for the number of children's books in the home, 4% selected none, 18% selected 10-24, 67% selected 25-100, and 11% selected more than 100). We then compared these percentage values between baseline and three years (the B + 6 + 36 and B + 36 sample; N = 89) and also between baseline, six months, and three years (B + 6 + 36 sample; N = 56; see Table 2).

We used the percentage scores to compare caregiver responses in our two samples to those collected by two large independent Australian databases: the Longitudinal Study of Australian Children (LSAC; Australian Government Department of Social Services, 2022), and Australia's Children (Australian Institute of Health and Welfare [AIHW], 2017). The LSAC data were collected when children were under 1 year old (N = 5,107;2004) and again when they were two to three years old (N = 4,606;2006). The relevant items for this study were: frequency of shared book reading (every day six to seven days in the previous week) and duration of shared book reading (average minutes the child



Table 2. Summary of shared book reading frequency.

	Full Sample	6-montl	n sample	Subgroup sample		3–year sample
	Baseline		6-month	3–year data		Overall sample
	(B)	Baseline	(B + 6)	(B + 6 + 36)	Baseline	(B + 6 + 36 and B + 36)
	(N = 343)	(N = 116)	(N = 116)	(N = 56)	(N = 89)	(N = 89)
Frequency of reading						
Not applicable, too young	54 (16%)	16 (14%)	2 (2%)	0 (0%)	10 (11%)	0 (0%)
Once every few months	5 (2%)	1 (1%)	1 (1%)	0 (0%)	1 (1%)	2 (2%)
Once a month	3 (1%)	1 (1%)	2 (2%)	1 (2%)	0 (0%)	0 (0%)
Once a fortnight	6 (2%)	2 (2%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)
Once a week	35 (10%)	7 (6%)	3 (3%)	1 (2%)	10 (11%)	3 (3%)
2 times a week	67 (20%)	17 (15%)	8 (7%)	3 (5%)	15 (17%)	9 (10%)
3 to 5 times a week	3 (1%)	0 (0%)	15 (13%)	7 (13%)	0 (0%)	10 (11%)
6 times a week	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Every day	132 (39%)	57 (49%)	55 (47%)	23 (41%)	40 (45%)	37 (42%)
More than once a day	38 (11%)	15 (13%)	30 (26%)	21 (38%)	12 (14%)	28 (32%)
Duration of reading						
No reading	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0(0%)
Fewer than 10 minutes	96 (36%)	37 (42%)	38 (36%)	6 (13%)	26 (38%)	6 (8%)
10-20 minutes	137 (51%)	40 (46%)	61 (57%)	35 (73%)	35 (51%)	57 (74%)
21-40 minutes	25 (9%)	10 (11%)	8 (8%)	7 (15%)	6 (8%)	13 (17%)
More than 40 minutes	10 (4%)	1 (1%)	0 (0%)	0 (0%)	2 (3%)	1 (1%)
Number of books in the home						
None	12 (4%)	1 (1%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)
10–24	61 (18%)	17 (15%)	26 (23%)	0 (0%)	13 (15%)	0 (0%)
25-100	231 (67%)	83 (72%)	70 (60%)	25 (45%)	61 (69%)	47 (53%)
More than 100 books	39 (11%)	15 (13%)	19 (16%)	31 (55%)	11 (12%)	42 (47%)

is read to). The relevant items in the AIHW's (2017) report ($N \sim 800,000$ children) were the frequency of caregivers' shared book reading or storytelling (three or more days in the previous week) and the number of children's books in the home (25-100 books) when children were 0 to 2 years of age.

We then investigated the shared book reading frequency of caregivers over time as a dichotomized outcome (daily [or more] versus less than daily) using unadjusted odds ratios to determine a measure of association between the frequency of shared book reading at baseline with shared book reading at six months and three years along with shared book reading frequency at six months with shared book reading at three years.

Reading attitudes and interactions

Six of the nine items used Likert scales to gather responses from caregivers, two provided simple yes/no options, and one requested a free-text response. The percentage of caregivers who provided each type of ordinal and yes/no response was calculated, and these percentages were compared between baseline and three years (the B + 6 + 36 and B + 36 sample; N = 89) and also between baseline, six months, and three years (B + 6 + 36 sample; N = 56). For the free-text response item (Benefits of the Program), key words were identified from all caregiver free-text responses to determine themes (e.g., range of books, love of reading). These themes were then tallied to determine the three themes with the highest frequency and proportions reported for the top three themes.

Emerging literacy skills

Of the 89 caregivers who completed surveys at baseline and three years (B + 6 + 36 and B + 36), 64 (72%) had children who had turned three. We used the responses of these caregivers to the 11 items and six summed scores to assess emerging literacy skills. For each item, we calculated the percentage of caregivers who provided ordinal responses of rarely, sometimes, or often. For 10 of these items, we calculated the percentage of caregivers whose ordinal responses were 0, 1, 2, 3, or 4. For the eleventh item, we calculated the percentage of caregivers whose ordinal summed score was 0, 1, or 2.

We conducted three statistical analyses (with p < .05) to test if there was an association between ordinal measures of emerging literacy skills and frequency of shared book reading. First, we used non-parametric Mann – Whitney U tests to compare the ordinal responses of two groups of caregivers: those whose children were read to daily (or more) to those whose children were read to less than daily. Second, we investigated unadjusted odds ratios to determine a measure of association between shared book reading frequency (daily [or more] versus less than daily) with the six summed scores for emerging literacy at three years. Third, we calculated Spearman's rank correlations (r) between the ordinal measure of shared book reading frequency (fewer than three days, three to five days, or six or more days) and the summed scores for each variable. Calculation of the confidence intervals for Spearman's rank correlation coefficients applied the Fieller and Pearson (1961) methodology. In line with the recommendations of Gignac and Szodorai (2016), we interpreted r values of 0.10, 0.20, and 0.30 as relatively small, moderate, and large, respectively.

Qualitative analysis

The qualitative analysis for where caregivers were given the option to share any additional feedback about the program or survey applied a deductive approach, working from general to more specific themes, and had two main phases. First, written responses were read carefully and subdivided into categories: shared book reading environment, empowerment/behaviors/family, social, cultural – Indigenous, public library, and general community. In the second phase, the data were compared for a thematic analysis of the codes following the guidelines of Singh et al. (2015). In brief, the lead author copied each response into Microsoft Excel (one row per response) and assigned one category label per response using keywords. An independent research assistant then checked the assignment of responses to categories. De-identified statements are provided from the raw feedback provided by caregivers under five thematic headings.

Results

Quantitative results

The home literacy environment

Frequency of shared book reading. For the sample who completed surveys at baseline and three years $(B+6+36 \text{ and } B+36;\ N=89)$, the proportion of caregivers reading daily or more to their child increased from 59% at baseline (after receiving one book) to 74% at three years (see Table 2). This is notably higher than data obtained from the LSAC study, which estimated that 58% of children age two to three years (N=4,606) were read to six to seven days per week.

In the Tamworth sample, caregivers who read daily or more at baseline were five times more likely to read daily or more at three years (OR 4.9, 95% CI 1.8,13.7) (see Table 3). Further, 68% of 3-year-old children were read to twice a week or more by other caregivers (usually fathers; see Supplementary Table S2).

Table 3. Unadjusted odds ratios for reading frequency (daily or more vs. less than daily) at baseline, six months, and three years.

Predictor (IV)	Sample	Sample Size	OR (CI)
Predicting of	daily (or more) reading at 6	months	
Frequency of reading at baseline	B + 6	N = 116	5.7 (2.3,13.8)
	Predicting daily (or mo	ore) reading at 3 years	
Frequency of reading at baseline	B + 36	N = 89	4.9 (1.8,13.7)
Frequency of reading at 6 months	B + 6 + 36	N = 56	5.9 (1.2,29.0)



For the sample who also completed the survey at six months (B + 6 + 36; N = 56), 73% reported daily or more reading at six months. This is higher than the 60% estimated by the AIHW (2017) report for $N \sim 800,000$ children age 0 to two not on the Imagination Library.

Caregivers who read daily or more at baseline (B + 6, N = 116) were nearly six times more likely to read daily or more at six months (OR 5.7, 95% CI 2.3,13.8) (see Table 3).

Duration of shared book reading. For the sample who did surveys at both baseline and three years (B + 6 + 36 and B + 36; N = 89), the median duration of caregiver reading was 10–20 minutes at both baseline and three years, with the proportion of those reading more than 10 minutes increasing from 62% at baseline to 92% at three years.

For the sample (N = 56) who also completed a survey at six months (B + 6 + 36), the median duration of caregiver reading was 10-20 minutes at baseline, six months, and three years, with the proportion of those reading more than 10 minutes increasing from 58% at baseline to 65% at six months. This is notably higher than data obtained from the LSAC study, which estimated 33% of children aged under one year (N = 5,107) were read to for more than 10 minutes on average per sitting.

Number of children's books in the home. For the sample who did surveys at baseline and three years (B + 6 + 36 and B + 36; N = 89), 85% of caregivers reported having more than 25 books at baseline, which increased to 100% at three years. For the sample who also completed the survey at six months (B + 6 + 36; N = 56), the median number of books in the home was 25–100, with 76% of caregivers reporting they had more than 25 books in the home at six months. This is much higher than the 44% reported by the AIHW (2017) for $N \sim 800,000$ children age 0 to two not on the Imagination Library.

Reading attitudes and interactions

The responses of caregivers who did surveys at baseline and three years (B + 6 + 36 and B + 36; N = 89; see Supplementary Table S3) indicated that at three years, 75% of children asked to be read to daily, 85% of caregivers felt more connected to the child, and 84% reported spending more quality time together as a family. Nearly all caregivers (96%) thought reading to the child was important, 99% would recommend the program, and 78% found that the tip sheets were useful. At three years, many caregivers were using repeating/rhyming words (62%) and counting images/objects (81%), with nearly half using repeating/teaching letter sounds (47%) and discussing the plot (49%). Nearly all children (91%) had a library card at three years, and 51% had visited the library in the last six months with the caregiver and 19% with another family member. At three years, 50% of caregivers reported that the greatest benefit of the program was that their child had developed a love of books/reading, 33% reported the opportunity to learn from the books, and 11% reported the range of books being provided.

For the sample who also did the survey at six months (B + 6 + 36; N = 56), the proportion of children who asked the caregiver to be read to daily increased from 16% at six months to 77% at three years (see Supplementary Table S3). The proportion of caregivers who felt more connected to the child and reported spending more quality time together as a family remained constant (79%-82% and 82%-84%, respectively). At six months, 83% of caregivers thought reading to the child was important, which increased to 100% at three years. The proportion of caregivers who would recommend the program at both six months (98%) and three years (100%) remained constant, as did the proportion of those who found the tip sheets useful (76% at six months and 79% at three years). With respect to the reading techniques, the proportion of caregivers reporting using these increased between six months and three years: repeating/teaching rhyming words (53%-68%), repeating/teaching letter sounds (35%-45%), counting images/objects (72%-79%), and discussing the plot (16%-50%). For the sample who also did the survey at six months (B + 6 + 36; N = 56) and at three years, 42% of caregivers reported that the greatest benefit of the program was that their child had developed a love of books/reading, 31% reported the opportunity to learn from the books, and 20% reported the range of books being provided.



Emerging literacy skills

Concepts about print. At three years, many caregivers reported that their child often held books correctly (84%) or pretended to read by pointing to words (58%) (see Table 4). Mann – Whitney U tests indicated a statistically significant difference between daily (or more) reading and less than daily reading for holding books correctly (p = .004) but not pretending to read (p = .227). For the summed score across both items, the graphical representation (see Figure 3) shows a higher percentage for children read to daily or more (61%) than read to less than daily (33%). Unadjusted odds ratios demonstrated no significant association between the summed score and the frequency of reading dichotomized (daily [or more] versus less than daily). However, Spearman's rank correlations demonstrated a moderate association between the frequency of reading (ordinal: fewer than three days, three to five days, or six or more days) and concepts about print (0.264; 95% CI 0.13,0.485, p = .035); that is, more shared book reading was associated with more familiarity with print materials.

Alphabet knowledge. Approximately two-thirds of caregivers indicated that their child sometimes (34%) or often (30%) named letters, while one-third reported that their child rarely demonstrated this skill (36%) (see Table 4). Almost one-half of caregivers (47%) indicated that their child made the sounds of letters, while one-half (53%) responded that their child rarely did. There was a statistically significant difference between daily (or more) reading and less than daily reading for naming the letters (p = .027) but not for the child making the sounds of the letters (p = .406). For the summed score across both items, the graphical representation (see Figure 3) shows similar percentages for children read to daily or more (12%) and less than daily (13%). Unadjusted odds ratios demonstrated no significant link between the summed score for concepts about print and the frequency of reading (daily [or more] versus less than daily). Spearman's rank correlations demonstrated a significant moderate relationship between the frequency of reading (ordinal: fewer than three days, three to five days, or six or more days) and concepts about print (0.223; 95% CI -0.032,0.450, p = .077); that is, more shared book reading was somewhat associated with more familiarity with alphabet knowledge.

Receptive vocabulary. Most caregivers reported that their child often answered questions like who, what, where, and why (53%) or the child could follow directions including two or more steps (64%) (see Table 4). There was a statistically significant difference between daily (or more) reading and less than daily reading for answering questions (p = .039) but not for following directions (p = .152). For the summed score across both items, the graphical representation (see Figure 3) shows a higher percentage for children read to daily or more (43%) than read to less than daily (33%). Unadjusted odds ratios demonstrated no significant association between the summed score and the frequency of reading dichotomized (daily [or more] versus less than daily). However, Spearman's rank correlations demonstrated a moderate relationship between the frequency of reading (ordinal: fewer than three days, three to five days, or six or more days) and receptive vocabulary (0.225; 95% CI -0.029,0.452, p = .073); that is, more shared book reading was associated with more receptive vocabulary.

Expressive vocabulary. The majority of caregivers reported that their child could retell the sequence of events in a story (63%), or the child could connect two sentences using the word "and" (64%) (see Table 4). There was a statistically significant difference between daily (or more) reading and less than daily reading for retelling the sequence (p = .012) but not for connecting two sentences (p = .093). For the summed score across both items, the graphical representation (see Figure 3) shows a higher percentage for children read to daily or more (63%) than read to less than daily (33%). Unadjusted odds ratios demonstrated a significant association between the summed score and the frequency of reading dichotomized (daily [or more] versus less than daily) (OR 3.4, 95% CI 1.1,11.7). Spearman's rank correlations demonstrated a moderate association between the frequency of reading (ordinal: fewer than three days, three to five days, or six or more days) and expressive vocabulary (0.288; 95%)

Table 4. Mann-Whitney U test and unadjusted odds ratios for children's emerging literacy skills ordinal and dichotomized and frequency of reading dichotomized and ordinal at age three.

				Daily ($N = 49$) and < daily reading ($N = 15$)		Ordinal readin (N = 64)	
N = 64 (over 3 years old) Emerging literacy skills sample	Rarely N (%)	Sometimes N (%)	Often N (%)	Mann- Whitney	OR (95% CI)	r (95% CI) p value	
My child holds books the correct way up and turns pages for	2 (3%)	8 (13%)	54 (84%)	<i>p</i> = 0.004	-		
reading My child pretends to read by pointing to words or moving their finger left to right across the writing	10 (16%)	17 (27%)	37 (58%)	p = 0.227	-		
Concepts about print (Sum of the above two questions)			2= (===()	p = 0.036		0.264 (0.13, 0.485) p = 0.035	
Concepts about print (Often in both questions)			35 (55%)		3.2 (0.9,10.7)		
My child can name letters that you point to	23 (36%)	22 (34%)	19 (30%)	p = 0.027	-		
My child can make the sounds of the letters you point to	34 (53%)	19 (30%)	11 (17%)	p = 0.406	_		
Alphabet knowledge (Sum of the above two questions)				<i>p</i> = 0.077		0.223 (-0.032,0.450) $p = 0.077$	
Alphabet knowledge (Often in both			8 (13%)		0.9 (0.2,5.0)	p = 0.077	
questions) My child answers questions like who, what, when, where, and	5 (8%)	25 (39%)	34 (53%)	p = 0.039	-		
why? My child can follow directions that include two or more steps	6 (9%)	17 (27%)	41 (64%)	p = 0.152	-		
Receptive vocabulary and language (Sum of the above two				p = 0.073		0.225 (-0.029,0.452)	
questions) Receptive vocabulary and language			26 (41%)		1.5 (0.4,5.0)	p = 0.073	
(Often in both questions) My child can retell the sequence of events in a story or an activity	7 (11%)	17 (27%)	40 (63%)	p = 0.012	-		
(e.g., making something) My child can connect two sentences using the word "and"	7 (11%)	16 (25%)	41 (64%)	p = 0.093	-		
expressive vocabulary and language (Sum of the above two questions)				<i>p</i> = 0.022		0.288 (0.038,0.504) $p = 0.021$	
Expressive vocabulary and language (Often in both questions)			36 (56%)		3.4 (1.1,11.7)	ρ = 0.021	
them what rhyme (e.g., If I ask them what rhymes with "bed," they would say red, head, said, etc.)	30 (47%)	26 (41%)	8 (13%)	p = 0.223	-		
My child can name words beginning with a certain sound (e.g., If I ask them what starts with "buh," they would say bed, bath, ball, etc.).	28 (44%)	25 (39%)	11 (17%)	<i>p</i> = 0.706	-		
Phonological awareness (Sum of the above two questions)				p = 0.358		0.116 (-0.141,0.358) p = 0.137	
Phonological awareness (Often in both questions)			6 (9%)		1.6 (0.2,14.8)	F 2.131	
My child can repeat new words that they hear	3 (5%)	14 (22%)	47 (73%)	p = 0.136	-		
Phonological memory (As above)				p = 0.136		0.188 (-0.680,0.421)	
Phonological memory (Often in the			47 (73%)		2.3 (0.7,7.9)	p 0.137	

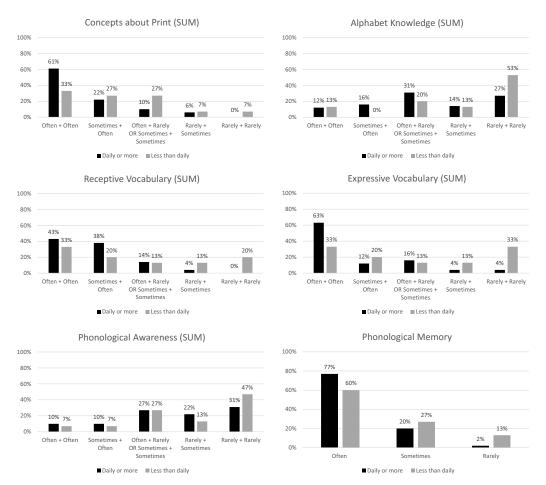


Figure 3. Proportion of responses for the summative emerging literacy skills at three years comparing daily or more reading (N = 49) vs. less than daily reading (N = 15) at three years for those children over three years (N = 64/89, 72%).

CI 0.038,0.504, p = .021); that is, more shared book reading was moderately associated with more expressive vocabulary.

Phonological awareness. Nearly all caregivers indicated that their child sometimes (41%) or rarely (47%) could rhyme, which was similar for the child naming words beginning with a certain sound (sometimes 39% or rarely 44%) (see Table 4). There was no statistically significant difference between daily (or more) reading and less than daily reading and rhyming (p = .223) or for the child naming words

(p = .706). For the summed score across both items, the graphical representation (see Figure 3) shows similar percentages for children read to daily or more (10%) and less than daily (7%). Unadjusted odds ratios demonstrated no significant association between the summed score for phonological awareness and the frequency of reading (daily [or more] versus less than daily). However, Spearman's rank correlations demonstrated a weak and non-significant relationship between the frequency of reading (ordinal: fewer than three days, three to five days, or six or more days) and phonological awareness (0.116; 95% CI -0.141,0.351, p = .137).

Phonological memory. Most caregivers reported that their child could repeat new words they hear (73%) (see Table 4). There was no statistically significant difference between daily (or more) reading



and less than daily reading for repeating new words (p = .136). The single-question graphical repre-

(see Figure 3) shows a higher percentage for children read to daily or more (77%) than read to less than daily (60%). Unadjusted odds ratios demonstrated no significant association between the single question for phonological memory and the frequency of reading dichotomized (daily [or more] versus less than daily). Spearman's rank correlations demonstrated a weak and non-significant association between the frequency of reading (ordinal: fewer than three days, three to five days, or six or more days) and phonological memory (0.188; 95% CI -0.680,0.421, p = .137); that is, more shared book reading was slightly associated with more phonological memory.

Oualitative results

Qualitative feedback was provided from 43/89 (48%) of caregivers at three years.

Shared book reading environment

Many caregivers commented on the importance of the book arrivals from the child's perspective (e.g., "Dolly sent me another book"), and many families highlighted the routine that went with the monthly arrival, especially the day the post person arrives with the book (e.g., "Just take those few minutes when the child asks to be read to" as the child receives "something of joy directly for them"). Families also highlighted that the monthly books established "the child's own library before school" and ensured "there are no excuses in terms of accessing quality literature on the program." Some caregivers commented on the usefulness of the tip sheets (e.g., "I didn't know where to start with the books and the tip sheets would always give me confidence," "Leaving the tip sheets on the fridge were another gentle reminder," "The tip sheets provided a rough ballpark of steps for me and as a new mum that really helped").

Empowerment/behaviors/family

A second key theme coming through the feedback focused on the empowerment that caregivers felt from participation in the program: "My town values my son and his future. They will financially support this to say, 'Hey, your baby matters and will in the future'" and "An adult in Tamworth thinks it is important enough to send a book to my child and somebody sends that book for free." Multiple caregivers reported that "spending money on books was not an option" or "If we had any money left over, we would not have spent it on books - it would have been on extra baby formula." There were numerous comments relating to the age at which shared book reading could be started (e.g., "I never knew reading to babies was 'a thing."") and how it might help communication with a baby (e.g., "having a baby who can't speak back and I don't know what to say, reading a book to her is great;" "My child's dad doesn't know what to do with the baby but by getting the book it gives him the opportunity to read to her;" and "My partner's interest in reading to our bub, his reading skills and relationship with bub has improved dramatically through reading to our bub"). Finally, the impact of the program on siblings and grandparents/other caregivers was noted: "We open it as a family, I read the tip sheet first to help guide me, and then we all sit and read it together and go straight on to the additional tips;" "I read it to my six-year-old and we discuss the book and then she reads to my eightmonth-old. It's beautiful to see them interact;" and "I wait for my oldest son to come home from school, and we read the book all together." Of the 89 households from which the caregivers completed the surveys, a further 90 siblings were also in the household but not enrolled in the program, therefore extending the reach of the books ((90 + 129)/129 = 170% reach).

Social

Two "social" themes emerged, the first being the social connection of the children to each other. Feedback highlighted interactions between the children around familiar books and characters within the books in the playground, social play gatherings, along with preschools (e.g., "Because the children



all have access to the Dolly Parton books . . . by every child getting the program . . . they are all familiar with the characters in the books, which gives the children a connection"). The second social theme related to the socio-economic nature of Tamworth. The "universal approach was not done by social standing ... creates an equal playing field ... [with] all kids equally important;" "kids with the best start possible irrespective of their situation;" and "the common reading the children are getting will bring a social benefit and they will know more about life."

Cultural – Indigenous

Feedback provided by Aboriginal and Torres Strait Islander caregivers demonstrated the intergenerational impact of the program, with families saying "uncles ... grandfathers were excited for the children to be getting the books because they never had access to books and now, they are all reading together." In other cases, Indigenous families reported how their children were able to identify with the characters in some of the books: "My kids couldn't believe that kids of their color could fly a plane, they really looked into it a lot deeper." This was identified as being important by one grandparent/teacher, who stated that "it is important for a child to be able to link to their own lives, if the story is something they can relate to and that is available through the program as a lot of the stories are Indigenous."

Library and community

The library in Tamworth provides a central hub where families can go to for support: "You can just walk into the library and so much is happening, Baby Book Time, story time, toddler time ... adult literacy classes ... gives another space for social interaction brought together by the program." Comments about challenges with shared booked reading (e.g., "I don't really know how to read these books" or "I struggled at school, my mum struggled") also highlighted the contribution of libraries, such as "The library has helped me so much and I am feeling more confident to read the books after watching the library lady read the program books out loud in the library." One caregiver stated that "this program not only helps our children's literacy but our own as well."

Community connectedness also emerged from the qualitative analysis: "The Imagination Library is about strengthening our community and forging a generation of early childhood literacy at the forefront;" "it is a fantastic resource for our community" and "an asset to the community." Caregivers responded with feedback about the connection the program provided during COVID-19: "The books replaced the day care, and we would watch the Facebook posts on how to read the books from the preschool to help us." This was also the case for rural/remote communities: "There are so many places without internet out here so having physical books is really important and they just turn up in the mail."

Concerns and criticism

Although most feedback about the program and surveys was positive (55/59, 93%), there were four issues raised by caregivers. The first two issues related to the logistics of book delivery. First, at both six months and three years, some caregivers reported that the books did not always arrive at the same time for all the children or consistently at the beginning of each month. Second, it was noted that some books were arriving bent in the mailbox. Third, while the inclusion of Aboriginal and Torres Strait Islander books was appreciated, it was noted that including books from all over the world would help broaden the learning for the children. One final criticism was expressed in the disappointment of one caregiver that their child would no longer receive the books because they had to move from the region.

Discussion

This study investigated the association between Dolly Parton's Imagination Library and the home literacy environment, reading attitudes and interactions, and children's emerging literacy skills. To this end, we analyzed the survey responses of 343 caregivers in Tamworth who were enrolled in the



Imagination Library in 2019 and completed surveys after receiving one book (baseline) and then at six months and/or three years (36 months). Below we use the results of both quantitative and qualitative analyses to address each of the study aims in turn.

Home literacy environment

Regarding the frequency of shared book reading, our findings indicated that the proportion of caregivers reading daily increased from 59% at baseline to 74% at three years and that those reading to the child more than once a day tripled from baseline to three years (14% to 42% respectively). These percentages are higher than those reported by the large-scale LSAC database. Further, they are similar in size, if not larger, than those reported by previous studies of the Imagination Library (Bradley et al., 2001; Harvey, 2016; Ridzi et al., 2014). The results from this study indicate that engagement in the Imagination Library is associated with increased frequency of shared book reading.

Another finding from this study was that caregivers reading daily or more to their child at baseline were five times more likely to be reading daily or more at six months and at three years. In our study, 76% of caregivers were reading twice a week or more from birth, which suggests that early reading routines were sustained through to three years. This is a key finding since Theriot et al. (2003) outlined that the early onset of routine reading practices has been associated with receptive and expressive language skills in toddlers, and also verbal performance and higher reading scores in the primary years.

Our finding that nearly 70% of fathers were reading more than twice a week to their child at three years was an interesting outcome given that previous research by Duursma et al. (2008) found less than half of fathers read to their children regularly. This is an encouraging result because fathers' use of language is different from mothers' (Duursma et al., 2008; Paulson et al., 2009) and has been found to be predictive of children's expressive language at three years (Paulson et al., 2009).

With respect to the duration of shared book reading, our finding that 65% of children at six months were read to for more than 10 minutes a day was encouraging, especially when compared to the LSAC study, in which only 33% of children under one year old (N = 5,000 approximately) were read to for more than 10 minutes a day. This finding indicates that participation in the Imagination Library is associated with caregivers spending more time reading to their children than is typically the case for Australian caregivers.

In terms of the number of children's books in the home, given the frequent delivery of books by the Imagination Library (12 books per year), our finding that 76% of children had at least 25 books in the home by six months was not unexpected. This percentage is notably higher than the AIHW (2017) estimate that 44% of children in Australia aged birth to two years have at least 25 books in the home (more specifically, 25-100). This is a key finding given that the number of children's books in the home has been associated with children's later language and literacy abilities (Baker, 2014; Chen & Ren, 2019; de Bondt et al., 2020; Funge et al., 2017).

For the home literacy environment, findings from our study suggest that children in the Imagination Library in Tamworth were read to more frequently, for longer durations, and had more books in their home than the average Australian child, as represented by data provided by large Australian Government surveys.

Reading attitudes and interactions

Given that the fundamental goal of the Imagination Library is to develop a love of reading in children, a key finding of this study is that caregivers reported that more than 75% of children were interested in books and reading at three years. This is an important finding given that studies have found that children who are interested in books are more likely to ask to be read to, explore books on their own, and self-direct their reading and learning (DeBaryshe, 1995), and that the latter is, in turn, associated with lower incidence of placement in special education and higher rates of school completion (Reschly, 2010).

Our finding that, after three years of participation, 96% of caregivers would recommend the program was a strong indicator of satisfaction with the books and administration of the Imagination Library program in Tamworth. Further, three out of four caregivers reported that they found the tip sheets useful. Such resources are particularly useful for caregivers with low reading proficiency (Newman, 1996), which can affect the nature of the shared book reading (Aram et al., 2013). They are also useful for families located on rural properties – such as those in the Tamworth region - where access to books and supporting information for caregivers is limited, and reading practices are typically limited to the home (Zgourou et al., 2021).

Finally, it was encouraging to see that the percentage of caregivers who used all the suggested reading techniques increased by an average of 17% from six months to three years since previous studies had found that caregiver engagement (i.e., caregiver asking questions) during shared book reading enhances the development of emerging literacy skills above and beyond reading without extra interaction between the caregiver and child (DesJardin et al., 2017; Landry et al., 2012; Li et al., 2021; Schmitt et al., 2011).

In summary, the positive attitudes reported by caregivers and the high proportion of children interested in reading suggest that the Imagination Library promotes shared book reading as an important contributor to caregivers' beliefs in the importance of regular reading to the child and, thus, the child developing a love of books.

Children's emerging literacy skills

Regarding concepts about print ("My child holds books the correct way up and turns pages for reading;" "My child pretends to read by pointing to words, or moving their finger left to right across the writing"), caregivers reported that most children (84%) could hold the book the correct way and children who experienced a higher frequency of shared book reading (daily or more) at three years held the book correctly significantly more often than those who were read to less frequently (less than daily). In contrast, just over half (58%) of the children pretended to read, but there was no difference between those children who experienced a higher frequency of shared book reading (daily or more) and those who experienced a lower frequency of shared book reading (less than daily). For the summed score for concepts about print, over half the children (55%) in the Imagination Library program often demonstrated this skill, and children who experienced a higher frequency of shared book reading (daily or more) at three years demonstrated this skill significantly more often than those who were read to less frequently (less than daily) (p = .036). This was supported by the finding that there was a moderate and significant association (r = 0.264, p = .035) between increasing levels of shared book reading frequency (fewer than three days, three to five days, or six or more days) and summed score for reading concepts about print. Together, these findings suggest that higher frequency of shared book reading in the Imagination Library is associated with improved development of concepts about print in young children. Our findings align with those of Anderson et al. (2019), who also found a moderate and significant association between increases in the frequency of shared book reading and concepts about print (r =0.242, p < .05) in 152 children in the USA who were in the Imagination Library program.

With respect to alphabet knowledge ("My child can name letters that you point to;" "My child can make the sounds of the letters you point to"), caregiver reports indicated that most children (64%) could name letters sometimes or often, and children who experienced a higher frequency of shared book reading (daily or more) at three years named letters significantly more often than those who were read to less frequently (less than daily; p = .027). In contrast, just less than half (47%) of the children could make the sounds of the letters sometimes or often, and there was no difference between those children who experienced a higher frequency of shared book reading (daily or more) and those who experienced a lower frequency of shared book reading (less than daily). Given that the two items assessing alphabet knowledge produced different results, it was unsurprising that the moderate relationship between the summed score for alphabet knowledge and levels of shared book reading frequency (fewer than three days, three to five days, or six or more days) was non-significant

(r = 0.223, p = .077). Therefore, the results of this study suggest that shared book reading is associated with the development of knowledge of letter names in 3-year-old children, but not letter sounds. This is appropriate given that older children (i.e., five to six years) typically require explicit and repetitive instruction to master letter-sound knowledge. To our knowledge, this is the first study to analyze caregiver reports on letter naming and letter-sound knowledge in children in the Imagination Library, and hence we cannot compare this finding to previous work to ascertain its reliability.

In terms of receptive vocabulary ("My child answers questions like who, what, when, where, and why?;" "My child can follow directions that include two or more steps"), caregivers reported that over half of the children (53%) could often answer who-what-when questions, and children who experienced a higher frequency of shared book reading (daily or more) at three years could answer such questions significantly more often than those who were read to less frequently (less than daily) (p = .039). In addition, caregivers reported that the majority of children (64%) could follow directions, although there was no significant difference between children who experienced a higher frequency of shared book reading (daily or more) and those who experienced a lower frequency of shared book reading (less than daily). The fact that shared book reading is more likely to prompt who-what-when questions by caregivers than instructions to follow complex directions may provide a clue for the pattern of outcomes across all the emerging literacy variables, as discussed in the final paragraph of this section. The summed score indicated that many children did not often demonstrate this emerging literacy skill (41%), and there was a moderate but non-significant association (r = 0.225, p = .073) between the summed score and increasing levels of shared book reading frequency (fewer than three days, three to five days, or six or more days).

For expressive vocabulary ("My child can retell the sequence of events in a story or an activity (e.g., making something); "My child can connect two sentences using the word 'and'"), caregivers reported that most children (63%) could retell the sequence of events and children who experienced a higher frequency of shared book reading (daily or more) at three years could retell the sequence of events correctly significantly more often than those who were read to less frequently (less than daily). A similar proportion of caregivers reported that children could connect two sentences (64%); however, there was no significant difference between children who experienced a higher frequency of shared book reading (daily or more) at three years connecting sentences correctly more often than those who were read to less frequently (less than daily). Our analysis estimated that over half the children (56%) in the Imagination Library program often demonstrated expressive vocabulary, as represented by the summed score across two items. Children who experienced a higher frequency of shared book reading (daily or more) at three years demonstrated this skill significantly more often than those who were read to less frequently (less than daily) (p = .022). This was supported by the finding that children who were read to daily (or more) were three times more likely to demonstrate the skill than those who were read to less frequently and that there was a moderate relationship (r = 0.288, p = .021) between increasing levels of shared book reading frequency (fewer than three days, three to five days, or six or more days) and frequency of expressive vocabulary skill. Together, these findings suggest more frequent shared book reading is associated with more developed expressive vocabulary in young children. This is the first study, to our knowledge, to address the association between shared book reading and expressive vocabulary in children in the Imagination Library; hence, we cannot compare our findings to previous work.

In relation to phonological awareness ("My child can rhyme [e.g., If I ask them what rhymes with 'bed,' they would say red, head, said, etc.];" "My child can name words beginning with a certain sound [e.g., If I ask them what starts with 'b' they would say bed, bath, ball, etc.]"), just over half the children (54%) were reported to rhyme sometimes or often and could name words beginning with a certain sound (56%). However, there was no difference between children who were read to at least once per day compared to those read to less than once per day for either of these items. It is interesting to note that these results are similar to those for letter-sound knowledge since these two variables are closely related in children in the early school years. Considering the summed score for phonological awareness at three years, the vast majority of children did not often demonstrate this skill (91%), there



was no significant difference between children who were read to at least once per day compared to less than once a day (p = .358), and there was a weak and non-significant relationship (r = 0.116, p = .137) between increasing levels of shared book reading frequency (fewer than three days, three to five days, or six or more days).

Finally, phonological memory was assessed using a single item ("My child can repeat new words that they hear"). Our study indicated that 73% of children often demonstrated this skill. However, at three years, there was no difference between children who experienced relatively higher (daily or more) and lower (less than daily) frequency of shared book reading for reported phonological memory (p = .136). In line with this, there was a weak and non-significant relationship (r = 0.188, p = .137) between increasing levels of shared book reading frequency (fewer than three days, three to five days, or six or more days) and caregiver reports of children's phonological memory. Again, this is the first study, to our knowledge, to test this in children who are in the Imagination Library program; hence, we cannot compare our findings to previous work.

In summary, our findings suggest that the Imagination Library is associated with reports of more advanced emerging literacy skills in 3-year-old children - specifically, concepts about print (summed score), knowledge of letter names, who-what-when questions (receptive vocabulary), and expressive vocabulary (summed score). This was not the case for letter-sound knowledge, phonological awareness (summed score), following instructions (receptive vocabulary), or phonological memory (repeating new words). This pattern of findings could be explained by proximal versus distal training effects. More specifically, there is good evidence from reading-intervention research that reading-related skills trained directly (proximal effects) will show greater gains than reading-related skills not trained directly (distal effects; e.g., McArthur & Castles, 2017). The emerging literacy skills in this study that were associated with the frequency of shared book reading were those most likely to be directly "trained" (i.e., encouraged or modeled) by caregivers to their 3-year-olds during shared book reading (e.g., holding books the correct way up, using a finger to track words on a page, naming letters, asking who-what-why-questions, and getting children to retell stories). Those not associated with shared book reading were less likely to be directly trained by caregivers during shared book reading (letter-sound knowledge, phonological awareness, or following complex instructions). The exception to this interpretation is repeating new words, which one might expect would be directly trained during shared book reading. However, this skill is mastered by children by three years, as illustrated by the fact that 74% of children were reported to engage in this skill "often;" thus, this measure may not have been a sensitive metric for children at age three.

Qualitative findings

Our analysis of the qualitative data (where caregivers were given the option to provide feedback about the program or the survey) identified five categories of feedback. The first was shared book reading. Parents in the Tamworth program repeatedly commented that the books and tip sheets provided regular reminders to engage in reading, which is consistent with Neyer et al. (2021), who found that the monthly deliveries of Imagination Library books helped to maintain consistency. The increased frequency of shared book reading from baseline (59%) to three years (74%) might have occurred because the monthly arrival of books makes caregivers more aware that they should be reading to their child rather than directly increasing the frequency of reading (Ridzi et al., 2014).

The second category was empowerment/behaviors/family. Some families in Tamworth noted that buying books was not a priority over other necessities, such as baby formula. Feedback from some families in Tamworth that they would not have had the money to purchase books demonstrates how the Imagination Library eliminates any financial barriers families face in acquiring books by adopting a universal approach where all children receive the books irrespective of their socio-economic status or geographic location. This is important, as evident in the literature by Taylor et al. (2016), who outlined the need to address barriers that might stop parents from reading to their children, such as access to books, and that taking these steps reduces disparities in resources known to impact healthy development (Flores et al., 2005). There is increasing evidence in the literature that demonstrates investing in early childhood interventions such as shared book reading could be one of the most economically sound investments



that a community like Tamworth could make (Skibbe & Foster, 2019) and warrants further research. Feedback from some caregivers that they were not aware that one could read to a baby was interesting and supported by our quantitative finding that at baseline, 16% of caregivers were not reading to the child because they did not think it was applicable. This is similar to Jain et al. (2021), who observed that not all caregivers are aware that reading to a baby is important. In this study, 98% of caregivers were reading to the child by six months. The qualitative feedback provided by caregivers indicated that they believed that the Imagination Library encouraged them to undertake shared book reading with their newborns.

The third area of social feedback focused on the fact that every child in Tamworth was enrolled in the program and received the same age-appropriate books irrespective of the family's socio-economic situation, which provided equality across the community. Given that reading failure is more prominent in children from lower socio-economic backgrounds (Goldfeld et al., 2011) and, conversely, caregivers with socio-economic advantage demonstrated less frequent shared book reading (Huebner, 2000), it is important to provide books using the universal approach undertaken in Tamworth.

The fourth area of qualitative feedback was focused on the impact on the Indigenous community of Tamworth, who represent approximately 13% of the population. Approximately 10% of books in the Imagination Library in Australia are written or illustrated by Indigenous people. This allows Indigenous children to be able to link their own lives to the stories, which was evident in the qualitative analysis. Intergenerational impact was also reported in the qualitative analysis, where families commented on elderly people in the family appreciating the gift of books (something they did not have) and reading with the younger children.

The final area of feedback relating to the Tamworth City Library and community provided interesting findings, especially when caregivers outlined how the library had impacted their own literacy skills, which is vital given that literature has outlined how caregivers with low-levels of literacy have been found to read to their children less than caregivers with higher levels of literacy, have limited knowledge about early childhood literacy development, and negative beliefs about literacy (Mendelsohn et al., 2001).

In summary, the qualitative feedback received demonstrated positive impacts on the family and greater community that cannot always be quantified. However, exploring these wider benefits of the program in Tamworth suggests that the impact of the Imagination Library goes beyond enhancing the home literacy environment and developing emerging literacy skills.

Limitations

The results of this study need to be interpreted with three methodological limitations in mind. Firstly, self-report questionnaires are vulnerable to "social desirability bias," which occurs when caregivers answer questions in a way that they believe would appear favorable to the researchers (Tura et al., 2023). For example, caregivers may be more likely to report a higher frequency of shared book reading, and more emerging literacy skills, than may have occurred. However, Grimm (2011) outlines that collecting data through a survey, rather than face-to-face interviews, can reduce social desirability bias, as caregivers are less likely to try and "please" the interviewer.

The second limitation is that self-report measures of shared book reading may themselves be biased (DesJardin et al., 2017). For example, caregivers may "inflate" reports of reading frequency and other home literacy factors because they believe these are important for their child. An alternative method would be to use direct observation of shared book reading behavior in the home (Bus et al., 1995). However, this is impractical for studies that are carried out across large regions such as Tamworth, which is approximately 1 million hectares. This is one of the main reasons large studies of shared book reading use self-report questionnaires.

Finally, it is important to note that this study of the Imagination Library was a correlational study. Correlation data cannot be used to prove causation. It is therefore important to emphasize that any evidence for improved outcomes in the home literacy environment, reading attitudes and interactions, and emerging literacy skills found by this study are associated with participation in the Imagination Library rather than necessarily caused by it.



Summary and conclusions

The survey responses of caregivers of Tamworth children in the Imagination Library program suggest that their children were read to more frequently, for longer periods, and had access to more children's books than the average Australian child. Further, caregivers who read to the child at least once a day at baseline were nearly five times as likely to read to their child daily six months later and three years later, demonstrating the establishment of early reading routines sustained as the child grows. Caregivers' attitudes to, and interactions during, shared book reading were positive at the start of the program and improved further across three years. There was evidence for an association between participation in the Imagination Library and several emerging literacy skills, particularly those most likely to be directly encouraged by caregivers during shared book reading. Together, these results encourage further survey studies of the Imagination Library with even larger samples of children and their caregivers to test the reliability of findings to date. Experimental studies could test the validity of survey studies by employing objective measures of the same variables. Based on the current findings, we predict that such studies will support the regular provision of books to children from their birth until they start school through programs such as Dolly Parton's Imagination Library, which may help enhance the home literacy environment, attitudes toward reading, and children's emerging literacy skills.

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Appendix 1

Detailed methodology for the implementation of Dolly Parton's Imagination Library in Tamworth, NSW. How did Dolly Parton's Imagination Library land in Tamworth?

Mark and Jay O'Shea (Australian country music duo artists) were introduced to Dolly Parton's Imagination Library in the USA when their first child was enrolled in the program in a hospital in Tennessee. The O'Shea's, being connected to the Tamworth country music scene, introduced the idea of the Imagination Library to Tamworth Regional Council (TRC) and proposed that a universal approach be adopted for the program.

TRC had concerns surrounding the school readiness of the children within the region, given data published in 2018 by the Australian Government on the development of children in their first year of full-time school through the Australian Early Development Census (AEDC, 2018). The census investigates not only children's language and cognitive skills, but also their communication skills, emotional maturity, social competence, physical health and wellbeing. The AEDC data can be mapped to the child's post/zip code, which is a common indicator used for socio-economic status. The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index established by the Australian Government that summarizes a range of information about the social and economic conditions of people and households within a region (post/zip code). The index considers the number of households with low income, the number of people over 15 years of age with no educational attainment, unemployment, and the percentage of households with no internet connection. The index is ranked from 0 to 10, with a higher score indicating a relative lack of disadvantage in general. Combining the AEDC and IRSD provides a picture of the concerns facing regions within Australia and provides guidance for policymakers and planners for community initiatives/interventions. In 2016, Tamworth had an index of disadvantage of 5/10, suggesting that the region had a moderate level of disadvantage; however, when comparing Tamworth to all other regions within NSW with an equivalent level of disadvantage, Tamworth had proportionally more children vulnerable on all domains except emotional maturity. TRC identified that pre-literacy was the most significant problem in the community, especially as it was the small communities surrounding Tamworth that had such low scores on the AEDC, which demonstrated that access to literature was the key problem.

TRC investigated the Imagination Library and established that it aligned with five out of nine of their areas of investment: resilient and diverse community, connecting our regions and citizens, celebrating culture, strong vibrant identity, and livable environment. This, along with (a) the global enrollment of the program; (b) the integrity of UWA (the charity that distributes the program in Australia); (c) the program could access all children in the region, including the smaller more remote communities by mailbox delivery; (d) the child did not need to attend a pediatrician to obtain the books; (e) children received a total 60 age-appropriate, high-quality books consistently over five years; (f) the evidence from the literature supporting the impact of the program; (g) Tamworth is the "country music capital" of Australia and is the "sister city" to Nashville, the "country music capital" of the USA; and (h) Dolly Parton had performed in Tamworth, led TRC to decide to implement the Imagination Library universally in January 2019. This gave the council the opportunity to deliver books to every child in their home irrespective of their socio-economic situation, creating equality for all of the children, based on the idea that if they aimed to lift everyone, then everyone would lift.

Who and what was involved?

The TRC liaised with Tamworth Hospital to have the enrollment undertaken by maternity staff. Around this time, the McLean Foundation had become interested in supporting the Imagination Library and chose to fund the first books provided to families upon enrollment though the "Books for Newborns" initiative. Subsequently, the TRC and the library team began reaching out to local businesses and community groups to help fund the local program. The program in Tamworth is jointly funded by the council and community sponsorship at around 50% each, which provides sustainability to the program. It has become not just a council program but a whole-community effort, being the foundation for connection of many organizations supporting the initiative, such as the Rotary Club and Lion's Club. The program has been embraced widely and is seen as helping build the fabric of the community.

The Hunter New England Central Coast Primary Health Network (PHN) was offered the opportunity to become a sponsor of the local Imagination Library program. The PHN considered the program from a holistic perspective and developed a partnership with UWA to include health literacy with each book to further support families during the critical first year of early development. As part of the arrangement, PHN provided health flyers that were inserted into the books each month, which informed caregivers about local health services and community health issues such as upand-coming immunization clinics, First Aid and Water Safety.

How were recruitment/enrollments into the Imagination Library undertaken?

At the commencement of the program, caregivers of newborn babies were given an enrollment form by the maternity staff and asked to take it, along with their baby's "My Personal Health Record," known as the "Blue Book," to the library to register their child for the Imagination Library. At this time, the baby would also receive a library card. However, after a few months, the uptake for the program was low (~40%), so the council organized for the nurse who conducted the



standard hearing test on the baby in the hospital to discuss the program with the caregivers and enroll their babies at the same time. The uptake for the program soared to 98% in Tamworth. The nurse who undertakes the enrollment has a map that outlines the local government area of Tamworth, and all babies who live within that mapped zone are eligible for the Imagination Library. There is no discrimination on the basis of ethnicity or socio-economic status.

What initiatives were undertaken throughout the community to enhance the literacy program?

The Central Northern Regional Library comprises a large network of 15 libraries, six of which fall within the Tamworth region; however, all 15 libraries are serviced by Tamworth City Library, making it the hub of the Northern Region of NSW. Tamworth library is a noncommercial, neutral, quiet public space in the community and welcomes everyone, providing not only a large array of books but also a series of workshops, computer access, and support networks. The library is responsible for processing the enrollment of all babies into the Imagination Library and issuing the babies their library card along with their very own personal letter addressed to them from the town mayor welcoming them to the Imagination Library. Along with the letter, the library also sends information to caregivers about programs being offered by the library, including Baby Book Time. Baby Book Time has seen a 265% increase in demand since the commencement of the Imagination Library in Tamworth. In 2017, only 10 babies (under one year old) registered for a library card across all the libraries (six branches) and only five in 2018. Between 2019 and October 2022, over 2,700 babies had registered. As a result of implementing the program, adult literacy classes and multicultural support are also offered in the library. In addition, the library provides outreach story time sessions to engage the local Indigenous communities and collaborates with local early childhood care services by providing information on the monthly book being delivered for inclusion in programming.

How are Imagination Library books selected?

UWA partners with Penguin Random House Australia, Hachette Australia, and other publishers and suppliers from time to time to source books. The program caters to children from birth to age five. Within this age range, six book groups correspond with birth year. Regardless of age, all children enrolling in the program receive the same welcome

Every two years, UWA holds a Book Selection Committee (BSC) to determine the books for the book list. BSC members come from a range of backgrounds and include speech pathologists, librarians, early childhood teachers, academics, and Aboriginal and Torres Strait Islander representatives. BSC members are provided with a range of books to review that meet program specifications. The scope of the BSC is to review each book for suitability for the program and consider the most appropriate book group for each title. BSC members are asked to provide feedback on book themes, which are also considered when creating the book list, ensuring that a mix of themes and book types are included across each group.

Who writes the tip sheets?

A tip sheet accompanies each book sent. The tip sheet provides information specific to the title received and is divided into tips for before reading, during reading, and after reading. The tip sheets are written by a speech pathologist at Early Education Childhood Intervention Service, and an early childhood teacher at 360 Early Education (previously Explore and Develop). Tip sheets are written in Plain English with icons to guide reading. They are designed to be fun and engaging and build confidence in caregivers to read to their infants and children.

Who is United Way Australia?

UWA is a community impact organization, focusing on preparing young people for success in life. Guided by community voice and aspirations, UWA unites residents, business, government, and philanthropy to help prepare children to read, learn, and succeed. In 2013, UWA acquired the license to operate the Imagination Library in Australia. UWA supports hundreds of Imagination Library programs nationwide in partnership with local and national organizations, business, and government, sending books to tens of thousands of children each month.



Appendix 2

 Table A1. Summary of caregiver and child data collected at baseline, 6-months and 3-years.

Table A1. Summary of Caregiver and child data collected at baseline, 6-months and 3-years.	Baseline	6-months	3–years
Demographics (Child)			
Gender	✓	✓	✓
Age	✓	✓	✓
Early childhood attendance	✓	✓	✓
Disability	_	_	✓
Demographics (Caregiver)			
Age bracket	-	-	✓.
Primary language spoken at home	✓.	✓.	✓
Highest education	✓	✓	✓
Employment status Children in the household enrolled	_	_	√ √
Home Literacy Environment	_	_	•
Caregivers responded to three survey items for the home literacy environment.			
Frequency of Shared Book Reading	✓	1	✓
"How often do you read to your child?"	•	•	•
Response options were: not applicable/too young, never, once every few months, once			
a month, once a fortnight, once a week, two times a week, three to five times a week,			
every day, or more than once a day.			
Duration of Shared Book Reading	✓	✓	✓
The caregiver was asked, "How many minutes on average would you spend reading at any			
one time?" The response option was a numeric value (e.g., 15 minutes).			
Number of Children's Books in the Home	✓	✓	✓
This was indexed with the question, "About how many children's books do you estimate			
your child has in your home now, including any library books?" Response options were:			
none, 0–9, 10–24, 25–100, or more than 100.			
Reading Attitudes and Interactions Caregivers responded to nine survey items about the reading attitudes and interactions of			
children, caregivers, and the community. A variety of response options were used: five-point			
Likert scales, yes/no responses, and free-text writing.			
Child's Interest in Books/Reading.		✓	✓
Caregivers were asked, "How often does your child ask to be read to? This could include			
picking up a book, bringing a book to you or verbally asking to be read to, for example?"			
Response options were: never, once a month, every few weeks, once a week, once a day, or			
more than once a day.			
Connection Between Caregiver and Child.		✓	✓
This was indexed with the statement, "I feel more connected to my child through reading			
and books provided by Dolly Parton's Imagination Library" with response options: strongly			
disagree, disagree, neutral, agree, strongly agree.		,	,
Quality Time Spent in Shared Book Reading.		✓	✓
This was measured with the statement, "We spend more quality time together as a family with the books" with response options: strongly disagree, disagree, neutral, agree, strongly			
agree.			
Importance of Shared Book Reading.	1	1	./
Caregivers were asked, "How important do you believe it is to read with your child?"	•	•	•
Response options were: not at all important, not very important, somewhat important,			
important, very important.			
Program Feedback.		✓	✓
This was measured by asking, "How likely are you to recommend this program to your			
family and friends?" Responses were: not at all likely, a little likely, neutral, somewhat likely,			
very likely.			
Usefulness of Tip Sheets.		✓	✓
This was indexed with the statement, "The book tip sheets are useful when guiding my			
reading with Dolly Parton's Imagination Library books" with response options: not at all,			
a little, neutral, somewhat useful, very useful.		,	,
Benefits of the Program.		✓	✓
Caregivers were offered a free-text response option to the question, "What benefits have you seen as a result of your child being on the Imagination Library program?"			
you seem as a result or your clinic being on the imagination Library program:			(C:: "
			(Continued)

(Continued)



Table A1. (Continued).

	Baseline	6-months	3–years
Reading Techniques.		✓	✓
The caregiver was asked to respond "yes" if they used any of the following: (a) repeating/			
teaching rhyming words, (b) repeating/teaching letter sounds, (c) counting images/objects,			
and (d) discussing the plot.			
Use of Tamworth City Library			
Caregivers were asked three questions: (a) "Does your child have a library card?," (b) "In the			✓
past six months, has your child visited a library?," and (c) "Has any other family member			
taken your child to an early childhood event at Tamworth City Library?" Response options			
were yes or no.			
Emerging Literacy Skills			
Caregivers responded to 11 items			
Concepts About Print			\checkmark
Caregivers responded to two statements: "My child holds books the correct way up and			
turns pages for reading" and "My child pretends to read by pointing to words or moving			
their finger left to right across the writing."			
Alphabet Knowledge			✓
Caregivers were asked two items: "My child can name letters that you point to" and "My			
child can make the sounds of the letters you point to."			
Receptive Vocabulary			✓
This was measured with two statements: "My child answers to questions like who, what,			
when, where, and why?" and "My child can follow directions that include two or more			
steps."			,
Expressive Vocabulary			✓
Caregivers answered two items: "My child can retell the sequence of events in a story or an			
activity (e.g., making something)" and "My child can connect two sentences using the word			
'and.'''			,
Phonological Awareness			✓
This was indexed using two statements: "My child can rhyme (e.g., if I ask them what			
rhymes with 'bed,' they would say red, head, said, etc.)" and "My child can name words			
beginning with a certain sound (e.g., if I ask them what starts with 'b' they would say bed,			
bath, ball, etc.)."			,
Phonological Memory This was massived by the statement "My shild can repeat new words that they hear"			✓
This was measured by the statement, "My child can repeat new words that they hear." Oualitative Feedback			
• • • • • • • • • • • • • • • • • • • •		1	,
"If you would like to share additional feedback on the program or notes on this survey, you		✓	✓
are welcome to do so here."		•	