Book sharing with young children: A study of book sharing in four Australian long day care centres

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Abstract
Research has consistently established the positive impact of sharing books with young children. Evidence suggests several important factors when evaluating book sharing with young children, including the quality of educator practice = and the nature of groupings, as well as the frequency and duration of book sharing sessions and access to books.

Other evidence suggests book sharing may be particularly important for children from low ses backgrounds attending early learning settings.

This paper reports on a larger study which investigated the factors and relationships influencing the use of children's literature to support principles of diversity in kindergarten rooms of long day care centres.

A mixed methods approach was adopted and a convergent design was employed to synthesise the qualitative and quantitative data and interpret significant relationships and their meanings. The quality of educator practice was measured through the Systematic Assessment of Book Reading (SABR) and Children's engagement in book sharing was assessed using the Children's Orientation to Book Reading Rating Scale. Detailed analysis of 148 video recorded book sharing sessions produced statistical representations of the frequency and duration of book sharing across the contexts and the nature of involvement of the children in the study. Twenty four educators and 110 children from four long day care centres in Western Australia participated. Data were collected through semi-structured interviews, video-based observations, field notes, document analysis and a book audit.

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The results showed that while the children in this study had a range of book sharing experiences, few of these were frequent or of high quality. Of great concern is the finding that the children in this study most likely to be considered at risk of educational disadvantage were those with the least exposure to book sharing in general, and, even less so, to high quality book sharing, raising concerns about equitable outcomes for them.

**Keywords**
Book sharing, early childhood literacy, story book interactions, early childhood education, book reading, childcare and development

**Introduction**
Few would question the importance of adults reading and sharing books with young children. Regular book sharing significantly impacts on the development of important literacy skills, including children’s oral language development and early reading skills, as well as their future reading proficiency and long term educational gains (Fleer and Raban, 2005; Ledger and Merga, 2018; Mol and Bus, 2011; National Early Literacy Panel [NELP], 2008). Evidence over many years has consistently emphasised the importance of early literacy practices, such as book sharing, between adults and children in assisting children to develop higher order cognitive and linguistic skills (Ledger and Merga, 2018; Logan et al., 2019; Tharpe and Gallimore, 1988). These are considered essential precursors to successful engagement with and participation in society (Fleer and Raban, 2005; NELP, 2008; Rankin and Brock, 2015).

Given the importance and value of book sharing for young children, Early Childhood Education and Care (ECEC) environments which include frequent high-quality book sharing experiences for the children in their care provide children with opportunities to achieve the many benefits associated with these practices.

Evidence presented in this paper suggests that multiple interrelated factors impact on the nature and quality of book sharing in early childhood settings. However, few, if any, studies have investigated these factors together and across multiple settings. Further, in Australia, 87% of children attend some form of ECEC, including 82% attending formal ECEC (Baxter, 2015) Despite the importance of early experiences in book sharing and the high proportion of children attending ECEC in Australia, there is currently a lack of evidence
regarding book sharing practices in ECEC settings in Australia. This paper seeks to address this gap in knowledge by addressing the following research questions:

- How are children’s literature texts used by educators?
- What interactions take place between educators, children and children’s literature texts?

**Book sharing environments**

Considerable evidence shows that children benefit from access to a variety of high quality books and frequent opportunities to listen to, discuss and engage with books (Dickinson and Tabors, 2001; Mol et al., 2008; Pentimonti et al., 2011). However, evidence also shows that there are several factors that can impact on the outcomes for children from book sharing.

Importantly, the frequency and length of book sharing sessions with children impacts on the outcomes for children, with some suggesting that 45 minutes per day made up of three 15 minute sessions should be aimed for (Dickinson and Tabors, 2001; Mol et al., 2009; Zucker and Landry, 2010). Dickinson and Tabors (2001) and the (US) National Early Literacy Panel (2008) found that more intensive and frequent book reading opportunities were more successful in building positive literacy outcomes for preschool children.

However, research in the U.S.A. by Dickinson et al. (2003) found that daily read-alouds were not included in the routines of approximately 40% of preschool classroom routines. Further, Zucker and Landry (2010) and others (Dickinson et al., 2003; Neuman, 1999) found that this is particularly the case for preschools serving children from low income households. This suggests that many children, particularly those from low income households, may not be experiencing regular opportunities to be involved in book sharing and thus unable to access the associated benefits.

Another factor is that of group size. A number of studies have shown that small group instruction is one of the key components of high-quality early learning experiences for young children (Bowman et al. 2001; Katz, 1995; Wasik 2008). Morrow and Smith (1990) suggested that children’s comprehension is best supported in small group reading (three children), rather than in both one to one reading and large group reading (over 15 children). Since then, others (Kaderavek et al., 2014b; Powell et al., 2008) have also found that whole group or large group reading sessions do not engage children in ways that encourage them to be highly involved and interested in book sharing.
Others suggest that the quality of educator practice may be an even more important factor (McGee and Schickedanz, 2007; Pentimonti et al., 2011; Schick and Melzi, 2010). Evidence suggests that to ensure book sharing improves outcomes for children, educators need to go beyond reading of the text and stimulate “rich, literal and inferential extra textual conversations” (Zucker et al., 2010 p. 82).

Interestingly, McGee and Schickedanz (2007) suggest that both frequency and quality of practice are important. They argue that repeated read-alouds using the same book, coupled with the active involvement of children in analytical thinking and discussion, is the most systematic approach to enhance vocabulary and comprehension development for young children and is particularly beneficial for children from home literacy environments in which book sharing may not be regularly practised.

Several studies have shown that positive relationships between child and educator have also been found to be an important factor in ensuring positive outcomes for children (Bowman, Donovan and Burns, 2001; Organisation for Economic Co-operation & Development [OECD] 2012; Wasik, 2008). However, Pianta et al. (2002) found that positive interactions between educators and children, and a child centred classroom climate, were lower in areas in which the concentration of poverty was high and family incomes low. This, again, suggests that children from low SES background are at risk of missing out on the benefits of high-quality book sharing.

However, lack of systematic tools for making comparisons of the nature and quality of practice across different contexts can present challenges. In 2008, the report of the (US) National Early Literacy Panel concluded that the difficulty in making comparisons among studies of shared reading practices was “detrimental to understanding effective features of shared reading interventions . . . and how they have been delivered” (Pentimonti et al., 2012: 514). In response to these challenges, Justice et al. (2010) developed the Systematic Assessment of Book Reading (SABR) to measure the quality of instructional practices of educators when sharing books with children. In addition, Kaderavek and Hunt (2007) developed the Children’s Orientation to Book Reading scale (COB) to evaluate children’s engagement in shared book experiences. Both of these instruments have been extensively tested for reliability and validity (Kaderavek et al., 2014a; Pentimonti et al., 2012), thus providing standardised and comparable ways for researchers to evaluate book sharing across the elements shown as important for successful outcomes for children. These instruments have been used in a number of studies (Kaderavek et al., 2014b; Pentimonti et al., 2012), including in combination (Kaderavek et al.,
suggesting that psychometrically sound instruments such as these can assist in the reliability of investigations into book sharing.

In the Australian context, the preamble to the Melbourne Declaration (Ministerial Council on Education Employment Training and Youth Affairs [MCEETYA], 2008), from which the educational policies in Australia at the time of this study were developed, calls for the disparity in the educational achievement of Aboriginal and Torres Strait Islander Australians and those from low socio-economic backgrounds to be addressed. Given the evidence of the importance of quality book sharing for young children and the evidence of a disparity in book sharing opportunities for children from low SES backgrounds, this study contributes important evidence of the extent to which book sharing in differing ECEC contexts in Australia supports the aims of current Australian educational policy. Further, this study also adds to the reliability and validity of instruments and adds to international studies of book sharing using these instruments and more generally.

**This study**

This paper reports on one part of a PhD study undertaken by the first author, Adam, and supervised by the second author, Barratt-Pugh. Adam (2019) investigated the factors and relationships influencing the use of children’s literature in the kindergarten rooms of long day care centres to support principles of diversity articulated in Australian educational policy. Central to this study were the book sharing practices of educators. This paper reports on the book sharing practices of the educators in four ECEC contexts.

This study was conducted using a mixed methods approach underpinned by sociocultural theory. Sociocultural theory posits that to understand child development, the external social world of the child must be studied (Tharpe and Gallimore, 1988). The educational and social environments of children in early childhood education and care settings influence their experience. Sociocultural theory views reading as a mode of social collaboration and cognitive processing (Hodges et al., 2016; Prior, 2006). Children’s literature texts both reflect and contribute to educational and social environments, as does the practice of educators as they act as mediators between children and texts. Thus, in this study, sociocultural theory informs the investigation of the educational and social environments in which the children are exposed to literature (Adam, 2019).

Thus, the nature and quality of educator practice and the interactions between educators and children during book sharing are central to the
educational and social environments in which children are learning and developing. In this study, the quality of educator practice was measured through the Systematic Assessment of Book Reading (SABR), and Children’s engagement in book sharing was assessed using the Children’s Orientation to Book Reading Rating Scale. A convergent design was employed to synthesise qualitative and quantitative data.

**Ethics**

The research was conducted with ethical approval granted through Edith Cowan University - Project 10741. Participants were given an information letter outlining the purpose of the research and their involvement. They were informed about confidentiality and security and their right to withdraw. All participants agreed to take part and signed a consent form.

**Participants**

The study was conducted in the kindergarten rooms of four long day care centres in Western Australia selected by stratified purposeful sampling. This sampling was informed by data from the 2011 Australian Census (Australian Bureau of Statistics [ABS], 2011) in order to select regions of diverse demographics including differing socio-economic profiles, varied ethnic population concentrations and urban and rural communities. Stratified purposeful sampling is particularly useful to study different models of implementing a particular teaching and learning strategy (Suri, 2011), in this case, that of book sharing with young children.

Long day care centres in Western Australia provide full-time or part-time care, usually for birth to five years, in purpose-built or adapted buildings. Long day care centres are owned and managed by non-profit organisations, local councils, community organisations, private operators and employers. All long day care services must be operated in accordance with the Education and Care Services National Law and Regulations (Australian Children’s Education and Care Quality Authority [ACECQA], 2012).

Long day care centres typically operate in a multi-room facility with children located in rooms according to their age. A typical long day care centre has separate rooms for babies (birth–24 months), toddlers (24–36 months) and kindergarten (36 months–preschool age) children. From 2012, long day care centres with more than 25 children have been required to employ at least one educator who holds an early childhood teaching qualification.
Research participants and selection

Twenty-four educators agreed to take part in the research, with qualifications ranging from an Education Assistant Diploma to a Bachelor of Education. The educators recruited included each centre coordinator and each of the educators employed in the kindergarten rooms of the centres. Centre Coordinators were responsible for overall management of each centre, while Lead Educators were responsible for the curriculum in each participant room assisted by other educators. The children in the participating kindergarten room of each centre also participated. The parents of the children were invited to give informed consent for observation of their children’s participation and engagement in book sharing and use. There were 110 child participants. While demographic data relating to ethnic-racial backgrounds were not collected for the children or the educators, SES demographic data for each centre are shown in Appendix 1. The four centres and all participants were assigned pseudonyms to ensure anonymity.

Data instruments and collection

Data were drawn from semi-structured interviews with centre coordinators and lead educators, 148 video recorded observations of book sharing sessions, and from field notes. Multiple data sources provided opportunities for the triangulation of findings, thus enabling the validation of themes by cross checking information from multiple sources. For the purposes of this paper, findings from the semi-structured interviews and observational data relating to the book sharing sessions involving educators and children are reported.

Appendix 2 is an advanced organiser that summarises the research instruments, tools and analysis procedures together with the data collected and the focus of research for each data source.

Data Sources and processes

The following data form the basis of this paper:

- 3 hrs and 35 minutes of recorded interviews.
- 27 hours and 7 minutes of video observations
- Field notes.

Interview data. The Centre Coordinator and Lead Educator (Kindergarten) from each centre were interviewed at the start of the study. Additionally, incidental unstructured interviews took place throughout the study. Interviews were recorded using a Phillips Digital Voice Tracer 7000 Conference Recorder device. Interviews were transcribed and returned to each participant for
member checking and clarification. Appendix 3 presents the Semi-Structured Interview Framework.

**Book sharing sessions video observation data.** Video recorded observations were made of every book sharing session over five consecutive weekdays in each centre. The book sharing sessions were all part of the daily programme of each participant room. All books shared were picture storybooks containing text and images.

**Field notes.** The researcher kept detailed field notes during each observation period. For the purposes of this paper the notes related to the involvement of children and educators in each book sharing session.

**Data analysis**

**Frequency, duration, grouping and involvement.** Interview data were transcribed and entered into NVIVO11. For the purposes of this paper, interview data relating to the frequency, duration and organisation of book sharing sessions were extracted.

The researcher designed a detailed observation spreadsheet to record details of all video recorded book sharing sessions, as well as individual self-selected “book reading” by children. This spreadsheet was used to record details of each session relating to which educators and children were involved, the size of groupings, whether the session was mandatory or optional for children and the duration of each session. This process was supported by the integration of information recorded in the field notes.

Quantitative analysis of the data recorded in the spreadsheet was undertaken to identify the frequency and duration of educator-led book sharing sessions and the involvement of individual children. These data were then triangulated with interview data regarding the organisation of book sharing sessions.

**Quality of educator practice and session climate.** Systematic Assessment of Book Reading (SABR) (Justice et al., 2010) was used to measure the quality of educator practice (https://earlychildhood.ehe.osu.edu/files/2016/04/SABR-Training-Manual1.pdf).

SABR (Justice et al., 2010) is an observational tool that uses a time-sampling approach to:

Systematically examine adult behaviours within the shared-reading context that appear to provide instructional support¹ for children’s (a) vocabulary and oral language skills, (b) abstract thinking
skills, (c) print-related and phonological awareness skills, and (d) elaborative responses to the text. In addition, SABR also captures more general features of the reading session, including: (e) adult behaviors that create a warm, supportive setting for shared reading. (Pentimonti et al., 2012: 513)

SABR also codes the book reading context through evaluation of the Session Climate, which 'examines the extent to which the teacher demonstrates enjoyment of reading and respect towards the children during reading. This construct also examines the extent to which the teacher invites children to manipulate the book during book reading' (Justice et al., 2010: 57) and a qualitative Global Rating scale for Reading Delivery, which is about 'The extent to which the teacher modulates the volume and pitch of her voice in an extreme fashion or uses gestures to mirror the story and create a dramatic storytelling experience while reading the printed text' (Justice et al., 2010: 62). A second Global rating Scale for Behaviour management assesses "whether the teacher uses proactive or reactive approaches to managing children’s behavior during the reading session" (Justice et al., 2010: 66).

Finally, SABR scoring allows for further qualitative comments regarding observed educator or child conduct. SABR is useful in capturing and comparing individual differences among adults in the nature of their extra-textual talk when sharing books with children (Pentimonti et al., 2012) and for comparing differences for individuals reading in different contexts or times (Kaderavek et al., 2014b).

In this study, it was important to understand the nature of the educators’ practice in their 'natural' settings. Therefore, SABR was used to evaluate the quality of practice and the use of the instructional supports in order to understand 'typical' practice and variations in practice in each centre. As such, the use of instructional supports across differing educators and participating centres was compared by averages, including length of sessions and the use of instructional supports.

Author one and her two PhD supervisors undertook training in SABR and, subsequently, conducted intrarater consistency resulting in a 90% inter-rater reliability score, thus ensuring reliability of the use of the tool in this study.

A purposeful sample of 20% (n = 30) of the educator-led sessions in each centre was selected for SABR analysis. The basis for purposeful selection of the sessions for this paper included:

- Representing a variety of group sizes from Individual to Whole Group (in the case of Whole Group, the longest session was selected).
- At least one session led by the Lead Educator.
- At least one session at, or closest to, the recommended duration of 15 minutes.

SABR data were transformed into numerical values representing the use of instructional supports, session climate support session length and group type, as well as calculating these for the average length book sharing session in each centre and the average overall length session for all centres. This enabled the creation of diagrams, charts and tables to allow for triangulation and comparison with other data and across contexts.

**Children’s engagement.** The Children’s Orientation to Book Reading (COB) rating scale was used to measure children’s engagement in book sharing.

The COB rating scale “is designed to evaluate children’s level of orientation (i.e. interest, engagement and focus of attention) during adult-child shared book reading” (Kaderavek and Hunt, 2007: 22). Coders observe a child’s behaviours across an entire book sharing session and rate the behaviours on a 4-point scale (4 being the highest level of engagement). The behaviours observed are: posture, facial expressions, eye gaze, distractibility, verbal or non-verbal communication and response to adult support.

Author one and her two PhD supervisors undertook training using COB Training Manual training videos and score sheets (Kaderavek and Hunt, 2007). They then independently coded six children across six of the video recorded book sharing sessions. An inter-rater conference was held and inter-rater reliability was shown to be 100%, thus ensuring reliability of the coding.

Fifty per cent of children were selected from each centre for COB analysis ($n = 54$). Eighty-four COB measurements were undertaken with some children being measured more than once and in different sessions. Selection of children followed purposeful sampling of the children:

- From sessions analysed with SABR – this allowed for consistency of selection criteria with SABR and for comparison of children’s COB scores with SABR scores
- In Individual or Small Group sessions, all children visible were analysed with COB.

In Large group and Whole Group sessions a child from each quartile of overall reading time was selected (where a target child was not visible in the recording the next best match was selected).

COB data were then transformed into numerical data according to COB scores, session length and the nature of groupings and displayed in the form of diagrams, charts and tables that allowed for triangulation and comparison with other data and across contexts.
Results

Given the sociocultural theoretical underpinnings of this study, and the associated factors within children’s learning environments which the literature review has shown to be of importance, many factors within the learning environment were investigated in this study. In this section, the results of the analyses are organised under each of these factors. Interrelationships and implications are then discussed.

Number and duration of sessions

Both within and between the centres the number (21–51) and duration (0.5 minutes – 22 minutes) of the educator-led sessions showed considerable variation, as did the overall amount of time educators spent sharing books in each centre (386.00–681.25 minutes).

Table 1 shows the amount of time educators shared books, the number of educator-led book sharing sessions and the duration of educator-led sessions for each centre. The final column shows the number of sessions that were within 2 minutes of the 15 minutes recommended by other researchers.

Involvement in book sharing by individual children

There was considerable variation in the amount of time individual children were involved in book reading (individual) or sharing (with an educator) both within each centre and across all centres. Table 2 shows the time involvement of children by range, mean and median for each centre and overall. All figures are rounded to the nearest 0.25 of a minute.

Interview data showed that all centres had either implicit or explicit expectations for all children to be involved when whole group sessions were conducted. Therefore, the time the children chose to spend involved in other book

Table 1. Duration of educator-led book sharing sessions.

| Centre | Total time Ed-led sessions | No. of Ed-led sessions | Range (minutes) | Mean duration (minutes) | Median duration (minutes) | Mode duration (minutes) | No. Meeting 15 (±2 min) |
|--------|-----------------------------|------------------------|-----------------|-------------------------|---------------------------|-------------------------|-------------------------|
| Riverview | 681.25                      | 51                     | 1.5–22          | 8.75                    | 8                         | 5                       | 7                       |
| Community | 374.25                      | 47                     | 0.5–12.5        | 3.75                    | 3                         | 3                       | 0                       |
| Dockside | 465.25                      | 29                     | 1–12           | 5.75                    | 6                         | 6.25                    | 0                       |
| Argyle  | 386.00                      | 21                     | 0.5–15          | 4.75                    | 4                         | 2                       | 1                       |
related activities was calculated to ascertain how much book sharing children freely chose to be involved in. This included large group, small group and independent book interactions in which children chose to take part. The following table shows these times to the nearest 0.25 minute and includes the percentage of children who did not choose book related activities outside of the mandatory group sessions.

Table 3 shows that the variation between centres, and between individual children was considerable. Particularly striking was the range of reading or book sharing time by individual children. In each centre there were some children who chose not to be involved in book sharing or reading unless required. However, the most time spent by an individual by choice ranged from just 60 minutes (or 12 minutes per day) in Dockside, to 151.50 minutes (or 26.3 minutes per day) in Riverview.

Furthermore, children in Dockside and Argyle, where interview data showed that restrictions were sometimes placed on access to books, were less likely to choose books or engage in book sharing than children in Riverview and Community House who had access to books throughout each day. The analysis also showed that individual children in Dockside, the centre with the largest number of Whole Group sessions, spent the least amount of time in book sharing or reading by choice (0 – 60 minutes, with an average of 18 minutes).

Secondary analysis extracted data to calculate the time involvement of the children in child-initiated book sharing. Table 4 shows the time involvement of children in child-initiated book sharing. These measurements were calculated by range, mean, median and the percentage of children who recorded zero time in these types of book sharing.

This shows that a high percentage of children in Dockside (65%) and Argyle (47%) did not initiate educator-led sessions or choose to participate in those initiated by other children.
This section presents results relating to the quality of educator practice as measured by SABR (Justice et al., 2010) through educators’ use of instructional supports, and the book reading context as measured by the session climate, Global Rating Scales and noted educator behaviours.

**Instructional supports.** For each of the sessions selected through purposeful sampling the number of each instructional support used was calculated for the average session in each centre. Figure 1 shows the use of the instructional supports compared across centres according to the average session length of each centre.

This analysis shows that the educators’ relative use of the four instructional strategies varied both within and across centres. However, all educators used SABR instructional support for language development more frequently than the other three supports in all four centres. To more closely examine variations in educator practice across centres the use of instructional strategies was calculated for the average educator-led session length across all centres (5.5 minutes). The results of this analysis are presented in Figure 2.
This evidence again shows variation between centres regarding the number of times each instructional support was used in each session. However, it shows that educators provided more instructional supports for language development than for the other categories followed by abstract thinking, then...
elaborations and the least use of supports for developing print/phonological skills. The only small exception to this was in Dockside where the use of supports for abstract thinking and elaboration was similar.

**Book reading context.** Session climate supports were calculated for the average overall educator-led book sharing length (5.5 minutes) in order to produce a comparable set of data that reflected the frequency of educator use of session climate supports for each centre. Figure 3 shows the use of instructional supports compared across centres according to the average overall session length.

This analysis shows that educators in Riverview and Dockside provided high levels of support for a positive session climate and these were much higher than those in Community House and Dockside.

Further, the educators in Riverview and Dockside were consistently rated at Moderate to High on the measure of Global Rating Scale for Behaviour Management. In addition, for Riverview, the coders recorded several positive comments relating to noteworthy or excellent supports. In contrast the educators in Community House and Argyle were consistently rated at Low to Moderate for behaviour management and with evidence of over-controlling or distraction, resulting in interruptions to the flow of the sessions recorded for these centres.

![Session Climate Supports in Overall Average Session](image)

**Figure 3.** SABR session climate supports for each centre by overall average session length.
The Global Rating Scale for Reading Delivery showed that Riverview, Dockside and Argyle were all rated as consistently Medium to High for reading delivery, while Community House was consistently rated as Low to Moderate.

**Relationships between instructional supports, group size, session length and session climate**

Secondary analysis compared the numerical measurements of instructional supports and session climate across all of the sessions analysed through SABR. As outlined earlier, language development was the most common instructional support used by educators in all the centres. However, secondary analysis identified eight sessions in which the supports for abstract thinking and/or elaborations outnumbered those focused on language development. Details of the group size and session length for these sessions were extracted from the data to identify patterns or relationships. Of these eight sessions, six (75%) were small group sessions while one of the remaining of the eight sessions, while categorised as a large group, had only 7 children (the minimum number required in SABR to be classified as a large group). Additionally, these sessions were all higher than the average session length, with some close to the optimal book sharing length as recommended in the literature (range 8.5 -16 minutes) All of these received high quality rankings for session climate support, while reading delivery was ranked High in six (75%) of these sessions with the other two (25%) ranked as Moderate. In these sessions behaviour management was also rated as moderately or highly effective. It is important to note that of these eight sessions, five were in one centre (Riverview) with two in Community House and one in Argyle.

**Children’s engagement in educator-led book reading sessions**

This section presents findings related to the engagement of children in educator-led reading or book sharing sessions as measured by the Children’s Orientation to Book Reading Scale (COB) (Kaderavek and Hunt, 2007).

Table 5 shows the number of COB ratings, the number of children rated, and the number of children rated more than once for each centre. Finally, the average COB score for each centre (1-4, with 4 being the highest level of engagement) is presented.

**Engagement, group size and session quality.** Secondary analysis extracted the children’s individual COB scores along with session details of session length and group size for each COB measurement to identify possible patterns and
relationships. All the children who demonstrated low engagement (scores of 1) did so in Whole Group or Large Group sessions. The children in Argyle had the lowest overall scores for engagement, followed closely by Community House.

Conversely, 85% of engagement scores of 4 (high engagement) occurred in sessions that were categorised as Small Group (or less). These highest scores were mostly from Riverview with Dockside second being most common.

Another pattern in the comparison of data sets was that the highest levels of engagement were predominantly found in sessions with high session climate support, high quality behaviour management and positive educator behaviour. This evidence suggests a relationship between the quality of educator practice and the engagement of children in book sharing.

Twelve children were rated in both Whole Group and Small Group sessions. Interestingly, two of these children had scores of 4 (high) regardless of the group size. These children were both from the top quartile in overall book reading and sharing time and in free choice book reading and sharing time. One child had a low score regardless of group size. This child was from the lowest quartile of both overall and free choice book sharing and reading time. Nine of these children had a higher engagement score for Small Group compared with their scores in Large Group sessions. This suggests that children are likely to be more engaged in small group rather than large group sessions.

_Engagement and book reading time._ Further comparisons were made between the children’s engagement scores and their overall involvement in book sharing. Seventy-one per cent of children who scored a rating of 1 (low) were from the 3rd or 4th (lower) quartiles of overall book time. When compared with the results related to children’s involvement in book sharing by choice, 78.5 per cent of children who had a low level of engagement (scored a 1 for COB) were

| Centre          | Number of COB ratings | Number of individual children rated | Number of children rated multiple times | Average COB score for each centre |
|-----------------|-----------------------|------------------------------------|----------------------------------------|-----------------------------------|
| Riverview       | 17                    | 14                                 | 3                                      | 3.05                               |
| Community house | 24                    | 14                                 | 8                                      | 2.6                                |
| Dockside        | 20                    | 15                                 | 3                                      | 2.7                                |
| Argyle          | 23                    | 11                                 | 6                                      | 2.54                               |
| Overall         | 84                    | 54                                 | 20                                     | 2.709                               |
also in the 3rd or 4th (lower) quartiles of overall book time by choice. This evidence suggests that children who frequently opted out of book sharing were likely to score low engagement ratings when they were involved in book sharing.

Conversely, 70% of children with a rating of 4 (high) were from the top two (higher) quartiles of overall book time and independent book time. When compared with the results showing children’s involvement in book sharing by choice, 85% per cent of those with a high engagement score (4 as measured by COB) were from the top two quartiles of overall book time by choice. This suggests that children who frequently chose to be involved in book sharing were more likely to be highly engaged when educators read to them.

*Levels of children’s engagement in book sharing sessions across centres.* Children’s levels of engagement in book sharing sessions were analysed for each centre. The proportion of children who scored the highest level of engagement (score of 4 on COB) and the proportion who scored the lowest level of engagement (score of 1 on COB) in each of the centres are presented in Table 6.

Argyle had the highest percentage of children with low engagement scores (1) and the lowest number of those with high levels of engagement (4). As reported earlier, this centre had the least amount of time spent in educator-led book reading and book sharing of all the centres. Riverview had the highest overall level of child engagement scores and the greatest amount of time spent in educator-led book reading and book sharing of all the centres. This centre also had the lowest percentage of children with low engagement scores (1). This suggests that the overall amount of time educators spent reading with children impacted on the engagement of individual children when they were involved in book sharing sessions.

| Centre          | % of children with low levels of engagement (rated 1 on COB) | % of children with high levels of engagement (rated 4 on COB) |
|-----------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Riverview       | 7                                                           | 35                                                            |
| Community house | 35.5                                                         | 25                                                            |
| Dockside        | 14                                                          | 25                                                            |
| Argyle          | 43                                                           | 15                                                            |
Discussion

The sociocultural theory underpinning this study “builds on Vygotsky’s (1980) Zone of Proximal Development (ZPD) and learning from a more knowledgeable other, focusing on social and concrete aspects of learning” (Hodges et al., 2016). The results in this study demonstrate the nature of the social and concrete aspects of learning associated with book sharing in these four early learning environments. This discussion will explore the interrelationships of these findings and the implications for the children at the centre of this study.

Studies have shown that the benefits of book sharing for children are enhanced when children and adults engage in rich conversations that go beyond just reading the text (McGee and Schickedanz, 2007; Zucker et al., 2010). Similarly, this study identified that book sharing sessions in which educators used higher levels of instructional supports promoting abstract thinking and elaborations were also associated with higher engagement and involvement by children. Further, these sessions shared the following characteristics:

- children freely chose to be involved;
- sessions were longer than the overall average session;
- quality reading delivery;
- positive session climate;
- positive behaviour management, and
- small group sessions.

These are important findings and make a valuable contribution to the literature as they show the combined impact of the time spent sharing a book, the quality of educator practice and the relationships between educator and children (Bowman et al., 2001; OECD, 2012; Schick and Melzi, 2010; Wasik, 2008). In addition, group size was also identified as an important factor in promoting effective book sharing for young children (Bowman et al., 2001; Kaderavek et al., 2014b; Katz, 1995; Powell et al., 2008; Wasik, 2008). Katz (1995) Bowman et al. (2001) and Wasik (2008) found that effective small group instruction is one of the key components of high-quality book sharing experiences for young children.

However, it is important to note that there were only eight such book sharing sessions in the study and five of these were in one centre (Riverview). Furthermore, seven of these groups were made up of seven or less children, thus only a small minority of children in the study experienced
this type of book sharing. The dominance of large rather than small or individual reading sessions in this study is a concern as, similar to the findings of others (Kaderavek et al., 2014b; Powell et al., 2008), this study found children’s level of engagement was higher in small group contexts.

Contrasting with these eight sessions were sessions characterised by low session climate support, less effective behaviour management and negative educator responses/actions which appeared to adversely impact on interactions between educators and children, and lessened children’s engagement. Of concern is that sessions with these characteristics all took place in the two centres that SES data indicated were in low socio-economic areas. These findings are similar to those of Pianta et al. (2002) who found that positive interactions between educators and children and positive instructional and child-centred climates in classrooms were less evident in areas where the concentration of poverty was high and family incomes low.

This is of concern, especially when studies have shown the importance of positive relationships between child and educator (Byrne and Munns, 2012; Wasik, 2008). Indeed, Bowman et al. (2001) suggest that, “if there is a single critical component to quality it rests in the relationship between the children and the teacher/caretaker and in the ability of the adult to be responsive to the child” (2001, p. 322). As highlighted by Pianta et al. (2002), these findings may have implications for “educational policies on class size and composition, and issues of equity in early school experience” (p. 225), especially given the evidence from this study and others that children from low socio-economic backgrounds may be less likely to access high quality pre-school settings.

Furthermore, educators in the two centres engaging with children from low SES backgrounds that may be considered more likely to face institutional and social barriers (Dickinson et al., 2003; Neuman, 1999) spent an average of 44% less time reading to them than did those in the centres catering for children more likely to be considered from educationally advantaged backgrounds. Evidence regarding quality book sharing practice consistently shows that the literacy activities young children are involved in from an early age substantially contribute to their language development and later reading comprehension (Fleer and Raban, 2005; Logan et al., 2019; Mol et al., 2008; National Early Literacy Panel, 2008). The children in this study who received 44% less book sharing time than others are therefore at increased risk of entering formal school at a disadvantage compared to those from the two centres in more affluent areas in which books were shared more frequently.

While this study identified important interrelationships between factors impacting on book sharing outcomes which can inform future research and
practice, none of the children in this study received the frequency and duration of exposure to educator-led book sharing recommended in the literature (Dickinson and Tabors, 2001; Mol et al., 2009; Zucker and Landry, 2010). The range of time children spent in any type of independent or educator-led book sharing across five days was 7 minutes to 162.25 minutes, with an average time of 72 minutes, or 14.2 minutes per day. There were also substantial differences in the amount of time individual children participated in child-initiated book sharing activities led by an educator (range 0 minutes-137 minutes).

Further, only a minority of children participated in the sessions identified as providing the highest quality and engagement. It is important to note that the average book sharing session was less than six minutes long across the centres. Thus, most interactions between educators, children and texts were far shorter than the recommended book sharing session length of 15 minutes.

In addition, the frequency and amount of time given to book reading experiences for children in this study varied greatly both within and across the centres and this impacted on children’s engagement. In each centre there were some children who did not engage with any book sharing unless it was mandated by the educators, but this too impacted on children’s engagement. This, in turn, adds to the challenges faced by educators in providing opportunities for, and building children’s interest in, small group reading opportunities. Given the evidence presented earlier that small group instruction in which children chose to be involved was associated with higher quality educator practice and higher engagement of the children it would seem that more rigid approaches to book sharing such as those in these two centres may be counterproductive to the goals of providing quality book sharing for young children.

Thus, this study adds to the literature by demonstrating the impact of children’s own interest in book sharing as evidenced by their choice to be involved. This study also suggests this may have a reciprocal impact on the nature of educator practice and this could be an important consideration for future studies in this field.

In addition, the study found that the instructional supports for elaboration or abstract thinking were more common in sessions longer than the average and closer to the recommended length of time. As most sessions were considerably shorter than this, it was not surprising that the instructional supports were largely limited to attention to language. Research consistently demonstrates that to ensure book sharing improves outcomes for children, educators need to go beyond reading the text and promote rich extra-textual
conversations with children (Zucker et al., 2010). This would require frequent use of the instructional supports of elaboration and abstract thinking. Yet this appears only likely to happen in sessions close to the recommended length of time, perhaps because this is a factor related to the depth of exploration that educators can achieve when sharing books with children (Dickinson and Tabors, 2001; McGee and Schickedanz, 2007; Mol and Bus, 2011).

The combination of these factors has the potential to reduce the positive outcomes of book sharing for these children, particularly for those who may already be considered at educational risk.

**Conclusion and recommendations**

This discussion of book reading quality and children’s level of engagement in book sharing sessions makes a valuable contribution to the literature in this field. Unique to this study is the consideration of the interrelationships of the multiple factors that impact on book sharing outcomes across multiple contexts in Australia.

This discussion has shown that while the children in this study had a range of book sharing experiences, few of these were frequent or of high quality. Of great concern is the finding that the children in this study most likely to be considered at risk of educational disadvantage were those with the least exposure to book sharing in general, and, even less so, to high quality book sharing, raising concerns about equitable outcomes for them. Further, none of the centres involved in the study consistently engaged children in book sharing sessions at or close to the frequency and duration of three sessions of 15 minutes per day recommended by others in this field (Dickinson and Tabors, 2001; Mol et al., 2009; Zucker and Landry, 2010). While research suggests that it is the quality of teacher–class book sharing, rather than the frequency, that is most critical in predicting children’s skills at the end of the preschool years and beyond (Gerde and Powell, 2009; Mol et al., 2009; Zucker et al., 2010), this study found only a minority of book sharing sessions were of high quality and these were infrequent and only experienced by a few children.

It is of concern that this study found that children from low socio-economic areas did not have access to the benefits of high-quality book sharing practice. Given the goals of Australian educational policy to end the disparity in outcomes for children from low SES backgrounds, it could be argued that these two long day care centres were unintentionally disadvantaging these children.
and thus contributing to institutional barriers to their academic success (Dickinson et al., 2003; Neuman, 1999; Zucker and Landry, 2010).

These disparities could be confronted by supporting educator understandings about the nature and place of shared book experiences. Attention to the interrelated influence of educator quality practice, group size, book sharing duration and frequency on children’s engagement and the potential benefits they can access through book sharing may help to address these disparities. Changes would include consideration of how to provide quality book sharing for all children, especially those from backgrounds more likely to be faced with institutional and social barriers.

The relatively small size of the sample (four centres) necessarily limits the generalisability of the findings. It could be argued, however, that the rigour derived from the mixed methods approach allows for implications to considered in similar contexts.

While this paper has not discussed the nature of the shared books, and the extent to which sharing is meeting the cultural needs of the children, these aspects of the larger study have been the subject of a previous paper (Adam and Barratt-Pugh, 2020).

Further studies could take the research into differing educational contexts, including community and school-based kindergartens, as well as other early learning environments such as early childhood classrooms in primary. Further studies could also investigate the apparent reciprocal impact of children’s interest in book sharing on the nature of educator practice and relationships with children.

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Note
1. In this paper the term Instructional Support is used to indicate the supports measured by SABR.

Supplemental material
Supplemental material for this article is available online.

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