Oral Language and Emergent Literacy Strategies Used by Australian Early Childhood Teachers During Shared Book Reading

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Abstract

The use of shared book reading is regarded as valuable to support young children to build their oral language and emergent literacy skills in preschool classrooms. Quantitative and qualitative features of early childhood teachers' (ECTs') shared book reading practices are important contributors to quality shared book reading experiences. The aim of this study was to gain in-depth insights about the range and frequency of extratextual oral language and emergent literacy utterances (utterances beyond the story text) used by ECTs during shared book reading with preschoolers as well as their use of paralinguistic and nonverbal features. Video-recordings were made of 32 ECTs engaging in shared book reading with their four-year-old preschool class. ECTs' extratextual utterances and their paralinguistic and nonverbal features were classified using a validated observational checklist: The "Emergent Literacy and Language Early Childhood Checklist for Teachers" (ELLECCT). Results showed ECTs frequently used responsive statements such as commenting on the story or acknowledging or imitating children's utterances in book-related talk. ECTs most commonly asked closed questions during shared book reading and regularly used paralinguistic and nonverbal features such as prosody and volume in order to engage children. In contrast, ECTs used only a limited range of dialogic reading prompts and explicit vocabulary strategies and only infrequently expanded children's utterances. Notably, ECTs rarely used strategies to target children's print knowledge or phonological awareness. Although extratextual dialogue was used regularly by ECTs during shared book reading, targeted techniques that are known to build oral language and emergent literacy were not consistently demonstrated. These results suggest missed opportunities for preschool children to benefit from shared book reading.

Keywords Oral language · Emergent literacy · Early childhood teacher · Shared book reading · Dialogic book reading · Paralinguistic features

Introduction

Quality oral language and emergent literacy experiences during the preschool years are pivotal contributors for positioning children for success when learning to read (Dickinson & Porche, 2011; National Early Literacy Panel [NELP], 2008). One important way of supporting children's oral language and emergent literacy skills is through shared book reading which is a common practice in most preschool classrooms. Shared book reading is an interactive approach of reading between an adult and child or children that builds engagement with written text (Milburn et al., 2014; Walsh & Hodge, 2018). Previous literature supports the frequent use of high-quality shared book reading opportunities in preschool settings to enhance children's oral language and emergent literacy skills (e.g., Mol et al., 2009; Zucker et al., 2013). While the frequency of shared reading opportunities plays a role in building oral language and emergent literacy skills, the quality of these experiences is integral in building children's long-term language and literacy skills (Zucker et al., 2013). Early childhood teachers (ECTs) can maximize quality shared book reading opportunities through the use of extratextual talk; utterances that go beyond merely reading the story text (Kaderavek et al., 2014). Extratextual utterances may include questions or comments during shared book reading and are important for developing language

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Table 1 Dialogic Reading Prompts

Prompt	Description	Example
Completion prompt	Statements or questions that prompt the child to fill-in-the-blank	"Oh no, I can see a ____!"
Recall prompt	Questions requiring the child to remember previous events in the story	"What happened to Harry before he went to the zoo?"
Open-ended prompt	Encourage a multi-word response (at minimum) from the child	"What do you think will happen to Harry?"
WH-prompt	Who, what, when, where, why, how questions	"Who is it?"
Distancing prompt	Questions requiring the child to relate the book content to their own personal experiences	"Tell me about a time you have felt happy like Sarah on your birthday"

and literacy learning (Anderson et al., 2012; Blewitt et al., 2009). Therefore, this study focused on identifying Australian ECTs' common shared reading and dialogic book reading practices.

ECTs' Use of Prompts During Shared Book Reading

Shared book reading provides instructional opportunities for ECTs to use prompts that can stimulate language growth. Although "questions" are a type of prompt, the term "prompt" has been used throughout to more broadly encompass ECT-initiated input that may also be phrased as statements (Hindman et al., 2019). Prompts encourage increased engagement during shared book reading by allowing verbal exchanges between the adult and children that can demonstrate more advanced vocabulary and utterances with increased linguistic complexity compared to everyday exchanges between adults and children (Deshmukh et al., 2019). Prompts are an effective spoken language elicitation strategy during shared book reading, as preschoolers have been found to respond more to prompts in comparison to comments that did not carry the expectation of a response (Justice et al., 2002).

One form of shared book reading that is strongly associated with enhanced children's oral language skills, and in particular their vocabulary skills, is dialogic book reading (Whitehurst, 1988). Dialogic reading prompts during shared book reading have demonstrated positive associations for facilitating vocabulary and oral language skills for children at risk of language difficulties as well as their typically developing peers (Mol et al., 2008; NELP, 2008). During dialogic book reading, the adult uses intentional, instructional prompts to encourage children to talk (Towson et al., 2017). Prompts allow children to be more actively involved, with the child as storyteller and the adult as listener (Cohrssen et

al., 2016). The adult prompts participation from the child to speak through these verbal prompts before having opportunities to expand the child's utterance (Towson et al., 2017). Specific dialogic reading prompts are found in Table 1 with descriptions and examples adapted from Whitehurst et al. (1994).

The prompts used by ECTs during shared book reading elicit different responses, from literal, lower-demand questions that are less cognitively and linguistically challenging than those that require more abstract ideation (Walsh & Hodge, 2018). WH-prompts are considered lower-level questions in dialogic book reading (Flynn, 2011), with open-ended and distancing prompts being more complex styles of questioning (Whitehurst et al., 1994). High-demand prompts encompass a degree of decontextualization from the book, and may relate aspects of the story to children's personal experiences (Blewitt et al., 2009). Different prompts also elicit varying amounts of verbal language (Deshmukh et al., 2019). For example, closed prompts typically elicit a specific response of one or two words compared to open-ended prompts, which stimulate a longer reply (Hindman et al., 2019). Closed prompts, however, still play a role in interactive shared book reading and dialogic book reading. Closed questions may be less demanding, to assist with eliciting descriptive language (Lonigan et al., 1999) and providing ECTs opportunities to clarify children's knowledge (Hindman et al., 2019). Low-demand prompts such as closed questions can also provide opportunities for children with lower levels of language to participate (Pentimonti & Justice, 2010) and can support initial consolidation of word learning (Blewitt et al., 2009). During dialogic book reading, ECTs may move from using lower-demand questions to higher-demand questions (Walsh & Hodge, 2018). Question types also impact the different levels of responses from children. The term *higher order questioning* has been used for ECTs' questions that elicit high abstract or inferential thinking. In comparison, *lower order questions* typically target more literal responses Walsh et al. (2017) found that asking intellectually gifted preschoolers higher order questions typically lead to higher order responses, and lower order questions elicited mostly lower order responses.

ECTs' Commenting During Shared Book Reading

The use of comments during shared book reading also plays a role in supporting oral language growth (e.g., Ard & Beverly 2004; Barnes et al., 2017) and increasing awareness of print (e.g., Justice et al., 2009). Comments are statements which are not phrased as a question and do not require an instant response from a child (Barnes et al., 2017). ECTs explicitly comment on vocabulary items to emphasize words within the text such as discussing word meanings,

providing an example, repeating the word, specifying a synonym or relating a word to a child's real-life experiences (Barnes et al., 2017; Milburn et al., 2014). Providing opportunities to discuss words is considered more effective for word learning than passive exposure (Beck et al., 2013; Wasik & Bond, 2001). Comments may also be used to build conceptual knowledge by bridging story content with real-life connections (Barnes et al., 2017). Utterances that incorporate discussion about words in the context of the book have been found to have a positive impact on preschoolers' receptive vocabulary (Gerde & Powell, 2009). Managerial comments that focus on behavior management and supporting children to sustain attention during shared book reading are also frequently used by ECTs (Gerde & Powell, 2009; Wasik et al., 2006) which allow instructional opportunities to be maximized.

ECTs' Responsiveness During Shared Book Reading

Linguistic responsiveness to children's utterances during shared book reading is positively related to children's language production, promotes children's engagement in extended verbal dialogue, and supports joint attention (Girolametto & Weitzman, 2002). Responsive comments during shared book reading include both responding to and expansion of children's utterances (Barnes et al., 2017). Less cognitively demanding responses made by the reader may include acknowledgement or praise (Hindman et al., 2019) or imitation of a child's utterance (Milburn et al., 2014). At the more demanding end, expansions involve language-modeling comments (i.e., a child stating, "Mouses is hiding" and the adult responding with, "Yes, the mice are hiding.") that extend a child's utterance by adding a semantic or syntactic component and are effective in developing children's language skills (Girolametto & Weitzman, 2002; Milburn et al., 2014).

ECTs' Focus on Print Knowledge and Phonological Awareness

Shared book reading can act as an ideal context for building preschoolers' print knowledge and phonological awareness skills, both of which are foundational precursor skills prior to conventional literacy (Mol et al., 2009; Zucker et al., 2009). Print referencing includes a combination of verbal (commenting on print, asking questions or making requests about print) and nonverbal references (tracking or pointing to print) (Ezell & Justice, 2000). These print referencing strategies increase the metalinguistic aspects of shared book reading and direct children's focus to the features of written language using more explicit terms (Justice & Ezell, 2004). Previous research demonstrates preschoolers pay little

attention to print during shared book reading and are more likely to focus on the pictures (Justice et al., 2008b). Further, Zucker et al. (2009) noted that ECTs are also unlikely to focus their time on print when reading to children. With training, however, Justice et al. (2009) demonstrated that ECTs were able to incorporate both prompts and comments using print referencing strategies to increase preschoolers' print knowledge during shared book reading. Using print referencing heightens children's interest and attention towards print resulting in them learning about print more quickly (Justice et al., 2009). Several studies have also looked at the impact of incorporating phonological awareness prompts into shared book reading. Prior research indicates ECTs can strengthen children's awareness of sounds, rhyme, and alliteration with explicit talk that focuses on these emergent literacy concepts (Justice et al., 2005; Rachmani, 2020; Ziolkowski & Goldstein, 2008).

Paralinguistic and Nonverbal Features

Much of the focus in the previous literature has been on ECTs' extratextual spoken utterances to improve children's language and literacy outcomes. Less attention has been on the paralinguistic (extralinguistic vocal features) and nonverbal (non-lexical) features ECTs can use during the book delivery component of shared book reading to engage children. The global quality of shared book reading is measured by ECTs' ability to make a story more engaging and entertaining for children in a way that invites them to interact with the story (McGinty et al., 2006). Nonverbal features such as incorporating body language into shared book reading can increase child interest and also support story comprehension (Moschovaki et al., 2007), while gesture has been linked to supporting preschoolers' word learning (Rowe et al., 2013). Prosody is an important paralinguistic aspect, and ECTs may use exaggerated prosody to show dramatic effect in the story or change their volume to focus children's attention to the story content (McGinty et al., 2006; Moschovaki et al., 2007). When reading, ECTs may isolate specific words important for story comprehension by pausing before reading the word (Milburn et al., 2014). Dramatic silent pauses before novel words during shared book reading can also support children to remember novel words (Read et al., 2019).

The Language and Literacy Environment in Preschool Classrooms

The extant literature notes that ECTs, during shared book reading, may not be providing optimal support to promote oral language and emergent literacy learning (Deshmukh et al., 2019; Hindman et al., 2019). The existing literature

highlights that during shared book reading, ECTs may not be asking sufficiently challenging questions to provide learning opportunities or place enough demand on children's expressive language skills (Deshmukh et al., 2019; Hindman et al., 2019). Additionally, Hindman et al. (2019) revealed that ECTs are more likely to focus on closed rather than open-ended questions during shared book reading and do not frequently use explicit vocabulary teaching strategies, even following training (Milburn et al., 2014). Further, extratextual utterances that increase children's awareness of print are infrequently used (Zucker et al., 2009). Less research has focused on ECTs' responsiveness to children's utterances during shared book reading (Barnes et al., 2017; Hindman et al., 2019) or book reading delivery practices to engage children (Moschovaki et al., 2007), despite its importance.

Previous research evaluating variability in ECTs' shared book reading practices has typically focused on the frequency of shared reading interactions or the quality of instructional practices with extratextual talk. Less is known about how factors such as ECTs' years of experience impact the quality of shared book reading. ECTs' years of experience and level of education have previously been examined to measure variability in teacher practices across multiple areas (McMullen et al., 2020; Nocita et al., 2020). Early childhood specialization (i.e., formal qualifications in early childhood specific courses) has typically been used as an indicator for quality improvement in early childhood (Nocita et al., 2020). Despite this, only weak associations have been found between children's language skills and ECT specialization (Nocita et al., 2020). Data from studies looking specifically at ECT-specific education and ECTs' extratextual utterances during shared book reading have also yielded mixed results (Gerde & Powell, 2009). ECTs' years of experience working in early childhood and children's academic outcomes have also been considered more generally in the early childhood literature. No association has been found for ECTs' years of experience and child outcomes, including vocabulary and letter identification (McMullen et al., 2020). Further, years of experience and shared book reading practices have yielded mixed results for vocabulary (Sun et al., 2020; Wasik & Hindman, 2014; Zucker et al., 2013) and non-significant results for print referencing (Zucker et al., 2009). Further research is required to understand the nuanced relationship between different types of extratextual utterances and ECTs' years of experience. Therefore, this study focuses specifically on oral language and emergent literacy strategies used by ECTs throughout adult-child shared book reading.

The Current Study

Given the importance of ECTs' ability to use extratextual talk to optimize oral language and emergent literacy during shared book reading, research examining shared book reading practices is crucial. Much of the previous literature evaluating ECTs' shared book reading practices is from an international context (Deshmukh et al., 2019; Hindman et al., 2019; Milburn et al., 2014). Little has previously been reported from the Australian context regarding ECTs' extratextual utterances during shared book reading or dialogic book reading (Cohrssen et al., 2016) and no research focuses on ECTs' paralinguistic and nonverbal features. To address this gap, this study provides a descriptive analysis of ECTs' "business-as-usual" practices during shared book reading.

This study addressed the following research questions:

1. Which extratextual utterances do ECTs use, and at what frequency, during shared book reading to support preschool children's oral language and emergent literacy skills?
2. Which paralinguistic and nonverbal features are most frequently used by ECTs during shared book reading?
3. Is there a relationship between ECTs' years of experience and their use of extratextual utterances during shared book reading?

Theoretical Framework

The current study is underpinned by a Vygotskian perspective of Sociocultural Theory that highlights how children's language and literacy learning is supported through mediated interactions (Vygotsky, 1978). Sociocultural Theory is framed by Vygotsky's concept of the *Zone of Proximal Development*, i.e., the difference between a child's independent ability and what they can achieve when provided with guidance (Vygotsky, 1978). A child's independent ability includes what they can achieve by themselves without the support of others and their potential ability encompasses their achievement with the help of somebody knowledgeable (Fellowes & Oakley, 2020; Pentimonti & Justice, 2010). Adults can work within children's Zone of Proximal Development through the use of scaffolding, which involves supporting a child to achieve a goal beyond their current ability (Wood et al., 1976). ECTs can provide scaffolding within a child's Zone of Proximal Development when they ask questions and make statements that extend children's learning (Anderson et al., 2012). Adults can modify the amount of support (i.e., high or low levels of scaffolding) they provide during a task depending on a child's ability (Pentimonti & Justice, 2010). In the context of shared book

reading, ECTs should use extratextual questions and comments to scaffold children's learning (Blewitt et al., 2009). They may adopt a high- or low-demand reading style that is dependent on children's age, knowledge, and language ability (Blewitt et al., 2009). For example, an ECT may ask a child a low demand question (such as a closed question) in the initial stages of learning a word and then ask a higher demand question (such as an open-ended question) when the word is more familiar to the child (Blewitt et al., 2009).

Method

Participants and Setting

Purposive sampling was used to recruit ECTs working anywhere in metropolitan, regional, and rural Victoria (Australia). The ECTs included in this study did not undergo any specific training to increase their use of extratextual utterances during shared book reading prior to undertaking their observation. To be eligible, ECTs held an early childhood teaching Bachelor or Master's degree from an Australian university, were employed in a government-funded preschool facility, and worked with four-year-old preschoolers (children in the year prior to formal schooling) at the time of the study. Ethics approval for this study was received from the La Trobe University Human Ethics Committeeand the Department of Education and Training. ECT participants were recruited via email contact and/or a follow up phone call with the site manager of the early childhood center, who then circulated the flier and participant information statement to participating ECTs.

Participants included 32 ECTs who were recruited from 26 different preschool centers including 81.25% from metropolitan Melbourne, 12.5% from regional Victoria and 6.25% located in rural Victoria. The mean years since qualifying as an ECT was 10.83 years (SD=10.07, median=6, range=6 months-43 years). Of the total, 16 ECT participants (50%) held a previous diploma and/or certificate qualification prior to specific training to become employed as an ECT. The average number of years working in early childhood was 15.25 years (SD=9.90, median=14, range=6 months-40 years).

Victoria has a population of 5.92 million people, of which 35.1% were born overseas, and 32.1% speak a language other than English at home (Australian Bureau of Statistics, 2016). In Victoria, 0.8% of the population are Aboriginal and/or Torres Strait Islander (ATSI), and the median weekly personal income is $644.00 and $1,419 for households (Australian Bureau of Statistics, 2016). Also referred to as municipalities, there are 79 local government areas within the state of Victoria. Appendix A provides an in-depth breakdown of the demographics for preschool children in the local council areas where our shared book reading observations were conducted, and demonstrates the economic, linguistic, and cultural diversity within Victoria.

Design and Procedure

To collect data, ECT participants were observed and video recorded by the first author on one occasion as they conducted a shared book reading session with their students. Using an iPad, the first author sat behind the children to ensure the recording was non-intrusive or distracting for the ECT or children. Children were not video-recorded; however, their voices were heard on the recording. Each participant selected their own book to read, in line with the study aims of evaluating "business-as-usual" shared book reading practices. The mean time spent reading a story was 6.94 min (SD=2.91, median=6.35, range=2.33–15.93). The mean number of children present during the shared book reading sessions was 14.56 (SD=5.95, median=13, range: 4–27).

The "Emergent Literacy and Language Early Childhood Checklist for Teachers" (ELLECCT)

Transcription, coding, and scoring procedures for the observations were completed using the "Emergent Literacy and Language Early Childhood Checklist for Teachers" (ELLECCT; Weadman et al., 2022). Details about each of these procedures are outlined under the relevant subheadings below. The ELLECCT is an observational tool designed to characterize ECTs' oral language and emergent literacy extratextual utterances, and paralinguistic and non-verbal features during shared book reading. Certain sections of the ELLECCT have been adapted from previous studies (found below under the "Coding of utterances" heading).

The psychometric properties of the ELLECCT were assessed in a separate study and the tool can be found in the Supplemental Material for that publication (Weadman et al., 2022). The observation data from the current study were used for the reliability testing of the ELLECCT and therefore, the intra-rater and inter-rater reliability of the ELLECCT can be found under the heading "Reliability" below and in Table 2. To measure the content validity, ten experts (five speech-language pathologists (SLPs) and five ECTs) were recruited. The Content Validity Index (Lynn, 1986) was utilized for a two-stage process to rate the individual items of the ELLECCT and suggest additional items. This process resulted in 25 of the 29 ELLECCT items being rated as having content validity by the expert panel. The face validity of the ELLECCT was measured using a three-phase modified Delphi process (Linstone & Turoff, 2002). A new panel of 12 (six SLPs and six ECTs) rated all the

current ELLECCT items to have face validity. A high level of consensus was also met for the overall structure, use of language on the tool, and scoring procedures (Weadman et al., 2022).
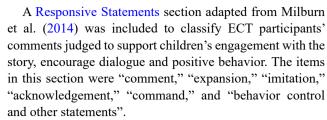
Transcription

Verbatim transcription of the shared book reading observations and all extratextual utterances spoken by ECT participants were transcribed by the first author, a researcher and experienced clinical SLP. Utterances included both pre- and post- book-related discussion. Reading the story text was not included in the transcription. Utterances could include a single word, small phrase or a complete sentence. Changes in speakers (for example, when a child spoke), an extended pause, or change in inflection signified a new utterance. Children's utterances were transcribed if they elicited a response from the ECT or were spoken in response to an ECT's question or prompt; however, they were not coded. Further details about transcription procedures for identification of utterance boundaries and transcription for ECTs' utterances and childrens' utterances are found in the ELLECCT manual (available as supplementary material in Weadman et al. (2022). An experienced SLP with a clinical and research background as a research assistant, who was external to the research team checked 34% (n = 11) of transcripts for accuracy. Initial transcription accuracy was measured using a percent agreement method with 99.4% agreement achieved for transcribed words and 98.9% agreement achieved for transcription of speaker turns. All discrepancies were resolved through discussion with the first author and independent SLP, or with the other study authors (university professors with a background in speech-language pathology).

Coding of Utterances

ECT participants' extratextual utterances were coded by the first author using the six sections of the ELLECCT classification system: Prompts, Vocabulary Promotion, Responsive Statements, Print Knowledge, Phonological Awareness, and Paralinguistic and Nonverbal Features. The Prompts section contains dialogic reading prompts: "completion prompt," "recall prompt," "open-ended prompt," "WH-prompt," and "distancing prompt" adapted from Whitehurst et al. (1988) and a "closed question" prompt adapted from Milburn et al. (2014).

The Vocabulary Promotion section includes explicit vocabulary prompts: "select and stress a word," "explain a word," "relate a word," and "repeat a word". These items were adapted from Milburn et al. (2014).

A Responsive Statements section adapted from Milburn et al. (2014) was included to classify ECT participants' comments judged to support children's engagement with the story, encourage dialogue and positive behavior. The items in this section were "comment," "expansion," "imitation," "acknowledgement," "command," and "behavior control and other statements".

A Print Knowledge section was included to classify ECTs' utterances that could increase children's awareness of print and develop their understanding of print form and function. It contains a "verbal reference to print" (with items including "question about print," "comment about print," and "request about print") and a "nonverbal reference to print" section (including "point to print" and "track print"), both adapted from work by Ezell & Justice (2000). Also included within this section is a "print concepts" item which was adapted from Clay (1993) and an "alphabet knowledge" item adapted from Girolametto et al. (2012).

The Phonological Awareness section includes four items to develop children's awareness and identification of spoken language parts. It contains "syllables," "rhyming" (generated by the study authors) and an "alliteration" item adapted from Pullen & Justice (2003). Further, a "sound awareness" item was included which was adapted from Girolametto et al. (2012).

The final section in the ELLECCT classification system is the Paralinguistic and Nonverbal Features section. These six items, "pauses," "facial expression," "gesture," "prosody," "volume," and "rate of speech" are based from Jefferson's (2004) conversation analysis conventions. These strategies may be used by ECTs when reading to build engagement and to support story comprehension.

Scoring

A scoring system was designed to determine frequency for ECT participants' different extratextual utterances. ECT participants received one point for each coded utterance to provide frequency count data. For example, a participant received a frequency count of five if they used five "WH-prompts" during their shared book reading observation. Individual codes were not mutually exclusive and therefore, multiple points were awarded for these utterances (e.g., an utterance could receive scoring under "WH-prompt" and "open-ended prompt"). For the Paralinguistic and Nonverbal Features section, a three-point rating scale was utilized for all five individual items (0 = not evident, 1 point = used on occasions in context, 2 points = used appropriately in context). A global rating scale was selected as the items in this section are more subjective across raters, given they are not tied to observable behaviors. Additionally, rating scales are less time consuming (Bakeman & Quera, 2011).

Table 2 Intra-rater and Inter-rater Reliability

	Intra-rater			Inter-rater		
	ICC	95% CI	Interpretation	ICC	95% CI	Interpretation
Prompts	0.997	(0.988, 0.999)	Excellent	0.881	(0.988, 0.999)	Excellent
Vocabulary Promotion	0.813	(0.48, 0.953)	Excellent	0.404	(0.058, 0.883)	Fair
Responsive Statements	0.987	(0.948, 0.997)	Excellent	0.964	(0.846, 0.993)	Excellent
Print Knowledge	0.946	(0.808, 0.986)	Excellent	0.967	(0.842, 0.993)	Excellent
Phonological Awareness	-	-	-	-	-	-

Further details about scoring procedures are located in the ELLECCT manual. A sum of all individual scores within a section (e.g., a sum of all six prompts) allowed section totals to be computed.

Frequency counts for different extratextual utterances and sections were converted to the average per minute in order to allow for differences in the time spent by ECT participants when reading to their students. First, the shared book reading time was converted to seconds. The frequency count for an extratextual utterance type (e.g., "WH-prompt") was then divided by the length of the shared book reading session in seconds. The average number in seconds was then converted to the average per minute by multiplying by 60.

Reliability

In order to establish reliability, intra-rater reliability was performed by recoding eight randomly selected observation videos (25% of data), 21–28 days after the initial coding. Inter-rater reliability was performed by the same SLP who completed transcription accuracy. After being trained, the SLP was provided with eight randomly selected observational videos (25% of data) to code and then compare with the first author's coding. Both reliability measures were evaluated using the Intraclass Correlation Coefficient (ICC) with a two-way random-effects model with absolute agreement (ICC; Shrout & Fleiss 1979) using Stata Core 16.1 (StataCorp, 2019). ICC and 95% confidence intervals are displayed in Table 2 for the first four sections of the ELLECCT. Interpretation was informed by Cicchetti's (1994) guidelines. Reliability scores could not be computed for Phonological Awareness as there were no extratextual utterances for this section present in the data set. The Vocabulary Promotion section was found to have the greatest discrepancy in agreement amongst raters. The score was impacted by the "select and stress a word" item which was less stable between raters than other items. The percent agreement of the other three items within this section was 84%. Cohen's Kappa (1960) scores were obtained for the Paralinguistic and Nonverbal Features section which uses categorical data using IBM SPSS Statistics for Mac, Version 26.0.0.0. A score of 0.54 (moderate agreement) was

Table 3 Section Totals

Section	M (SD)	Median	Range
Prompts	2.87 (1.51)	2.72	0.15–5.92
Vocabulary Promotion	1.10 (0.59)	1.11	0.18–2.93
Responsive Statements	4.13 (2.20)	4.02	0.73–10.97
Print Knowledge	0.51 (0.50)	0.35	0.00-1.80
Phonological Awareness	0.02 (0.09)	0.00	0.00-0.51

obtained for inter-rater reliability and 0.64 (moderate agreement) for intra-rater reliability (Landis & Koch, 1977).

Results

Findings indicate that ECTs participating in the study used Responsive Statements most frequently during shared book reading, with a mean of 4.13 statements per minute (see Table 3). Although responsive statements were most commonly used, there was large variability in their occurrence which is reflected in the range. This variability was found across all oral language domains; for example, the second most commonly used extratextual utterance was prompts with a mean of 2.87 per minute. Targeted vocabulary promotion strategies were used approximately once per minute with a mean of 1.10. Descriptive statistics for all section totals are displayed in Table 3. Strategies to facilitate emergent literacy development were notably less frequent with this sample of ECTs; a mean of 0.51 per minute was obtained for Print Knowledge, and Phonological Awareness strategies were rarely used with a mean of 0.02 per minute. The shared book reading observation results for individual oral language and emergent literacy strategies are presented below. All data are presented in units of mean per minute.

Prompts

ECT participants most commonly used *closed prompts* (e.g., "Do you think they're going to copy him?") with 1.33 occurring per minute. For dialogic reading prompts, *WH-prompts* (e.g., "What happens when the snow melts?") were most commonly used with 0.80 initiated per minute, followed by 0.37 *open-ended prompts* per minute. ECT participants infrequently used *recall prompts* (e.g., "Tell me what happened to the dog at the beginning of the story") with

Table 4 Descriptive Data for Prompts

	M (SD)	Median	Range	% of section total
Completion prompt	0.18 (0.32)	0.00	0.00-1.39	6.27%
Recall prompt	0.10 (0.19)	0.00	0.00-0.92	3.48%
Open-ended prompt	0.37 (0.39)	0.32	0.00-1.80	12.89%
WH-prompt	0.80 (0.59)	0.70	0.00-2.32	27.87%
Distancing prompt	0.09 (0.18)	0.00	0.00-0.56	3.14%
Closed prompt	1.33 (0.82)	1.08	0.00-2.90	46.34%

Table 5 Descriptive Data for Vocabulary Promotion

	M (SD)	Median	Range	% of section total
Select and stress a word	0.90 (0.56)	0.87	0.18–2.93	81.81%
Explain a word	0.09 (0.14)	0.00	0.00-0.50	8.18%
Relate a word	0.02 (0.05)	0.00	0.00-0.19	1.81%
Repeat a word	0.10 (0.17)	0.00	0.00-0.59	9.09%

Table 6 Descriptive Data for Responsive Statements

	M (SD)	Median	Range	% of section total
Comment	1.21 (0.90)	1.15	0.00-2.92	29.29%
Expansion	0.28 (0.33)	0.18	0.00-1.46	6.78%
Imitation	0.60 (0.53)	0.49	0.00-1.63	14.52%
Acknowledgement	0.77 (0.63)	0.73	0.00-2.90	18.64%
Command	0.47 (0.56)	0.26	0.00-2.07	11.38%
Behavior control & other statements	0.80 (0.65)	0.77	0.00-2.58	19.37%

0.10 per minute or distancing prompts (e.g., "He's having a midnight snack. What would you make for your midnight snack?") at 0.09 per minute. All descriptive data for prompts are included in Table 4.

Vocabulary Promotion

ECT participants most commonly opted to *select and stress a word* 0.90 times per minute. Other explicit vocabulary promotion strategies were infrequent. On average, ECT participants would *repeat a word* 0.10 times per minute, *explain a word* (e.g., "Breaches is what it's called when a whale jumps out of water") 0.09 times per minute, and *relate a word* (e.g., Mammal: "Your pet rabbit is a mammal") 0.02 times per minute. All vocabulary promotion data are shown in Table 5.

Responsive Statements

ECT participants most frequently used *comments* (e.g., "I reckon that was a crocodile") with 1.21 per minute, followed by *behavior control and other statements* 0.80 times

Table 7 Descriptive Data for Print Knowledge

	M (SD)	Median	Range
Verbal reference to print			
Question about print	0.00 (0.00)	0.00	0.00–0.00
Comment about print	0.05 (0.08)	0.00	0.00-0.26
Request about print	0.00 (0.00)	0.00	0.00–0.00
Nonverbal reference to print			
Point to print	0.03 (0.09)	0.00	0.00-0.42
Track print	0.18 (0.32)	0.00	0.00-1.56
Print concepts	0.25 (0.35)	0.18	0.00-1.80
Alphabet knowledge	0.00 (0.00)	0.00	0.00–0.00

per minute and an *acknowledgement* (e.g., "You're right!") of a child's utterance 0.77 times per minute. *Expansion* of children's utterances was the least frequent at 0.28 times per minute. Data for all responsive statements are displayed in Table 6.

Print Knowledge

Strategies to increase awareness of print were infrequently used during shared book reading (see Table 7). No ECT participants made utterances relating to *alphabet knowledge*, made *requests about print* or asked *questions about print*. *Comments about print* (e.g., "The words on this sign say, 'don't jump in'") were extremely uncommon at 0.05 times per minute. ECT participants occasionally made nonverbal references to print including *tracking print* (such as running a finger along the text when reading) 0.18 times per minute, but rarely *pointed to print*, which happened 0.03 times per minute. On average, ECT participants made reference to *print concepts* including acknowledging the title, author or illustrator 0.25 times per minute.

Phonological Awareness

Utterances relating to phonological awareness were used extremely infrequently. No ECTs made reference to syllables, alliteration, or sound awareness. Only one ECT made reference to *rhyming*, resulting in an average of 0.02 times per minute (SD = 0.09, median = 0.00, range = 0.00-0.51).

Paralinguistic and Nonverbal Features

This final section highlights paralinguistic and nonverbal features used by ECTs when reading to preschoolers. Frequency totals for each item within this section are displayed in Table 8. The results showed that facial expressions, gestures, and prosody were the most commonly reported strategies across the 32 videos. Pauses were the least frequently observed strategy used by ECTs in this sample.

Table 8 Frequency Totals for Paralinguistic and Nonverbal Features

Item	Not Evident n (%)	Occasional Use n (%)	Appropriate Use n (%)
Pauses	12 (37.5%)	12 (37.5%)	8 (25%)
Facial Expression	0 (0%)	13 (40.6%)	19 (59.4%)
Gesture	0 (0%)	11(34.4%)	21 (65.6%)
Prosody	0 (0%)	10 (31.3%)	22 (68.7%)
Volume	3 (9.4%)	19 (59.4%)	10 (31.2%)
Rate of Speech	4 (12.5%)	22 (68.7%)	6 (18.8%)

N = 32

Years of Experience and ECTs' Extratextual Utterances

In order to determine the distribution of the data, the Shapiro-Wilks test for normality was completed using IBM SPSS Statistics for Mac, Version 26.0.0.0. The normality assumption was rejected for Print Knowledge (W(32)=0.863, p=0.001), but not for "Years working in early childhood" (W(32)=0.955, p=0.204), Prompts (W(32)=0.970, p=0.496), Vocabulary Promotion (W(32)=0.952, p=0.168), and Responsive Statements (W(32)=0.946, p=0.110). Therefore, a Pearson Product-Moment Correlation was computed to assess the relationship between ECTs' years of experience working in early childhood and their use of extratextual utterances. There was no significant relationship found between ECTs' years of experience and Prompts (r=0.042, p=0.820, 95% CI=-0.050, 0.063), Vocabulary Promotion (r=0.061, p=0.738, 95% CI=-0.018, 0.026), and Responsive Statements (r=0.042, p=0.819, 95% CI=-0.074, 0.092). Spearman's Correlation was used to assess the relationship between ECTs' years of experience and use of Print Knowledge extratextual utterances. Spearman correlation indicated a weak negative association that was not significant (r=-0.126, p=0.493, 95% CI=-0.025, 0.012). Phonological Awareness was omitted from the analysis because there was only one occurrence of this utterance type in the data set.

Discussion

The primary objective of this study was to characterize Australian ECTs' extratextual oral language and emergent literacy strategies during shared book reading. A further aim was to evaluate common paralinguistic and nonverbal features ECTs use when reading to build engagement with the text. The major study findings are explored below, with implications outlined for supporting the oral language and emergent literacy skills of preschoolers during shared book reading, as well as for further research.

ECTs' Extratextual Utterances

The first major finding was wide variability in ECTs' use of dialogic reading and the reliance on closed prompts. Of the five prompts specific to dialogic book reading (Completion, Recall, Open-ended, WH-, and Distancing prompt), the ECTs in our sample most frequently used WH-prompts. WH-prompts are introduced in the first level (Level 1) of dialogic book reading, with open-ended prompts introduced in Level 2 (Flynn, 2011). Further, closed prompts were the most frequently used (46.3% of all prompts) and were used more than three times more often than open-ended prompts (12.89%). Distancing prompts, a higher-demand question type, were infrequently used across the entire sample. These results indicate that our ECT participants tended to focus on lower-demand questions, which are less cognitively challenging and limit children's extended responses and therefore, language development opportunities (Walsh & Hodge, 2018). Given the strong link between dialogic book reading and supporting preschoolers' vocabulary (Mol et al., 2008), these results also pose potential missed opportunities for the ECTs in our sample to maximize the provision of support to children's vocabulary during shared book reading. Further, explicit vocabulary promotion strategies were seldom used, consistent with previous literature indicating explicit vocabulary instructional strategies are infrequently used by ECTs without training (Milburn et al., 2014; Namasivayam et al., 2015). These results indicate ECTs are not capitalising vocabulary learning opportunities for during shared book reading and highlight a key area for professional learning with ECTs.

An important finding in this study was that our ECTs' were generally responsive during shared book reading. Our results demonstrate that responsive statements were the most frequently used extratextual utterances, and were used more than prompts during shared book reading. These findings are noteworthy given the importance of ECTs being responsive during shared book reading to create a positive social milieu (Blewitt & Langan, 2016), and supporting engagement and language outcomes (Girolametto & Weitzman, 2002). Despite these benefits, the mean number of responsive statements used by ECTs (4.13 per minute) in this study was relatively similar to that reported in Milburn et al. (2014) at 4.76 per minute for ECTs *prior* to undergoing professional development. The ECTs in our study did not undergo any training attached to this study, therefore it would be expected they could increase their responsiveness with such support. While it was encouraging that ECTs used responsive statements during shared book reading, it was notable that expansions were the least frequently used responsive statement. Expansions are a more cognitively demanding responsive comment for the child (Hindman et

al., 2019) and provide a more advanced expressive language model (Girolametto & Weitzman, 2002). Our results confirm findings from previous studies demonstrating ECTs are not always providing opportunities to expand and advance children's language skills in preschool settings (Girolametto & Weitzman, 2002; Justice et al., 2008a).

One of the main study findings relates to the ECT participants' emergent literacy extratextual utterances. The ECTs in our sample rarely incorporated strategies that focused on supporting children's emergent literacy development during shared book reading. Both verbal and nonverbal references to print were minimal, in line with evidence from previous observations reporting on ECTs' use of print referencing strategies (Justice et al., 2009; Zucker et al., 2009). Our sample of ECTs typically used print awareness strategies that focused on print organisation (e.g., book title and author) rather than letters and words. This highlights another key area for focus in professional learning to enable ECTs to develop strategies that will support children to develop an understanding of the alphabetic principle (Cabell et al., 2011). One area that has not been as commonly reported in the previous literature is ECTs' use of extratextual utterances that focus on phonological awareness. There is a paucity of studies examining ECTs' use of phonological awareness strategies during shared book reading. A related study, however, reported that parents rarely used phonological awareness strategies when reading storybooks (Stadler & McEvoy, 2003). Literature looking specifically at ECTs has demonstrated benefits for preschoolers' phonological awareness skills when ECTs incorporate these strategies into shared book reading (Justice et al., 2005; Rachmani, 2020; Ziolkowski & Goldstein, 2008). Collectively, the results from this study reveal that Australian ECTs are not frequently using strategies to support important precursor emergent literacy skills, such as print knowledge or phonological awareness, that are linked with later literacy ability (NELP, 2008).

ECTs' Paralinguistic and Nonverbal Features

ECTs' use of paralinguistic and nonverbal features during shared book reading is a relatively unexplored area in the literature. Our findings show ECTs were generally animated and engaging in their book delivery style through their use of gesture, prosody, and facial expressions. All of these features are encouraging given previous studies have indicated the positive impact of gesture use with vocabulary (Rowe et al., 2013), and the benefits of gesture and intonation with supporting children's engagement (Diehl & Vaughn, 2010; Moschovaki et al., 2007). The ECTs in our study did not frequently use pauses before words, before turning a page, or after turning a page. This finding, while preliminary,

indicates that ECTs could increase pause time to allow children to respond to a question, and provide more opportunities to make comments during shared book reading (Colmar, 2014; Lane & Wright, 2007). The results from this study raise a number of prospects for future research to explore the impact of ECTs' paralinguistic and nonverbal features on children's engagement and language skills during shared book reading.

Extratextual Utterances and Years of Experience

We found no relationship between ECTs' years of experience and their use of extratextual utterances. These results mirror some previous reports that ECTs with more years of experience do not use more favorable strategies to support vocabulary (Wasik & Hindman, 2014) or use more print referencing strategies once reading length is controlled for (Zucker et al., 2009). However, the association between ECTs' years of experience and use of extratextual utterances has yielded mixed results, and more research is required to determine the impact of teacher characteristics on shared book reading. The findings from our current study are exploratory and informative and should be considered with caution given the small sample size. They do, however, warrant additional investigation to determine whether ECTs' years of experience impacts their use of extratextual utterances and any underlying mechanism behind this.

Study Limitations and Future Directions

This study was limited by the small sample size, selected from one state in Australia, thus restricting the generalizability of these findings to a wider population. Further research should include a larger sample size, with recruitment of ECTs from across all Australian states and territories and with sampling from different times of year and different class sizes. Demographic details about the children in such studies should also be provided given that shared book reading effects are influenced by child characteristics e.g., oral language skills, cognitive ability (Grolig, 2020). Other factors that may influence ECTs' extratextual utterances should also be considered in future studies, such as previous training through professional development. It is possible these factors may have impacted the type and amount of extratextual utterances demonstrated by ECTs. For example, the number of managerial prompts. These factors were constrained by logistics, however, they could potentially be controlled for in future studies to mitigate such challenges. Another possible limitation was that ECT participants selected their own book to read during the shared book reading observations in order to evaluate "business-as-usual" practices. While

this allowed ECTs to use a book they felt comfortable reading, the book variability may have influenced opportunities for ECTs to use an array of extratextual utterances. Further, shared book reading observations only provided opportunities for evaluation of one context throughout the day when ECTs may be supporting children's oral language and emergent literacy skills in other effective and powerful ways. In addition, only one observation was completed for each participant. In future studies, multiple observations of ECTs participating in different activities may be more representative of their typical interactions and use of instructional practices in oral language and emergent literacy. Finally, while strong reliability was obtained for most items measured for this study, a discrepancy between raters found for Vocabulary Promotion requires further investigation.

children's participation through their use of paralinguistic and nonverbal strategies during shared book reading, they could be providing even more instructional opportunities to support preschoolers' oral language and emergent literacy development with extratextual utterances that target a greater range of dialogic book reading prompts, explicit vocabulary promotional strategies, and language expansion strategies.

Appendix A.

Demographic details for the children based on local government areas are described below in Table 9. The median household income was obtained from the Australian Bureau of Statistics (2016). All other information was taken from the Australian Early Development Census (2018).

Table 9 Shared Book Reading Demographic Data for Preschool Children by Local Government Areas (LGAs)

LGA	# preschool settings in study per LGA	% children born in another country	% ATSI* children	% children with ESL**	% children with LBOTE	% children with special needs status	% children with at-risk language skills	% children with vulnerable language skills	Median household income
LGA 1	2	9.1%	0.2%	9.5%	18.7%	4.6%	7.2%	4.1%	$1,527.00
LGA 2	3	5.2%	0.7%	7.8%	13.9%	6.1%	5.9%	2.9%	$1,655.00
LGA 3	1	11.1%	≤0.4%	6.7%	15.6%	2.8%	5.9%	2.1%	$1842.00
LGA 4	2	10.6%	0.5%	23.5%	32.1%	5.2%	10.2%	7.2%	$1,554.00
LGA 5	3	8.7%	1.5%	16.2%	28.6%	4.6%	6.9%	5.2%	$1,4230.00
LGA 6	1	10%	≤0.2%	7.7%	18.3%	3.6%	5.6%	1.8%	$2,083.00
LGA 7	3	3.8%	1.9%	4.4%	6.7%	5.6%	7.7%	6.2%	$1,244.00
LGA 8	1	8.1%	1.2%	21.2%	34.7%	4.6%	9.4%	6.4%	$1,444.00
LGA 9	1	2.8%	0.8%	2.2%	5.0%	5.9%	8.4%	6.1%	$1,497.00
LGA 10	1	11.3%	0.6%	22.8%	39.7%	5.0%	7.4%	6.3%	$1,503.00
LGA 11	3	21.1%	0.7%	57.5%	70.5%	5.2%	12.8%	9.5%	$1,168.00
LGA 12	1	2.1%	0.8%	1.9%	3.9%	5.4%	9.0%	6.4%	$1,501.00
LGA 13	4	9.4%	0.2%	12.6%	24.3%	3.5%	4.5%	2.8%	$1,507.00
LGA 14	1	2.6%	2.6%	≤1.5%	2.1%	4.1%	19.6%	7.2%	$1,002.00
LGA 15	2	8.7%	≤0.5%	20.0%	33%	3.8%	7.8%	5.6%	$1,958.00
LGA 16	1	3.9%	0.9%	1.4%	2.9%	4.1%	9.9%	6.4%	$1,276.00
LGA 17	2	4.9%	1.1%	5.5%	9.5%	6.4%	8.9%	5.9%	$1,331.00

* Aboriginal and Torres Strait Islander

** English as a second language

*** Language background other than English

Conclusions

Shared book reading provides rich and meaningful opportunities for ECTs to stimulate preschoolers' oral language and emergent literacy growth through their use of extratextual utterances and paralinguistic and nonverbal features. Further, ECTs can read to children in ways that are engaging and linguistically responsive to encourage children's language development and participation. Results from the current study indicate that while ECTs may be inviting

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