Interactive Shared Book Reading with a Narrative and an Informational Book: The effect of genre on parent-child reading

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Interactive shared book reading with a narrative and an informational book: The effect of genre on parent-child reading

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Abstract. Previous studies indicate the dominance of narrative fiction in shared book reading. Theory and research suggests this may contribute to reading difficulties. This study contrasted the impact of two genres on shared book reading based on factors known to maximize children’s literacy development. It also examined the participants’ perspectives regarding their interactive reading behaviours. Eight parent-child dyads, with children four-and five-years-old, read a non-narrative informational book and a narrative fictional book. The study controlled for the books’ reading levels, Rockets and Spaceships (Guided Reading K, Lexile 520) and A Penguin Pup for Pinkerton (Guided Reading K, Lexile 510). Analysis showed that informational book features such as captions, predictable text, and a glossary supported interactive reading behaviours. Children engaged more with concrete, factual concepts, and answered and asked more questions with the informational book. Additionally, the non-narrative informational text encouraged more children's interactive reading behaviours known to develop emergent literacy skills. The informational text was more engaging for children because of 1) book features/characteristics, and 2) the information presented. Parents were generally unaware of the benefits of reading multiple genres to their children.

Keywords: Content Area Literacy; Emergent Literacy; Genre; Fiction/Narrative Text; Expository/Informational Text

Introduction

Parents should introduce varied genres to their young children (Manz, Hughes, Barnabas, Bracaliello, & Ginsburg-Block, 2010). The types of books used with a young child may influence later reading and expressive language outcomes (Schickedanz & McGee, 2010). Moreover, such a practice could help mitigate children’s frequent struggles transitioning from familiar narrative texts to the more varied genres in late elementary grades (Ogle & Blachowicz, 2002). However, despite the benefits of multiple genres in shared book reading, studies demonstrate the continued dominance of narrative and the shortage of informational books.
within early childhood (e.g. Crisp, Knezek, Quinn, Bingham, Girardeau, & Starks, 2016; Yopp & Yopp, 2012) and especially at home (Robertson & Reese, 2017). This, despite Duke’s (2000) finding that parents enjoy reading informational texts their children.

Research demonstrates differences in the ways that parents and children interact with narrative and informational books. A few studies have explored differences in teachers’ (Moschovaki & Meadows, 2005; Price, Bradley, & Smith, 2012) and parents’ (Price, van Kleeck, & Huberty, 2009) spoken language associated with shared book reading and genre, as well as more global measures of interactions that include language (Anderson, Anderson, Lynch, & Shapiro, 2004). The authors of the present work have identified no previous studies explicitly linking a wide range of shared book reading behaviours known to support emergent literacy to the use of different genres. Additionally, they did not find genre studies explicitly balancing the reading difficulty of the books in early childhood. This study seeks to fill these voids.

This study describes specific behaviours associated with two contrasting genres used during shared book reading: narrative fiction (referred to herein as “narratives” or “narrative books”) and non-narrative informational books (referred to as “informational books”). It examines those specific behaviours for each genre in relation to a broad range of behaviours, both verbal and physical, known to develop emergent literacy skills. This analysis is important because it relates genre exposure for young children to general literacy development. It also suggests a practice for mitigating later reading failure, which Jeanne Chall called the fourth grade slump (Chall, Jacobs, & Baldwin, 1990).

Two questions guided this study: 1) how do parents’ and children’s interactive literacy behaviours that support literacy differ when reading a non-narrative informational book as compared to a narrative fictional book?, and 2) what are the parent and child perspectives regarding their interactive reading behaviours?

**Interactive Shared Book Reading**

Children whose parents read and discuss books with them gain an early introduction to the world of the written word (Morrow, 2005; Promoting Healthy Families, 2008). That introduction should include active shared book reading, which develops emergent literacy skills such as vocabulary, print knowledge, syntax, and comprehension (e.g. National Institute for Literacy & National Center for Family Literacy, 2008; Schickedanz & McGee, 2010). To maximize the benefit of shared book reading, parents should engage in a range of interactive reading behaviours that involve the child (DeBruin-Parecki, 2007; Morrow & Gambrel, 2001). These behaviours include conversation, taking turns in discussions, and making the child part of the reading process. McGee and Richgels (2004) detail this idea further. They explain that the adult may read, ask questions, comment, and point to both words and illustrations, while the child responds with his or her own parallel comments and questions. With such interactions, shared book reading brings an emergent reader’s attention to a text and its meaning. For the sake of this study, we define interactive shared book reading as a set of techniques designed to focus an emergent reader’s attention on salient book features in order to develop a foundation for reading comprehension.

**Genre**

Genres represent differences in text that vary according to the book’s purpose. Fiction, biographies, and science texts are examples of genres; every book is an example of at least one
genre. According to Duke and Purcell-Gates (2003), different genres reflect differences in content, language, structure, and format.

Dymock (2007) explains that children's narratives require the development of multiple elements such as setting, theme, episodes, and resolution. Conversely, non-narrative informational books describe facts, explain sequences of events, compare and contrast, and deal with problems and solutions.

Grammar and sentence structures vary with genre. As a single example, informational books often use timeless verbs that describe actions that take place in the past, in the present, and in the future (Duke & Kays, 1998). While a fictional narrative text might explain, "Johnny went to school," indicating that one person went to school at a given time, and that the event is time-constrained, an informational text might state, "Students go to school." In the latter case, students in the past, present, and future go to school. Additionally, the latter sentence suggests that going to school is an inherent property of being a student. Thus, seemingly small changes in language can have important implications for meaning and comprehension.

Fictional narratives are structured by time (Bruner, 1991). The focus of the story is the unfolding of a process that is time ordered, whereas informational books are organized by topic. For example, many fictional narratives have individuals meet and develop relationships over time. They emphasize personal growth and change. In contrast, informational books present men and women in terms of their professional roles, such as scientist or astronaut, and their professional activities or accomplishments.

Pappas (2006) identified four format features of informational books: the topic must be presented, the topic must be defined, the characteristic processes regarding the topic must be described, and a summary statement must be given. Reviews of topic-specific vocabulary are frequently found with informational books; they may take the form of a glossary at the end of the book. Pappas also commonly found illustrations with explanatory labels; these illustrations often come in the form of photographs, in contrast to hand drawn illustrations frequently found in children's narratives.

While elements may overlap, fiction has a different structure from informational texts. Generally, fiction is organized by time and informational books are organized by topic. Exceptions exist. Histories and biographies are informational texts organized by both time and topic; here the difference is that fiction is invented and informational texts are based on actual events. Bruner (1991) identified 10 elements found in narrative texts, one of which is canonicity and breach. Canonicity and breach requires that the characters' actions must have at least one violation of a culturally accepted norm. The violation of that norm provides an opportunity to give the story meaning, often demonstrating a culturally desired behaviour. This implies that fiction teaches lessons through implied meaning while informational texts are largely literal. For a more detailed description of fictional narrative, we recommend Bruner (1991).

Fiction may give background for the beginning of a story but will not typically introduce a topic as is done with informational texts. Fiction does not define the topic, and it does not usually describe characteristic processes. Summaries are also absent from most narratives, as are the explicit examples, definitions, and illustrations associated with vocabulary. These are often found with informational texts.

Each genre requires different ways of thinking for the reader to arrive at an understanding; therefore, when parents and educators read different genres aloud to children, the children’s ability to read and write within that genre is impacted positively (Bruner, 1991; Palincsar & Duke, 2004). According to Hirsch (2003), children need to be exposed to and taught the differences in text genres to understand the different texts themselves.
This study seeks to describe differences in behaviours when parents and children share the reading of a non-narrative informational book and a narrative fictional book. It contrasts those differences with respect to behaviours known to support emergent literacy development.

**Literature Review**

A small group of studies examined the effect of genre on shared book reading during early childhood. As a first example, Anderson et al. (2004) looked at 25 parents reading children's books to their four-year-old children. They compared two informational texts to two narrative texts. The researchers found that parents interacted with their children nearly twice as much with informational texts ($\bar{x} = 83.8$) as they did with narrative texts ($\bar{x} = 49.4$), even though the informational books had a combined 735 words compared to the narrative books' combined 1,134 words. This finding was impressive, as the two informational books consisted of fewer words about which to interact, yet these informational texts generated significantly more interactions.

Price et al., (2009) looked at 62 parents (55 mothers and 7 fathers) reading to their three- and four-year-old children. The dyads read narrative and informational books on two occasions. Similar to Anderson and colleagues (2004), they found both children and parents talked more and asked more questions with the informational books; the children engaged in nearly twice as much discussion. Parents also used a greater variety of vocabulary and longer utterances with the informational texts.

As an exception, Robertson and Reese (2017) found no correlation between parent interactions and book genre. They had 44 parents read a narrative and an expository book to their children and then had the children complete a battery of literacy tests. The researchers found that the parents’ reading strategies correlated with children’s literacy skills and this result held true across both genres. Higher level strategies such as predictions and inferences were positively correlated with higher literacy scores and lower level strategies such as descriptions were correlated with lower literacy scores. The researchers also found that the parents who read a wide range of texts at home also talked more during the narrative text and shared more high-level strategies with the expository text.

Moschovaki and Meadows (2005) found that 20 Greek kindergarten teachers engaged in significantly more high-cognitive demand discussions with their 3.5- to 5.5-year-old students when using informational texts rather than narrative texts. Conversely, they found that the teachers and students engaged in significantly more low-cognitive demand discussions when using two narrative texts. For Moschovaki and Meadows, high-cognitive demand discussions encouraged analysis, prediction, and reasoning; low-cognitive demand discussions focused on interpretations of the book illustrations or the text. The Moschovaki and Meadows study paralleled the findings from Price et al., (2012), who found that preschool teachers used significantly more complex vocabulary when reading informational books to their classes. More recently, Neuman, Kaefer, and Pinkham (2016) studied a shared book reading intervention focused on science involving 268 students in 17 low-income preschool classrooms. The treatment group received a science intensive shared book reading program with nothing being done for the control group. The 12-week intervention found that preschool students' word, concept, and content knowledge improved relative to the control group. They also found that children's knowledge of the information genre improved.
Recent studies indicate that children either prefer informational books or have no preference. Kotaman and Tekin (2017) studied 142 four- and five-year-old children attending government supported kindergartens in Turkey. The researchers surveyed children’s parents, interviewed their preschool teachers, and the children participated in 8 book selection sessions. They found children had a preference for informational texts. Similarly, Robertson and Reese (2017) had 44 parents read a narrative and an expository book to their children and then had the children complete a battery of literacy tests. The researchers found that the parents reading strategies correlated with children’s literacy skills and this result held true across both genres. Higher level strategies such as predictions and inferences were positively correlated with higher literacy scores and lower level strategies such as descriptions were correlated with lower literacy scores.

Repaskey, Schumm, and Johnson (2017) looked at 82 students in the first and fourth grades. Participants were children from a large urban school district in the southeastern United States and were evenly split between boys and girls. The researchers gave the students a choice of narrative and expository books. They found that first grade boys had a strong preference for expository books; however, first grade girls had preferences for both expository and narrative books. On the whole, these studies suggest that the children’s preferences are an unlikely contributor to the dearth of informational books.

**Book Sharing that Supports Literacy Development**

Vygotsky’s (1978) sociocultural learning theory suggests that parents and children co-create meaning during shared book reading. By involving the child in a story discussion, the parent and child come to a common understanding about the book (Nevills & Wolfe, 2009). Several studies support this contention including Wasik, Bond and Hindman (2006). The researchers studied 16 Head Start classrooms and 207 preschool children. Using an experimental design, the researchers found that Head Start teachers could significantly support children's vocabulary development by using open-ended questions associated with shared book reading. The intervention group’s Peabody Picture Vocabulary Test III scores increased by slightly more than 20 points from fall to spring while the control group’s mean gain was slightly less than 10 points ($F(1, 189) = 33.28, p < .001$). The effect size ($d = 0.73$) was large. The study found that asking predictive questions and making connections were important strategies for building preschool vocabularies.

The National Research Council (1998) reports that children become more aware of print when parents and teachers bring children’s attention to the text. This is supported by Piasta, Justice, McGinty, and Kaderavek (2012). The researchers wanted to see if verbal and non-verbal references to print during shared book reading has long-term literacy benefits. In an experimental, longitudinal study, they looked at 85 Head Start classrooms assigned to three groups, a high dose program, low dose, and treatment conditions. The high dose classroom had teachers expose their children to verbal and non-verbal explicit reference to print during shared book reading four times a week. The low dose classrooms exposed children to the explicit print reference twice a week, and the treatment classrooms continued with their regular classroom practice.

Piasta, et al., (2012) found that at one and two years later, both the children in the low and high print reference conditions had better literacy scores than the control group. For example, the high dose children had higher scores for word recognition ($d = 0.27, p = .022$), spelling ($d = 0.31, p = .002$), and comprehension ($d = 0.26, p = .025$) when compared to the
control group. The authors concluded that verbal and non-verbal print references benefit later literacy development.

The environment helps create or hinder an educationally supportive atmosphere. More specifically, maintaining physical proximity, sustaining interests and attention, and displaying a sense of audience help to create a positive shared book reading experience.

Bergin (2001) found that parents' positive affect supports positive attitudes for reading. She videotaped 32 parent/child dyads during shared book reading and coded affective interactions. For the study, Bergin created a composite rating of positive interactions during story reading, interactions that she called "affection". It included warmth (expressions of concern for the other, including smiling), responsiveness (interest and response to the other's activities), flexibility (willingness to go along with the other's wishes) and sensitivity (response to cues from the other person). The researcher found a correlation (r = .38, p < .05) between the parent's affection score and the child's reading fluency. Bergin also found that children who had positive interactions during shared book reading were more engaged readers. The reverse was also true; more engaged readers had interactions that were more positive during shared book reading.

Similarly, Sonnenschein and Munsterman (2002) studied 30 families with five-year-old children; 83 percent were from low-income families. The researchers looked at the affective quality of the parent/child interactions. To do this, they videotaped parents and children while reading a book which the researchers transcribed and analyzed for the affective quality of conversations around books. They additionally measured the child's motivation for reading at the start of first grade.

Sonnenschein and Munsterman (2002) described affective quality as a combination of reading expression, contact with the child, reader's involvement with the child, the child's involvement with the parent, and the parent's sensitivity to child engagement. They interviewed students individually at the beginning of first grade and administered a forced choice questionnaire designed to assess children's reading motivation. Sonnenschein and Munsterman (2002) found a correlation (r = .55, p = .004) between the affective quality of storybook reading and first grade reading motivation.

Summary

The above mentioned studies suggest advantages to reading informational books with children in early childhood. These advantages include greater parent/child verbal and physical interactions. Similarly, the studies found early childhood teachers asked more sophisticated questions and used more difficult vocabulary while reading informational texts when compared to fiction. Further, evidence suggests that children's genre preference is an unlikely contributor to fiction's dominance in home and school libraries. Finally, several studies show that specific parent child interactive literacy behaviours support literacy development; these are the behaviours which are central to the current study.

This study asks what is the nature of interactive behaviour, including language, when parents read informational texts and when they read narrative fictional texts to their children. It further asks what are the similarities and differences found with interactive reading during narrative fictional texts and during non-narrative informational texts. The answers to these questions extend our understanding of emergent literacy development. It identifies differences in parent child interactions during shared book reading that are dependent on book genre. The study identifies such differences; it suggests changes for how parents encourage the development of their children's emergent literacy skills. Ultimately, the study hopes to
encourage prophylactic literacy practices that prevent problems with conventional literacy development such as the fourth grade slump.

Methods

Participants in the current study included four mothers and four fathers along with their children, four girls and four boys. The children were four- to five-years-old and were transitioning from emergent literacy to conventional literacy. As verified by the day-care centres, the children were expected to enter kindergarten during the next school year. The demographics of the communities suggested that the centres catered to middle SES and upper-middle SES parents. Table A indicates the genders of all participants and the order in which books were read.

Table A Participant Gender and Book Order

<table>
<thead>
<tr>
<th>Name</th>
<th>Child Gender</th>
<th>Parent Gender</th>
<th>First Book</th>
<th>Second Book</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noah &amp; Richard</td>
<td>Male</td>
<td>Male</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Captain &amp; William</td>
<td>Male</td>
<td>Male</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Nate &amp; Sarah</td>
<td>Male</td>
<td>Female</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
<tr>
<td>Bruce &amp; Ting</td>
<td>Male</td>
<td>Female</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
<tr>
<td>Rapunzel &amp; Peggy</td>
<td>Female</td>
<td>Female</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Mena &amp; Dee</td>
<td>Female</td>
<td>Female</td>
<td>Rockets</td>
<td>Pinkerton</td>
</tr>
<tr>
<td>Violet &amp; Evan</td>
<td>Female</td>
<td>Male</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
<tr>
<td>Cinderella &amp; Pete</td>
<td>Female</td>
<td>Male</td>
<td>Pinkerton</td>
<td>Rockets</td>
</tr>
</tbody>
</table>

Note: All names are pseudonyms. The child is referenced first in each pair.

Four dyads were of Asian descent and four were of European descent. The eight dyads met with the researcher at four different day-care centres.

The researchers chose the Adult Child Interactive Reading Inventory (ACIRI) (DeBruin-Parecki, 2007), as it works well with the study’s questions. The ACIRI measured both physical and verbal interactions known to develop emergent literacy, and quantified the extent to which each parent scaffolded his or her child’s learning. The ACIRI quantified a range of 12 interactive reading behaviours for both the adult and the child (DeBruin-Parecki, 1999). Additionally, the ACIRI was adaptable to qualitative observations, as illustrated by Barnyak (2011), who created semi-structured questions based on the instrument.

The ACIRI manual (DeBruin-Parecki, 2007) details each behaviour to be scored and clear criteria for each behaviour are given for both parents and children; examples help clarify the scored behaviours. With the behaviour ratings, a zero indicates a behaviour not observed. Behaviours observed once (or infrequently) are given a one. Behaviours observed two or three times (or some of the time) earn a two. A behaviour that occurs four or more times (or frequently observed) earns a three. Further, analogous phrasing of questions allows the scores on the same criteria to apply to both parent and child. As an illustration, item 2.2 for adults assesses whether "Adult points to pictures and words to assist the child in identification and understanding" (p. 33). The corresponding item for children reads, "Child responds to adult cues or identifies pictures and words on his or her own" (p. 35). The scores associated with each
item are distinct from all other items on the measure.

**Procedures**

Participants indicated that they were not familiar with either of the books used in the study. Book order was counterbalanced according to parent and child gender (see table A), and the researcher asked the dyads, “Please read together exactly as you would at home.” At the end of the reading sessions, all parents confirmed that they had read as they did at home.

Data was taken from a video recording and a separate audio recording which were then transcribed. DeBruin-Parecki (2007) recommended that two individuals score behaviours. An assistant initially assessed videos independently of the first author.

After the reading sessions were completed, the researcher asked the dyads semi-scripted questions developed from the ACIRI categories. This made it possible to gather the participants’ perspectives on the same shared book reading behaviours scored by the ACIRI. As an example, an item on the ACIRI was, “Adult poses and solicits questions about the book’s content.” This scoring item was transformed into the question, “Today you did several things to help your child’s understanding of the books. Did you feel there was a difference between the books? What about asking questions?”

The videos and transcripts were studied for a subjective analysis of both shared reading behaviours and individual preferences. Semi-scripted questions that solicited the children’s views, also based on the ACIRI, were also used during interviews. Interpretation of the interviews was informed by sociocultural learning theory and the zone of proximal development (Vygotsky, 1978, 1986).

Examining each question across all participants in a recursive process, the first author looked for trends and contrasts in answers. He compared respondents’ answers to ACIRI scores and to video-recorded behaviours; he compared responses across respondents. He then grouped the findings into common themes among which the researchers sought to understand individual behaviours, trends in behaviours, and exceptional behaviours.

**Selected Books**

The researchers chose *A Penguin Pup for Pinkerton* (Kellogg, 2001) as the narrative fiction title, and *Rockets and Spaceships* (Wallace, 2011) as the non-narrative informational title, because they fit multiple criteria. Importantly, the books were age-appropriate for shared book reading. They purposely sought a strong contrast in book genres, as genre elements can overlap. Additionally, the books closely matched in terms of reading difficulty.

Pappas (2006) described the features of informational books. She determined that informational books introduce the book’s topic, describe the topic’s attributes and characteristics. She also noted that as an optional feature, informational books may recap information in a form of a glossary and may use illustrations in support of the main text. *Rockets and Spaceships* fits these attributes.

Conversely, Atwell (1998) indicated that writing fiction required the development of multiple elements such as character, problem, setting and dialogue. Additionally, fictional books are structured according to time (Bruner, 1991). *A Penguin Pup for Pinkerton* has these features.

The authors found no studies that controlled the reading level of the selected books. This study sought to control for disparities in reading difficulty and supportive textual features.
Consequently, the study uses two books of contrasting genres that matched reading level criteria according to both the Lexile and Guided Reading scales.

The selected books were both written on the identical K Guided Reading level (Scholastic.com) and nearly identical Lexile levels. A Penguin Pup for Pinkerton has an L520 Lexile level, and Rockets and Spaceships has an L510 Lexile level (http://www.lexile.com/fab/). Both books have 32 pages and similar numbers of images. A Penguin Pup for Pinkerton has 548 words and 65 sentences, while Rockets and Spaceships has 492 words and 59 sentences.

A Penguin Pup for Pinkerton is a narrative about a dog named Pinkerton. Pinkerton learns how emperor penguins care for their eggs and then misguidedly tries to care for a football, mistaking it for a penguin egg. Typical of storybooks, the book has multiple characters, is organized by time, is written in the present tense, and has a plot with features typically found in a narrative book. Typical of children’s narratives, it has large, full colour, hand drawn illustrations that support the book’s text.

Rockets and Spaceships is an informational book written to teach children about topics associated with space flight and exploration. Fitting the characteristics of informational books, the book introduces facts about space travel and describes the function of rockets and spaceships. Full-page colour photographs support concepts and vocabulary presented in the text. Like many informational books, Rockets and Spaceships has a short glossary and an index. Further, the book’s author gives information without using time order to structure the book’s content, using timeless verbs. Outside of the main body of text are definitions with small illustrative images.

To assure reliability during coding, the first author and a separate coder used the ACIRI to score the reading interactions. The scores had a 76.3% agreement rate and an intra-class correlation of \( r = .933 \), thus meeting Cicchetti’s (1994) excellent rating for all scores. Pearson calculation indicated inter-rater reliability of \( r = .876 (p < .01) \) for all scores. The coders resolved differences by reviewing the pertinent videos and referencing relevant definitions to arrive at consensus scores on all items.

Results

This study contrasts the impact of the narrative and informational book genres on shared book reading behaviours. It looked at factors known to improve children’s literacy development and found that informational book features such as captions, predictable text, and a glossary support interactive reading behaviours. Children in the study engaged more with concrete, factual concepts and asked more questions with the informational book. On the whole, the informational book encouraged more children’s interactive reading behaviours. Observations suggest the informational book was more engaging because of book features and characteristics, and because of the information presented. Detrimentally, parents were generally unaware of the benefits of reading multiple genres to their children.

Qualitative Results

During shared book reading, the dyads sat close together and the parents created a nurturing atmosphere. Often the child sat on the parent’s lap or flush against the parent. The children generally engaged in the shared book reading and gave their attention to the books. After reading the books, parents and children were asked about their experiences. Evan was typical of the parents when he explained his daughter’s willingness to read. He said that Violet
"wants to constantly read. I don't think I have to do anything extra special to get her interested in a book. She'll give everything a fair shot." Children were also responsive to interactions with their parents.

Regardless of the book read, parents' behaviours showed that they engaged in shared book reading for the benefit of their children. Every parent held the book so that his or her child could easily see the pictures, even if the book was at an awkward angle for the parent. With varying degrees of success, the parents read the books with appropriate emphasis and expression. When a child looked away from the book or appeared distracted, some parents asked the child questions to draw the child's attention back to the book.

**Page turning.** Several parents claimed that they let their children hold the book at home and turn the pages, but not a single child held the book during the study and three of eight did not turn a page. In interviews, parents identified three reasons for not encouraging the child to turn the pages. First, parents were afraid that the child might damage a book that was not theirs. Ting offered, "He [Bruce] likes to turn the pages. Which, I usually don't let him, especially if the book is not mine. Because sometimes I'm afraid he will just destroy the book or make it dirty or something." Dee offered a second explanation. She explained, "I usually do not do that because I would have control of the book." Some parents seemed to want to control the book so that the child was on the right page. Several parents also spoke of the child's rushing the story, or skipping pages.

In contrast, four of the parents claim they allowed children more control of the books at home. Sarah said, "Sometimes at home, [Nate will] flip the pages, especially if he already knows the story." Evan, whose child turned one page with each book, explained, "Yeah. I think I generally do. I think maybe on the board books, when she was younger, she usually turned the pages, but now, when we are reading bigger books, I'm just turning them for her. I don't know why." This suggests a third reason that parents did not have their children turn the page. Perhaps they felt that their children have matured past needing to turn the page.

Of the eight children, five turned pages during the study. Interestingly, Captain, Meena, and Bruce turned more pages with the informational book while Violet turned a single page with the fictional title. Only Rapunzel turned roughly equal numbers of pages with both books.

**Pointing.** In general, parent behaviours suggested that they wanted the children to follow the content and they pointed to pictures to help them. Children reacted to their parents' picture pointing, and also pointed at pictures.

With both *Rockets and Spaceships* and *A Penguin Pup for Pinkerton*, parents pointed to words and pictures. In general, the parents pointed to pictures that supported textual understanding; they were likely to point to a picture as it was mentioned in the text or immediately afterwards. Dee pointed to a photograph of a rocket, saying, "There is a rocket here." She then simply continued reading. Sometimes, however, parents did more. Evan pointed at a photograph of the Earth taken from space and reinforced the text by explaining, "That's what it looks like when you go up into space. You can see the whole Earth like that." He explained, "I certainly pointed to the picture that went along with the text that was being read."

With the informational book, the parents' pointing to illustrations may have supported children's vocabulary development; for example, Pete shared that *Rockets and Spaceships* had "a little box that said 'Astronaut' and there was a picture of an astronaut. And... I would point to that." For Dee, the purpose of pointing to pictures was to help Meena learn "the object or the terms."

With the narrative book, parents often pointed to illustrations that included elements of humour, such as the drawing of the family cat fleeing an overly affectionate dog. In *A Penguin*
Pup for Pinkerton, one of the characters suggested that the dog Pinkerton could care for Rose the cat. Sarah pointed to this picture and told Nate, "See, the cat was thinking about it. She really didn't like the idea.... She didn't really like the idea of the dog licking her. So she jumped." **Language for understanding.** With both books, children asked questions and made statements that elicited tacit or explicit confirmation of their understanding, as if to ask, “Am I right?” This happened when Cindy pointed to an illustration of Pinkerton and stated, contrary to the story, "He's dreaming of a puppy." In an additional example, Violet checked her understanding by exclaiming that Pinkerton was sitting on ice. The illustration depicted the dog sitting in an ice rink.

Parents and children asked questions and made statements that increased the children’s understanding. For example, Peggy pointed at keywords and especially keywords that Rapunzel did not know, such as "spaceship." William said that he had to take more time with *Rockets and Spaceships*, as the informational book had "things he [Captain] hadn't seen before. So, [his son needed] a little bit more explanation, just taking a little bit more time per page." Similarly, the parents asked questions that checked the children's understanding.

In *Rockets and Spaceships*, there was a countdown that was especially predictable. It had the words "Blast Off!" supported by a photograph. In another example, the last word in many sentences was the name of a planet, and sometimes the children anticipated this sentence ending and gave the planet’s name. While both books elicited the “am I right?” questions, the questions were more frequent with the informational text.

**Focusing attention.** Parents asked questions that focused the children's attention. During the interview, Sarah explained that she worked to get Nate to ignore a doll and other distractions and to pay attention to the books. As Sarah explained, "So when I see his [Nate's] eyes pointing at something, and I know he's not looking... I'll have to point at something else, to bring his attention to it."

Parents were more frequently empathic with the informational book. All of the parents became more expressive while reading the countdown to a rocket launch in *Rockets and Spaceships*. They became particularly lively when saying, "Roar," for the sound of a rocket launch. When Peggy read about space-walking, she commented, "Floating. Floating. Weeee, weee, floating!" The text created opportunities that parents used to read with animation.

**Making sense of text and pictures.** Children also asked factual "what's that" questions, as well as making statements and offering questions to check their understanding. For example, Noah asked, "What kind of dog is that?" The "what's that" question could also extend occasionally to the vocabulary used in the reading. Violet wanted to know, "What does a 'flop' mean?" and Noah, not realizing that "pooch" is another word for "dog," asked, "Who's pooch?" With the informational book, the child often referred to the identity of items within photographs. This was the case with Captain, who said, "That's the earth; it's mostly in water." Further emphasizing vocabulary, the informational book had a glossary. Some parents read all of the glossary definitions and others read just one definition before moving on to the next book.

Children would also occasionally ask questions when they could not make sense of the connection between the text and the photograph. For example, the text mentioned a star, but there was no star in the picture. Cindy wanted to know where the star was in the picture when she did not see it there.

*Rockets and Spaceships* had clear, uncluttered photographs and captions that clearly illustrated key vocabulary words, a format that encouraged interactive book reading strategies such as pointing at the illustration, questions, and statements.
Making connections. Parents made connections between what the texts said and what the children already knew, and they were more likely to do this with *Rockets and Spaceships*. For example, several parents started reading a sentence in *Rockets and Spaceships* and then stopped, leaving the last word blank for the child to fill in. Evan, Sarah, Dee, and Richard read, "Our planet is called...," and paused to allow their child to answer. Most children did as Noah and replied, "Earth!" Evan even worked with Violet after reading, “The planet in this picture is called...” to which Violet replied, “Mars,” and “Rings,” before giving the correct answer, “Saturn.”

While four parents had the child fill in the blank for the informational book, no parent used this technique with the narrative book. The presence of a picture clearly indicating the correct answer may have been critical in making this approach work. Instead, for the narrative book, a parent sometimes connected the story to the child's own experience. With *A Penguin Pup for Pinkerton*, one parent made a connection between the dog in the story and a dog the family once had. Noah asked, "But he [Pinkerton] won't [lick the cat], right?" to which Richard replied, "He might. He looks like a licker." When explaining that the dog Pinkerton might try to lick a cat, Richard said, "Teddy [the family dog] was not much of a licker, was he?"

Connections to the child’s prior experience were also made with the informational book; in fact, more connections were made in this context with the informational book than with the narrative. For example, while reading about the space shuttle carrying satellites to orbit, Sarah helped Nate make a connection with a computer at home. She said, "Remember your game on the computer… where you can see the stars, and some of the satellites?" Nate indicated that he remembered.

Writing style. How the books were written seemed to influence how dramatic a parent could be while reading to a child. With *Rockets and Spaceships* (Wallace, 2011) parents became animated while reading "Rumble… rumble… ROOAAARRRR" (p. 5). They emulated the sound of a rocket taking off, becoming particularly expressive and often reading the words with enthusiasm; a growing text font size apparently encouraged such behaviour.

William explained that he felt more animated with the informational book, due to “the, kind of, 'roar' and those kinds of things in the first book [Rockets]," and “the captions and actions and what was going on," suggesting the informational book's features made it easier for him to feel animated. Dee was also more emphatic in her reading of *Rockets and Spaceships*. She wanted her child to “try to learn the words” associated with the informational book, but was less concerned with the content of the fictional book.

Rhetorical device. Both books used the word "you" in the text as a rhetorical device designed to draw attention to something within the text. Parents used this rhetorical "you" to bring the child's attention to an idea. *Rockets and Spaceships* states, "One day you might go on vacation in space!" (p. 30). After reading this, seven out of the eight parents asked the child if he or she wanted to go to space, to which the child indicated yes. In *A Penguin Pup for Pinkerton*, a teacher, a character within the story, asked his students, "Did you know that in the Antarctic, a father emperor penguin cradles his egg on his feet?" While similar to the first statement in that it used "you," only three parents asked questions of their child.

Quantitative Results

Because of the small sample size (8 dyads), the authors do not claim the quantitative results are conclusive. Instead, we see the quantitative results as supporting conclusions drawn from the qualitative observations. Additionally, they suggest paths for future research.
The ACIRI scored parent and child interactive reading behaviours with both narrative and informational books, with a possible range of 0 to 36, with higher scores indicating more literacy supportive behaviours. In the current study, the informational book scored higher median scores with all test categories and with the test totals; this was true for both parents and children (see Table B). For statistical analyses, the study used the nonparametric Mann-Whitney U test and set significance at $\alpha \leq .05$. The test compared the three categorical scores and the test totals across the two conditions, informational and narrative book reading.

**Table B** Non-parametric contrast between informational and fictional ACIRI

<table>
<thead>
<tr>
<th>ACIRI Category</th>
<th>Informational Med (SD)</th>
<th>Fictional Med (SD)</th>
<th>$U$ (16)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.875 (1.356)</td>
<td>9.500 (1.512)</td>
<td>28.500</td>
<td>0.721</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>6.625 (1.302)</td>
<td>5.375 (2.200)</td>
<td>20.500</td>
<td>0.234</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>3.375 (1.598)</td>
<td>2.500 (2.138)</td>
<td>22.500</td>
<td>0.328</td>
</tr>
<tr>
<td>Test Total</td>
<td>19.875 (2.232)</td>
<td>17.375 (3.701)</td>
<td>19.000</td>
<td>0.195</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention To Text</td>
<td>9.750 (1.488)</td>
<td>8.500 (2.070)</td>
<td>17.000</td>
<td>0.130</td>
</tr>
<tr>
<td>Interactive Read Comp</td>
<td>5.375 (1.923)</td>
<td>3.375 (2.387)</td>
<td>16.500</td>
<td>0.105</td>
</tr>
<tr>
<td>Literacy Strategies</td>
<td>2.875 (1.642)</td>
<td>1.500 (1.414)</td>
<td>17.000</td>
<td>0.130</td>
</tr>
<tr>
<td>Test Total</td>
<td>18.000 (3.251)</td>
<td>13.375 (4.206)</td>
<td>13.000</td>
<td>0.05*</td>
</tr>
</tbody>
</table>

* Significant at $\alpha \leq 0.05$

The parents’ median test total score was 19.875 for informational reading compared to 17.375 for narrative, and the children’s median test total score was 18.000 for informational reading compared to 13.375 for narrative. The Mann-Whitney U test showed that the children’s scores were significant, with the children’s test total ($U$ (16) = 13, $p = .05$).

Using criteria established by Cohen (1988), the effect size of children’s test total was large ($d = 1.315$), with the informational book, *Rockets and Spaceships* outscoring *A Penguin Pup for Pinkerton* (see Table C). Even though the results were not different at a statistically significant level, an examination of test means showed that parents used more literacy supportive behaviours with the informational book than with the narrative book. Scores were higher for Enhancing Attention to Text ($M = 9.875$ vs. $M = 9.500$), Promoting Interactive Reading and Supporting Comprehension ($M = 6.625$ vs. $M = 5.375$), and Using Literacy Strategies categories ($M = 3.375$ vs. $M = 2.500$).

Under the heading of Enhancing Attention to the Text, children had higher scores because of turning pages and responding to their parent sharing the book. With Promoting Interactive reading and Supporting Comprehension, the child responded to more questions about the informational book, asked his or her own questions about the book and more frequently connected something about the book back to his or her own experience. Finally, the children were more likely to engage in using literacy strategies. This included identifying visual clues and offering ideas about the book.
Table C  Effect Size

<table>
<thead>
<tr>
<th>Informational/Fictional Child</th>
<th>DF</th>
<th>t</th>
<th>Cohen's d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Total</td>
<td>14</td>
<td>2.46</td>
<td>1.315</td>
</tr>
</tbody>
</table>

Note. DF = degrees of freedom.

Genre Read at Home

The researchers asked, "Which kind of book, narrative or informational, do you read most frequently at home?" and, "Why?" Three parents, Richard, Peggy, and William, volunteered that they had not considered the importance of genre. William simply explained, "I just never thought about it before." Further conversations debriefing the parents on the study suggested that parents were unaware of genre’s positive impact on children’s literacy development.

Commonly, parents indicated that they read more narrative books because they themselves preferred the genre. While none of the parents explicitly said that informational books were boring, Dee, Richard, and Peggy implied it. Dee offered, "Frankly, [storybooks] are not that boring for me," implying that informational books were "that boring". Similarly, Richard condemned the informational genre with faint praise by calling such books "fine." He then explained, "I guess it’s because I like stories better." Finally, Peggy, explained informational books seem, "to be dry. ... So, part of it is us/me. So I buy more story books." Four of the parents, Dee, Richard, Pete and Ting, indicated a general preference for narrative books, and no parent preferred informational books. Pete was particularly clear when she said, "I prefer reading stories…. As a parent, Dr. Seuss is actually enjoyable." The children’s choices were a critical factor in the selection of books read at home, as the parents indicated that they allowed the children some autonomy when choosing books. Dee explained, "I read to her whatever she brings to me." William surmised that, based on Captain’s choices, he (Captain) must prefer stories. Thus, the children’s preferences influenced what the parents read.

Interestingly, children seemed to be more open to whatever was available to read. Some evidence suggested that they had preferences for individual books, but were generally willing to read either informational or narrative books. Pete noticed that he preferred narratives, but that this preference was not necessarily the case for his daughter. He explained, "I guess I usually pick fiction books; she picks informational texts." Sarah thought that it was the topic that mattered, and suggested, "Anything gross and disgusting is much more catchy in terms of information. ... Anything he can relate to." Indeed, a child may not be influenced by genre as much as a topic with which the child has a connection.

Conclusions

This study investigated the similarities and differences with parent/child interactions during shared book reading when genre was taken into account. Two major possibilities stand out as reasons for the informational books being more engaging: 1) book features/characteristics, and 2) the information presented.
**Book Features and Characteristics**

Many of the book features of *Rockets and Spaceships* encouraged interactive book reading. One noticeable feature was the use of photographs instead of illustrations. Children were attracted to the photographs, as were the parents. They were clear, explicit, and attractive. When parents pointed at photographs, they offered varying levels of description. Generally, parents pointed at photographs as the objects were mentioned in the book, thus reinforcing the textual message with a visual support. Additionally, using illustrations to support the text allowed the child to finish some parental “fill in the blank” sentences.

Vocabulary was explicitly and implicitly featured in the informational book. New vocabulary was presented with a picture and label. When parents came to new words in the book, they pointed to the pictures and used the new words to identify the objects. Most of the parents used this book feature to some extent to facilitate vocabulary learning and to engage in interactive reading behaviours. Also, the informational book’s larger print may have also encouraged parents to point at words more in comparison to the smaller print of *A Penguin Pup for Pinkerton*.

*Rockets and Space Ships* may have encouraged children to check their own background knowledge and general understanding against the text. Children asked questions and made statements as they read the informational book. Children were using language to understand to affirm and clarify their understanding of the informational book.

**Engaging Information**

Both types of books encouraged "what is that?" and "what is happening?" questions. Even though parents asked nearly the same number of questions for both books, four children answered more parent questions with the informational book while no child answered more with the fictional book. This had the additional benefit of providing opportunities to focus children’s attention on the books and their content.

The videotape analysis revealed ways in which parents helped children to make sense of the pictures and illustrations. With the narrative book, parents pointed to help children identify items within an illustration, and later, with this process, they spoke of assisting their children’s understanding of the narrative itself. With the informational book, the parents asked clarifying questions and pointed at the photographs with the purpose of identifying the objects depicted.

Part of the appeal of the rhetorical "you" statement in *Rockets and Space Ships* was the captivating power of an idea that could spark a child’s imagination. The parents understood that children would marvel at the thought of spending time in space. In addition, *Rockets and Spaceships* directly addressed the "you" statement to the reader. In *A Penguin Pup for Pinkerton*, the "you" statement was directed toward a classroom of students within the story, which may have dampened the effect.

For the fictional book, children seemed less concerned with understanding story elements and following plot than with identifying the objects depicted in the text. A child was most likely to check his or her understanding of an illustration or factual matter. They also asked questions about vocabulary when they did not understand a word.

With both books, parents helped children make connections to what their children already knew and had experienced. However, more connections were made with the informational books. *Rockets and Space Ships* had many new-to-the-children concepts and photos that parents naturally reminded their children of analogous experiences and objects. Further,
parents checked their children’s understanding by asking them to fill in the missing word (e.g. “Our planet is called…”).

**Kindling interest**

The books’ writing styles helped parents work with their children to build interest. Additionally, the book’s rhetorical devices further grabbed children’s attention. The features/characteristics and the information presented worked together to spark children’s curiosity, which in turn encouraged interactive reading behaviours. The photos, captions, and glossary effectively highlighted important concepts and vocabulary; parents simply took advantage of teaching opportunities made possible by the book and its layout. Moreover, children may have responded more to *Rockets and Space Ships* because it was factual. The children seemed interested in learning factual information and less interested in interpretive information. That is, the children appeared more interested in learning the identities of objects and less interested in understanding the story narrative and the ways story elements fit together. Additionally, parents were more animated while reading the informational book, which may have helped encourage children’s interest.

**Quantitative Analysis**

The quantitative results from the ACIRI support findings from the qualitative analysis. Children in the study engaged in more literacy-supportive reading behaviours with the informational book than they did with the narrative book. As children read the informational book, their language and behaviour were significantly more interactive, and, to a lesser degree, parent language and behaviour were more interactive as well. In all cases, the informational book did more than the narrative book to support children’s literacy development as measured by the ACIRI. The findings support the hypothesis that genre characteristics elicited different types of behaviours from children and possibly their parents.

Finally, parent interviews indicate that the genre read at home is fiction. Parents explained that home libraries are largely comprised of fiction because that is what the adults purchase. While the parents may be trying to buy books that their children will enjoy, their own preferences may steer the children away from informational books. This means that children read more fictional books at home because of adult preference. This preference is a likely culprit in fiction’s domination of children’s reading. After all, children can only choose books that are available to them.

**Supporting and Extending Previous Studies**

This study found that parents read mostly narrative books and few informational books at home which supports Robertson and Reese (2017). It also found that parents had simply not thought about the issue of genre when reading books with their children. It then goes against a claim by Duke (2000) who found parent enjoy reading informational books. In contrast, this study finds that at least some parents do not read informational texts because such books are less appealing. This finding is important, as it provides an alternative explanation for the dominance of fiction at home. Parents and other suppliers of home library books should realize the importance of using informational books. Additionally, it complements Yopp and Yopp’s (2006) contention that parents may not have yet discovered high quality informational books.

The parents within this study allowed their children to choose many of the books used in shared book reading. If available, children are likely to choose informational books.
However, the children usually pick storybooks from a home library because that is what is available. Parents and other adults who purchase books as gifts may want to select from a wide variety of book genres, including informational books.

Extending current research, this study suggests the effectiveness of using informational texts at home. This study continues this trend of research suggesting that genre impacts shared book reading interactions. More specifically, several studies (e.g.; Moschovaki & Meadows, 2005; Price et al., 2009; Price et al., 2012) have found that adults and children have more language interactions during shared book reading when using informational books. Further, Anderson et al., (2004) found more interactive behaviours between parents and children in the informational context.

While the small sample size suggests skepticism is appropriate, the effect size from the current study suggests the potential potency of using informational texts to support children’s literacy development.

**Limitations**

With a sample size of eight dyads, the study was only able to detect very large differences in the ACIRI. It is probable that significant results have gone undetected because of the small number of dyads in the study. Further, this study did not fully explore the degree to which the observed differences are the result of the specific books used. While this study attempted to balance the reading levels of the books, the writing qualities not measured by Lexile and Guided Reading levels of each book may have impacted results. The results would have been more robust if the study had compared multiple narrative fictional titles to an equal number of non-narrative informational titles.

For researchers, this study suggests the need for a larger study using an experimental design. It would be important to use multiple titles of both non-narrative informational books and narrative fictional books. Future studies could look at a greater range of ages, and not just children in their final year of preschool. Additionally, a larger study could allow for a comparison between genders and afford the opportunity to include a more diverse and representative population.

**Recommendations**

The results of this study extend existing research indicating the effectiveness of using informational books. This analysis suggests that informational books encourage more literacy supportive behaviours in four- and five-year-old children. While informational books are not generally better than narrative books, these results suggest likely advantages to including informational books in a child’s diet of shared book reading. Perhaps the use of informational books during early childhood will ease the transition to informational textbooks in late elementary grades, a period when children commonly struggle (Chall et al., 1990; National Center for Education Statistics, 2013). Further, the study seeks to heighten awareness regarding the importance of informational books, especially as current research clearly substantiates that informational books are underutilized in early childhood by parents and teachers.

The purpose of this study was to impact children’s literacy attainment. To succeed in this goal, the study must contribute to awareness on the part of parents and preschool educators that informational books are important to the literacy development of children. Through various forms of outreach, parents and educators should learn about the importance of informational books during shared book reading. Additionally, school administrators and
librarians will want to increase the numbers of informational books available to preschool students and use more informational books during shared book reading.

References


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### Adult–Child Interactive Reading Inventory

<table>
<thead>
<tr>
<th>ADULT BEHAVIOR</th>
<th>OBSERVATION</th>
<th>CHILD BEHAVIOR</th>
<th>OBSERVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adult attempts to promote and maintain physical proximity with the child.</td>
<td>2. Child holds the book and turns the pages on his or her own or when asked.</td>
<td>3. Adult gives the child an opportunity to hold the book and turn pages.</td>
<td>4. Adult shares the book with the child (displays sense of audience in book handling when reading).</td>
</tr>
<tr>
<td><strong>II. Promoting Interactive Reading and Supporting Comprehension</strong></td>
<td>1. Child responds to questions about the book.</td>
<td><strong>II. Promoting Interactive Reading and Supporting Comprehension</strong></td>
<td>2. Child responds to adult cues or identifies pictures and words on his or her own.</td>
</tr>
<tr>
<td>1. Adult poses and solicits questions about the book’s content.</td>
<td>2. Child attempts to relate the book’s content to personal experiences.</td>
<td>2. Adult points to pictures and words to assist the child in identification and understanding.</td>
<td>3. Adult relates the book’s content and the child’s responses to personal experiences.</td>
</tr>
<tr>
<td>3. Adult relates the book’s content and the child’s responses to personal experiences.</td>
<td>4. Child poses questions about the story and related topics.</td>
<td>4. Adult pauses to answer questions that the child poses.</td>
<td>4. Child initiates or responds to book sharing that takes his or her presence into account.</td>
</tr>
<tr>
<td><strong>III. Using Literacy Strategies</strong></td>
<td>1. Child responds to the adult and/or identifies visual cues related to the story him- or herself.</td>
<td><strong>III. Using Literacy Strategies</strong></td>
<td>2. Child is able to guess what will happen next based on picture cues.</td>
</tr>
<tr>
<td>1. Adult identifies visual cues related to story reading (e.g., pictures, repetitive words).</td>
<td>2. Child is able to recall information from the story.</td>
<td>2. Adult solicits predictions.</td>
<td>3. Child is able to recall information from the story.</td>
</tr>
<tr>
<td>3. Adult asks the child to recall information from the story.</td>
<td>4. Child spontaneously offers ideas about the story.</td>
<td>4. Adult elaborates on the child’s ideas.</td>
<td>4. Adult shares the book with the child (displays sense of audience in book handling when reading).</td>
</tr>
</tbody>
</table>