



Parental Perceptions of Book versus Tablet Related to Time Spent Reading

Rosanne Roy, Grace Paradis, Kimberlie Lewis, Mark Fischer
California State University Stanislaus, Department of Psychology and Child Development

For a copy of our poster,
scan the QR code with your
smartphone or go to:
www.csustan.edu/cdev/research



Introduction

Reading to young children has a multitude of benefits. Research suggests that reading to children at an early age allows them to understand more words, have a larger vocabulary, and gives them an advantage in school later on (Fernald, Marchman, & Weisleder, 2013). According to Krashen (2004), reading to children results in better comprehension, improved reading scores, and helps them develop into better thinkers. Given the pervasiveness of technology in recent decades, it is important to look at how certain devices may influence young children's development. Research suggests that digital technology, such as tablets, with their more interactive nature, allows children to develop a way to make sense of the text given certain cues that the tablet offers for stories. These "symbolic representations" of words aids young children in understanding the text (Levy, 2009). For example, some electronic readers are designed to show pictures of the text, which help cue the reader on what the word should be. Since electronic books are now an alternative medium to print books, parents are left to decide which medium they prefer. Studies have found that parents' interactions with children varied depending on the medium used (Plowman, McPake, & Stephen, 2010). Because electronic books can provide a distraction for children with preloaded games and music, having children focus their attention on the story may be challenging. Compared to paper books, electronic books may offer a different reading experience since some are equipped to read along with the child; whether it be single words or the entire page (de Jong & Bus, 2002). Although shared reading has been explored in several studies (e.g., Kim & Anderson, 2008; Kramar & Cingel, 2014), parents' perspectives of shared reading on a tablet versus a book have not yet been investigated. Thus, the purpose of this study was to investigate the relationship between the parental perception of learning during shared reading and the amount of time spent reading from either a book or electronic book.

Method

Participants:

- 50 parent-child dyads
 - Parents: 7 male, 43 female; 19-39 years old ($M = 31.00$, $SD = 4.89$). Children: 27 male, 23 female; 13 – 55 months old ($M = 32.10$, $SD = 10.64$)
 - 56% Caucasian, 32% Hispanic/Latino, 12% other Ethnicities
 - Approximate Household income for 58% of families was greater than \$50,000 per year.
- Participants recruited through the use of flyers and compensated with \$40 gift cards for their participation

Materials:

- Kindle e-reader
- Print and electronic versions of the following books:



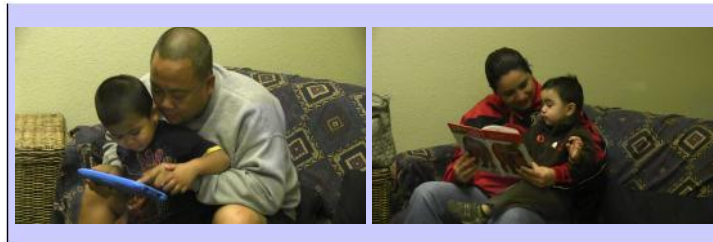
- The Technology Use questionnaire was used to record data about smartphone usage and parental perceptions of the shared reading experience. Some example questions:
 - "Within a given week, how often do you allow your child to play with your smartphone (i.e., to play games, see pictures, etc.)?"
 - "While reading the tablet, how important was it that the child learn something from the story?"
 - "While reading the book, how important was it that the child have fun with the story?"
- Demographics questionnaire

Procedure:

- Upon the parent's arrival at the lab, Informed Consent was acquired
- Parents were instructed to read to their children in the lab room
- Reading conditions were counterbalanced in the following ways:
 - Order of the reading medium (Print then Electronic format or vice versa)
 - Which book appeared in each condition
- Parents were videotaped for the entire duration of their visit to the lab
- Following the reading session, parents were asked to fill out the questionnaire mentioned in the Materials section
- Following the questionnaire, parents were then debriefed and provided compensation for their participation

Results

- Reading times were coded using the videos collected from the reading sessions.
- The start time for each story was coded as the point in the video when the parent reads the first word of the story (not including the title if the parent read the title aloud).
- The end time for each story was coded as the point in the video when the parent reads the last word of the story
- Total reading time for each condition was calculated by subtracting the start time from the end time of each story and adding the two story times together.
- Mean Tablet reading time was 6.38 minutes ($SD = 1.51$)
- Mean Book reading time was 6.24 minutes ($SD = 1.84$)
- To investigate the relationships between reading times and parental perceptions acquired from the Technology Use Questionnaire, a bivariate Spearman correlation was conducted between parent perceptions and reading times. The following relationships were significantly correlated:
 - Parental perception of the importance of learning during shared reading on a tablet and a printed book ($r_s = .82$, $p < .01$).
 - Parental perception of the importance of learning during shared reading and tablet reading times ($r_s = .36$, $p < .05$).
 - Parental perception of the importance of the child's interest during shared reading and printed book reading times ($r_s = .36$, $p < .05$).



References

- de Jong, M. T., & Bus, A. G. (2002). Quality of book-reading matters for emergent readers: An experiment with the same book in a regular or electronic format. *Journal of Educational Psychology*, 94(1), 145-155. doi:10.1037/0022-0663.94.1.145
- Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, 16(2), 234-248. doi:10.1111/desc.12019
- Krashen, S. D. (1993). *The power of reading: Insights from the research* (p. 33). Englewood, CO: Libraries Unlimited.
- Levy, R. (2009). 'You have to understand words...but not read them': Young children becoming readers in a digital age. *Journal of Research in Reading*, 32(1), 75-91. doi:10.1111/j.14679817.2008.01382.x
- Maynard, S. (2010). The impact of e-books on young children's reading habits. *Publishing Research Quarterly*, 26(4), 236-248. doi:10.1007/s12109-010-9180-5
- Plowman, L., McPake, J., & Stephen, C. (2010). The technologisation of childhood? Young children and technology in the home. *Children and Society*, 24, 63-74. doi:10.1111/j.1099-0860.2008.00180.x

Discussion

The purpose of this exploratory study was to investigate relationships between parental perceptions during a shared reading activity and the amount of time spent reading from a printed or electronic book. The findings suggest that for the parents who value learning, the modality did not matter when it came to reading to the child. Findings also suggest that parents who score high on the importance of reading spent more time reading on the tablet. Lastly, it was found that a child's interest in the book corresponded to longer book reading times.

Although we cannot draw conclusions regarding which modality is better for learning or which one leads to longer reading times. It is important to note that parents' perceptions of shared reading time are very much the same when it relates to the child learning. As de Jong and Bus (2002) mention, although there may be different experiences with book reading depending on modality, both offer "overlapping, complimentary" learning experiences for the child. Being able to decipher the text more easily because of interactive abilities on electronic tablets may be beneficial, but ultimately children are benefiting from either reading experience (Levy, 2009).

Limitations

- The lab setting was not representative of the children's actual reading environment.
- Due to scheduled lab appointments, the time of day may not have reflected the usual time of parent-child reading activities in the home.
- Tablet reading times may have been artificially inflated by the multi-purpose nature of the device.
- When recruited for this study, parents were informed that they would be reading to their child. Because of this, most felt it was important to make the child sit and listen to all of the stories. This feeling of commitment could have influenced the length of reading times.
- Past experience with tablet reading and familiarity with electronic reading devices may be a factor in the amount of time spent reading.

Future Research

- Investigate the amount of time children were distracted by the features of the electronic device and the amount of time parents spent trying to put them back on task
- Maturation level is a factor that affects the child's attention span so narrowing the age group to children who share common developmental attributes could be helpful