Parent Knowledge Regarding the Relationship Between Literacy and Language Development

Emily Pankiewicz
Ouachita Baptist University

Follow this and additional works at: https://scholarlycommons.obu.edu/honors_theses

Part of the Communication Sciences and Disorders Commons, and the Language and Literacy Education Commons

Recommended Citation
Pankiewicz, Emily, "Parent Knowledge Regarding the Relationship Between Literacy and Language Development" (2020). Honors Theses. 750.
https://scholarlycommons.obu.edu/honors_theses/750

This Thesis is brought to you for free and open access by the Carl Goodson Honors Program at Scholarly Commons @ Ouachita. It has been accepted for inclusion in Honors Theses by an authorized administrator of Scholarly Commons @ Ouachita. For more information, please contact mortensona@obu.edu.
SENIOR THESIS APPROVAL

This Honors thesis entitled

“Parent Knowledge Regarding the Relationship
Between Literacy and Language Development”

written by

Emily Pankiewicz

and submitted in partial fulfillment of
the requirements for completion of
the Carl Goodson Honors Program
meets the criteria for acceptance
and has been approved by the undersigned readers.

__________________________________
Dr. Nancy Hardman, thesis director

__________________________________
Mrs. Carrie Sharp, second reader

__________________________________
Dr. Elizabeth Kelly, third reader

__________________________________
Dr. Barbara Pemberton, Honors Program Director

April 27, 2020
Parent Knowledge Regarding the Relationship Between
Literacy and Language Development

Emily Pankiewicz

Ouachita Baptist University
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Survey Method</td>
<td>8</td>
</tr>
<tr>
<td>Survey Results &amp; Discussion: Demographics</td>
<td>9</td>
</tr>
<tr>
<td>Survey Results &amp; Discussion: Survey Statements</td>
<td>11</td>
</tr>
<tr>
<td>Conclusion</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX A: Survey Cover Letter &amp; Consent Form</td>
<td>30</td>
</tr>
<tr>
<td>APPENDIX B: Survey Questionnaire</td>
<td>32</td>
</tr>
<tr>
<td>APPENDIX C: Additional Data</td>
<td>34</td>
</tr>
<tr>
<td>APPENDIX D: Institutional Review Board Human Subjects Application</td>
<td>41</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>45</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>47</td>
</tr>
</tbody>
</table>
Abstract

Countless research articles support the connection between literacy and language development. This project explores the knowledge parents have about this connection. The paper first summarizes key findings and provides background information about the relationship between literacy and language development. Then, it discusses the results of a survey performed by the researcher. The first section of the survey collected demographic information and the second section contained 16 statements about the relationship between literacy and language development. Survey participants indicated the extent to which they agreed or disagreed with each statement, based on their previous knowledge.

Three main questions were addressed in addition to the overall picture of parent knowledge about literacy and language development:

1. Do parents who have completed a higher level of education have more knowledge on this topic?

2. Do parents with an educational background in child development or childhood education have more knowledge on this topic than parents who do not?

3. Do parents with more than one child have more knowledge on this topic than parents with one child?

Results from this current survey indicated that neither level of education, type of educational background, nor number of children significantly increased the level of knowledge of surveyed participants-regarding the relationship between literacy and language development.
Introduction

“The more that you read, the more things you will know.
The more you learn, the more places you’ll go” – Dr. Seuss

In their article, “How Reading Books Fosters Language Development around the World,” David K. Dickinson and colleagues elaborate on this well-known quote from Dr. Seuss’ book, “I Can Read with My Eyes Shut.” The authors apply the quote to reading with children. The more a child is read to, the more they will learn. The things they learn through reading will allow them to go to new places developmentally (Dickinson et al., 2012). Through their discussion, they emphasize that early book reading is strongly related to later language development; this is in agreement with countless research articles that support this connection.

According to an article by Frank Niklas, Caroline Cohrssen, and Collette Tayler titled, “The Sooner, the Better: Early Reading to Children,” it is never too early to start reading to a child. Niklas and colleagues assessed the language skills of 104 preschoolers by distributing surveys to the families asking if the family read to their child and, if so, what was the child’s age when family reading began. After comparing survey results to the children’s current language abilities, the research found increased rhyming skills, verbal comprehension, and concept formation in the children who were read to at a younger age. The authors discuss research showing everyday language encounters tend to have more influence on development than reading aloud in the first months of a child’s life. However, Niklas et al. (2016) find reading to a child before they turn six months old seems to have a positive effect on language development.

Although a baby cannot directly follow a story or fully understand the pictures they see, reading to them still helps enrich the networks in their brain. Hearing the words of the story is one of the important parts of the activity when they are this young (Lewis, 2019). In her article
titled, “Reading Books to Babies,” Kandia N. Lewis discusses how two-year-old children who have been read to from a young age typically know more words than two-year-old children who have not been read to consistently. Hearing stories allows the baby to hear the sounds of their language in a structured way (Lewis, 2019). Listening to the rhythm and intonation of the voice reading to them helps a baby learn how language works. Their brain uses this information to form connections about the speech patterns of their language. As they grow, they begin to copy the sounds they hear. A child who is frequently read to also begins to recognize the pictures of a book and learns to understand the words they have been hearing in the story (Bright Horizons Education Team, n.d., paras. 2-4). Listening to stories “builds listening, memory, and vocabulary skills” and helps babies learn more about the world (Lewis, 2019, para. 2). All of these aspects encourage later language development.

Hearing the words of a story is an important part of a child’s reading experience, however, the interaction that takes place during reading time is just as influential to their development. An article titled, “How You Read to a Child is Important” (n.d.) tells about how, as children grow older, they can become active participants during story time. This “active participation” provides opportunity for great amounts of language development. For example, activities such as asking and answering questions, talking about pictures, and making predictions can help increase a child’s vocabulary and comprehension skills (para. 3). Cullinan and Bagert (2013) discuss another way to encourage language growth. When the reader associates the words and pictures on the page with real-world items with which the child is familiar, the child can learn even more about how language works by making connections between the story they hear and the world they know (para. 3). Even if a child cannot read, listening to a story, looking at the
pictures, and actively interacting with the reader helps their brain create networks and builds skills necessary for future success in school and life (“Why Reading…”, n.d., paras. 1-2).

Dickinson et al. (2012) discuss several principles of language learning. These include: children need to hear a lot of words; they learn words when the meanings are clear; they learn vocabulary and grammar simultaneously; and they learn words best when they are interested, when caregivers are responsive, and in a positive environment (pp. 4-5). Book reading can be related to these principles in multiple ways.

Reading promotes language learning by exposing children to new words within a variety of sentence structures (Dickinson et al., 2012). This allows a child to learn about grammatical structures and how language can be used to convey different meanings, all while growing their vocabulary. Books also support vocabulary growth by providing opportunities for a child to hear different words than they might hear in a typical, day-to-day conversation (Dickinson et al., 2012). Frequent book reading also contributes to the amount of language input a child receives, which can positively influence language development. The greater amount of language a child is exposed to, the better their language processing abilities will be as they grow. Language processing ability can also predict language comprehension and vocabulary growth as a child develops (Dickinson et al., 2012).

Next, book reading facilitates language development by encouraging joint attention, where both the child and caregiver attend to the same item (Dickinson et al., 2012). Studies have shown that children learn new words most easily when their caregiver establishes joint attention and talks about the current object of interest. Children have more limited vocabularies when their caregiver constantly redirects attention and talks about an object that does not interest the child (Dickinson et al., 2012). Children’s books are often large and colorful, with pictures designed to
draw a child’s attention. During story time the caregiver can observe what the child is interested in and structure their comments accordingly. When the book and the caregiver hold a child’s interest, maximum language learning can take place (Dickinson et al., 2012). Book reading also encourages language learning by “requiring the participants to be active and engage in responsive interactions about word meanings” (Dickinson et al., 2012, p. 6). This corresponds to the active participation during story time discussed earlier.

Because of the many ways book reading can facilitate language learning, it is possible for it to have more influence on language learning than does oral conversation (Dickinson et al, 2012). Research makes it clear that there is a strong connection between early book reading and language development. Hearing words of a story helps create networks in a baby’s brain as they use the information to make connections about speech patterns and structure of language. Quality interactions during story time facilitate even more language growth and assist them in developing skills needed for later language success. Book reading also fulfills many requirements outlined in the principles of language learning. This research barely touches the surface of the relationship between literacy and language, but it provides the basis for the following survey titled, “Parent Knowledge Regarding the Relationship Between Literacy and Language Development”.
Survey Method

The survey consisted of 22 questions (Appendix B). The first section collected demographic information about the participant including parental status, educational background, age of children, and number of children. The following section consisted of statements about children’s literacy and language development. The statements were derived from research included in the introduction of this paper. Of the 16 statements, six were false and ten were true. Participants were asked to indicate the extent to which they agree with each statement. Responses were collected using a Likert scale with options for strongly agree, agree, disagree, and strongly disagree. The survey collected responses from 70 parents of children ages birth to 18, but one participant was excluded due to incomplete responses.

The survey was approved by the Institutional Review Board of Ouachita Baptist University (Appendix D). Participants were required to complete an electronic consent form, agreeing to be at least 18 years of age and to participate voluntarily (Appendix A).
Survey Results & Discussion

Demographics

*Parental status:*

Participants were asked to indicate their parental status. Of the 69 responses collected, 94.3% (n=66) of participants were mothers and 4.3% (n=3) were fathers. No participants indicated guardian.

*Highest level of education:*

Participants were asked to indicate their highest level of education completed. Of the 69 responses collected, the majority of participants (49.2%, n=34) completed a bachelor’s degree; 31.9% (n=22) a master’s or doctoral degree; 7.2% (n=5) an associate degree; and 11.6% (n=8) a high school diploma or GED as their highest level of education. This demographic information is important to the question, “Do parents with a higher level of education have more knowledge on this topic?”
Educational background in child development/childhood education:

Participants were asked to indicate if they have an educational background in child development or childhood education. The majority of participants (59.4%, n=41) reported no educational background in child development or childhood education and 40.5% (n=28) indicated an educational background in child development or childhood education. This demographic information is important to the question, “Do parents with an educational background in child development or childhood education have more knowledge on this topic than parents with a different educational background?

Number of children:

Participants were asked to indicate the number of children in their family. The majority of participants (68.1%, n=47) indicated either two or three children; 14.5% (n=10) four children; 8.7% (n=6) five or more children; and 8.7% (n=6) one child. This demographic information is important to the question, “Do parents with more than one child have more knowledge on this topic than parents with one child?”.
Survey Statements

For TRUE statements, participant responses of Strongly Agree and Agree are considered correct; Disagree and Strongly Disagree are considered incorrect. For FALSE statements, participant responses of Strongly Disagree and Disagree are considered correct; Agree and Strongly Agree are considered incorrect.

Statement 1: *Even if a child cannot read yet, listening and looking at pictures helps the brain prepare for future success.*

This statement is true. Of the 69 participants, 98.6% (n=68) indicated they strongly agree with this statement. The remaining 1.4% (n=1) agreed. All participants responded correctly. Demographic differences did not appear to influence responses to this statement.
Statement 2: *Reading the words of a book is more important to language development than the interactions that take place during shared book reading.*

This statement is false. Of the 69 participants, 15.9% (n=11) indicated they strongly disagree with the statement and 78.3% (n=54) indicated they disagree. The remaining 5.8% (n=4) indicated they agreed with the statement.

*Overall correct responses:*

Those with a master’s degree or higher (n=22) had 90.9% correct responses to this statement. Participants with a bachelor’s degree (n=34) had 94.1% correct responses. Those with an associate degree (n=5) had 100% correct responses. Those with a high school diploma or GED (n=8) had 100% correct responses. These results indicated no significant differences in total correct responses when considering participants’ highest level of education.

Participants who indicated an educational background in child development or childhood education (n=28) had 96.4% correct responses. Those who did not indicate an educational background in child development or childhood education (n=41) had 92.7% correct responses to this statement. These results indicated no significant differences in total correct responses when considering participants’ educational background in child development or childhood education.

Those who indicated having one child in their family (n=6) had 100% correct responses. Those who have two children (n=29) had 93.1% correct responses. Those who have three children (n=18) responded correctly 100% of the time. Participants with four children (n=10) had
90% correct responses. Those with five or more children (n=6) had 100% correct responses to this statement. These results indicated no significant difference in total correct response when considering participants’ number of children.

Statement 3: Reading aloud with children for 10 minutes a day is one of the best ways to provide learning tools for life.

This statement is true. All 69 participants responded correctly. The majority of participants strongly agree with this statement (82.6%, n=57). The remaining participants (17.4%, n=12) indicated they agree. Demographic differences did not appear to influence responses to this statement.

Statement 4: Newspapers, cookbooks, and magazines can be effective literacy materials for parents who want to build a language and reading-rich environment.

This statement is true. The majority of participants (97.1%, n=67) indicated they agree or strongly agree with this statement and 2.9% (n=2) indicated they disagree or strongly disagree.
**Overall correct responses:**

Those with a master’s degree or higher (n=22) had 95.5% correct responses. Participants with a bachelor’s degree (n=34) had 97.1% correct responses. Those with an associate degree (n=5) had 100% correct responses. Those with a high school diploma or GED (n=8) had 100% correct responses. These results indicated no significant difference in total correct response when considering participants’ highest level of education.

Participants who indicated an educational background in child development or childhood education (n=28) had 96.4% correct responses to this statement. Those who indicated no educational background in child development or childhood education (n=41) had 97.6% correct responses. These results indicated no significant difference in total correct response when considering participants’ educational background in child development or childhood education.

Those who have one child in their family (n=6) had 100% correct responses to this statement. Those who have two children (n=29) had 93.1% correct responses. Participants with three children (n=18), four children (n=10), and five or more children (n=6) had 100% correct responses. These results indicated no significant difference in total correct response when considering participants’ number of children.
Statement 5: *Reading books to children can have more influence on language learning than oral conversation.*

This statement is true. The majority of participants (78.3%, n=54) indicated they agree or strongly agree with the statement. The remaining participants indicated they disagree (20.3%, n=14) or strongly disagree (1.4%, n=1).

*Overall correct responses:*

Those with a master’s degree or higher (n=22) had 95.5% correct responses. Participants with a bachelor’s degree (n=34) had 79.4% correct responses. Those with an associate degree (n=5) had 80% correct responses and those with a high school diploma or GED (n=8) had 37.5% correct responses. These results indicated a difference between those with a master’s degree or higher and those with a bachelor’s or associate degree. Results also indicated a difference between those with a high school diploma or GED and those with a higher level of education. This difference could be attributed to the ambiguity in the wording of the statement regarding meaning of “oral conversation”,

Participants who indicated an educational background in child development or childhood education (n=28) had 78.5% correct responses to this statement. Those who did not indicate an educational background in child development or childhood education (n=41) had 80.5% correct responses. These results indicated no significant difference in total correct response when considering participants’ educational background in child development or childhood education.
Those who have one child in their family (n=6) had 83.3% correct responses. Those with two children (n=29) had 89.7% correct responses, those with three children (n=18) had 61.1% correct responses, and those with four children (n=10) had 80% correct responses. Participants with five or more children (n=6) had 83.3% correct responses to this statement. Results were different for participants with three children as compared to the other groups. This could be attributed to the ambiguity in the wording of the statement regarding meaning of “oral conversation”, which could have been avoided by providing an example.

Statement 6: *In the first 2-4 months of life, reading aloud to a child has more influence on their language development than general language experiences do.*

This statement is false. However, the majority of participants (59.4%, n=41) indicated they either strongly agree or agree with the statement. The remaining participants indicated they disagree (39.2%, n=27) or strongly disagree (1.4%, n=1).

**Overall correct responses:**

Participants with a master’s degree or higher (n=22) had 27.3% correct responses to this statement. Those with a bachelor’s degree (n=34) had 50% correct responses. Participants with an associate degree (n=5) had 0% correct responses and those with a high school diploma or GED (n=8) had 50% correct responses. Result differences may be attributed to ambiguity in the wording of the statement regarding meaning of “general language experiences”.
Those who indicated an educational background in child development or childhood education (n=28) had 46.4% correct responses. Participants who indicated no educational background in child development or childhood education (n=41) had 34.1% correct responses. These results indicated a slight difference in total correct responses between those who indicated an educational background in child development or childhood education and those who did not. However, this difference could be attributed to ambiguity in the wording of the statement regarding meaning of “general language experiences”.

Participants who have one child in their family (n=6) had 16.7% correct responses. Those who have two children (n=29) had 48.2% correct responses. Those who have three children (n=18) had 44.4% correct responses, those with four children (n=10) had 30% correct responses, and those with 5 or more children (n=6) had 33.3% correct responses. These results indicated a slight difference in total responses when considering participants’ number of children. Participants with two children had more total correct responses than the other groups. However, this difference could be attributed to ambiguity in the wording of the statement regarding meaning of “general language experiences”.
Statement 7: *Books encourage use of a wider range of words than may occur in everyday conversations.*

This statement is true. The majority of participants (72.5%, n=50) indicated they strongly agree with this statement and 26.1% (n=18) indicated they agree. Only 1.4% (n=1) indicated they disagree.

*Overall correct responses:*

Participants with a master’s degree or higher (n=22) had 100% correct responses to this statement. Those with a bachelor’s degree (n=34) had 97.1% correct responses. Participants with both an associate degree (n=5) and a high school diploma or GED (n=8) had 100% correct responses. These results indicated no significant difference in total correct responses when considering participants’ highest level of education.

Those who indicated an educational background in child development or childhood education (n=28) had 100% correct responses to this statement. Participants who indicated no educational background in child development or childhood education (n=41) had 97.6% correct responses to this statement. These results showed no significant difference in total correct responses when considering participants’ educational background in child development or childhood education.

All participants who have one child in their family (n=6), two children (n=29), and 3 children (n=18) had 100% correct responses to this statement. Those who have four children (n=10) had 90% correct responses. Participants with five or more children (n=6) also had 100%
correct responses. These results indicated no significant difference in total correct responses when considering participants’ number of children.

Statement 8: *Socioeconomic status is more important than frequency of reading in predicting a child’s language growth.*

This statement is false. The majority of participants (71%, n=49) indicated they strongly disagree with the statement and 24.6% (n=17) indicated they disagree. The remaining participants (4.3%, n=3) indicated they agree with this statement.

*Overall correct responses:*

Those with a master’s degree or higher (n=22) had 95.5% correct responses to this statement. Participants with a bachelor’s degree (n=34) had 97.1% correct responses and those with an associate degree (n=5) had 80% correct responses. Participants with a high school diploma or GED (n=8) had 100% correct responses. These results indicated a slight difference between those with an associate degree and those with higher levels of education.

Participants with an educational background in child development or childhood education (n=28) had 100% correct responses to this statement. Those who did not indicate an educational background in those areas (n=41) had 92.7% correct responses. These results showed no significant difference in total correct responses when considering participants’ educational background in child development or childhood education.
Those who have one child in their family (n=6) had 100% correct responses to this statement. Participants with two children (n=29) had 93.1% correct responses. Those with three children (n=18) had 94.4% correct responses. All participants with four children (n=10) and five or more children (n=6) had 100% correct responses. These results showed no significant difference in total correct responses when considering participants’ number of children.

Statement 9: *Maternal reading style is related to language growth.*

This statement is true. The majority of participants (62.3%, n=43) of participants indicated they agree with this statement and 15.9% (n=11) indicated they strongly agree. The remaining participants (21.7%, n=15) indicated they disagree or strongly disagree.

**Overall correct responses:**

Participants with a master’s degree or higher (n=22) had 81.8% correct responses to this statement. Those with a bachelor’s degree (n=34) had 76.5% correct responses. Participants with an associate degree (n=5) had 80% correct responses and those with a high school diploma or GED (n=8) had 75% correct responses. These results indicated no significant difference in total correct responses when considering participants’ highest level of education.

Those who have an educational background in child development or childhood education (n=28) had 75% correct responses to this statement. Participants who do not have an educational background in those areas (n=41) had 80.5% correct responses. These results indicated no
significant difference in total correct responses when considering participants’ educational background in child development or childhood education.

Participants who have one child in their family (n=6) had 83.3% correct responses to this statement. Those who have two children (n=29) had 86.2% correct responses and those with three children (n=18) had 61.1% correct responses. Participants with four children (n=10) had 70% correct responses and those with five or more children (n=6) had 100% correct responses. These results show a difference in total correct responses between participants with one to two children and those with three to four children. They also indicated a difference between those who have five or more children and those with less than five children.

Statement 10: Reading aloud to a child before they are 6 months old does not have an impact on their future language development.

This statement is false. The majority of survey participants (62.3%, n=43) indicated they strongly disagree with the statement and 36.2% (n=25) indicated they disagree. The remaining participants (1.4%, n=1) indicated they agree with the statement.

Overall correct responses:

Participants with a master’s degree or higher (n=22) had 100% correct responses to this statement. Those with a bachelor’s degree (n=34) also had 100% correct responses. Participants with an associate degree (n=5) had 80% correct responses and those with a high school diploma
or GED (n=8) had 100% correct responses. These results showed a slight difference in total correct responses between participants with an associate degree and those with a different level of education.

Those who indicated an educational background in child development or child education (n=28) had 100% correct responses. Participants who indicated no educational background in those areas (n=41) had 97.6% correct responses. These results indicated no significant difference in total correct responses when considering participants’ educational background in child development or childhood education.

Participants who have one child in their family (n=6) had 100% correct responses to this statement. Those with two children (n=29) had 96.4% correct responses. Participants with three children (n=18), four children (n=10), and five or more children (n=6) had 100% correct responses. These results showed no significant difference in total correct responses when considering participants’ number of children.

Statement 11: The quality of reading interactions is more important than the quantity of books read over time.

This statement is true. The majority of participants indicated they agree (46.4%, n=32) or strongly agree (31.9%, n=22) with this statement. The remaining participants (21.7%, n=15) indicated they disagree. No participant indicated they strongly disagree.
**Overall correct responses:**

Those who have a master’s degree or higher (n=22) had 77.3% correct responses to this statement. Participants with a bachelor’s degree (n=34) had 79.4% correct responses. Those with an associate degree (n=5) had 60% correct responses and those with a high school diploma or GED (n=8) had 100% correct responses to this statement. These results indicated a difference between the correct responses of participants with a high school diploma or GED and those with a higher level of education.

Participants who have an educational background in child development or childhood education (n=28) had 78.6% correct responses to this statement. Those who do not have an educational background in those areas (n=41) had 80.5% correct responses. These results indicated no significant difference in total correct responses when considering participants’ educational background in child development or childhood education.

Those with one child in their family (n=6) had 66.7% correct responses to this statement. Participants with two children (n=29) had 93.1% correct responses. Those with three children (n=18) had 61.1% correct responses and those with four children (n=10) had 90% correct responses. Participants with five or more children (n=6) had 66.7% correct responses. These results indicated a difference between total correct responses of participants with one child and those with two children. Results also showed a difference between those with two or four children and those with one, three, or five children.
Statement 12: *Watching an age-appropriate, educational television show can have the same effect on a 2-3-year-old child’s language development as having a caregiver read aloud to them.*

This statement is false. The majority of participants indicated they disagree (49.3%, n=34) or strongly disagree (42%, n=29) with this statement. The remaining participants (8.7%, n=6) indicated they agree.

*Overall correct responses:*

Participants with a master’s degree or higher (n=22) had 100% correct responses to this statement. Those with a bachelor’s degree (n=34) had 94.1% correct responses and those with an associate degree (n=5) had 80% correct responses. Participants with a high school diploma or GED (n=8) had 62.5% correct responses. These results indicated a difference in total correct responses between those with a high school diploma or GED and those with a higher level of education.

Those with an educational background in child development or childhood education (n=28) had 96.4% correct responses to this statement. Participants who do not have an educational background in those areas (n=41) had 87.8% correct responses. These results indicated a slight difference in total correct responses when considering participants’ educational background in child development or childhood education.

Participants with one child in their family (n=6) had 100% correct responses to this statement. Those with two children (n=29) had 86.2% correct responses and those with three
children (n=18) had 94.4% correct responses. Participants with four children (n=10) had 90% correct responses and those with five or more children (n=6) had 100% correct responses. These results showed a slight difference in total correct responses between participants with two children and the other groups.

Statement 13: *Children who have not been read to know the same amount of words by age 2 as children who have been read to.*

This statement is false. The majority of participants indicated they strongly disagree (65.2%, n=45) or disagree (31.9%, n=22) with this statement. The remaining participants (2.9%, n=2) indicated they agree or strongly agree.

*Overall correct responses:*

Participants with a master’s degree or higher (n=22) and those with a bachelor’s degree (n=34) had 100% correct responses to this statement. Those with an associate degree (n=5) had 80% correct responses. Participants with a high school diploma or GED (n=8) had 87.5% correct responses. These results indicated a slight difference between total correct responses of participants with a bachelor’s degree or higher and those with an associate degree or high school diploma/GED.

Those who indicated an educational background in child development or childhood education (n=28) had 100% correct responses to this statement. Participants who indicated no educational background in those areas (n=41) had 95.1% correct responses. These results showed
no significant difference in total correct responses when considering participants’ educational background in child development or childhood education.

Participants with one child in their family (n=6) had 100% correct responses to this statement. Those with two children (n=29) had 96.4% correct responses and those with three children (n=18) had 94.4% correct responses. Participants with four children (n=10) and those with five or more children (n=6) had 100% correct responses. These results showed no significant difference in total correct responses when considering participants’ number of children.

Statement 14: *Children can learn how language works by listening to the rhythm and intonation of the voice reading to them.*

This statement is true. All participants either agreed (31.9%, n=22) or strongly agreed (68.1%, n=47) with the statement. Demographic differences did not appear to influence responses to this statement.
Statement 15: *When reading to a child, associating the words with both the pictures on the page and real-world objects can help children learn the importance of language.*

This statement is true. All participants either agreed (31.9%, n=22) or strongly agreed (68.1%, n=47) with the statement. Demographic differences did not appear to influence responses to this statement.

Statement 16: *Reading aloud to a child supports their growth in both vocabulary and grammar knowledge.*

This statement is true. The majority of participants (88.4%, n=61) indicated they strongly agree with the statement and 11.6% (n=8) indicated they agree. Demographic differences did not appear to influence responses to this statement.
Conclusion

Results from this current survey indicated that neither an educational background in child development or childhood education nor number of children had a significant effect on the level of participant’s knowledge regarding the relationship between literacy and language development. Results indicated highest level of education completed had a slight effect on the level of participant’s knowledge regarding the relationship between literacy and language.

Participants with a master’s degree or higher had an average of 14.6 of 16 correct – or 91.2%. Those with a bachelor’s degree also had an average of 14.6 of 16 correct – or 91.2%. Participants with an associate degree had an average of 13.4 of 16 correct – or 83.8%. Those with a high school diploma or GED had an average of 14.1 of 16 correct – or 88.1%. Refer to Appendix D, Table 1-1 through 1-5. These results indicated a slight difference between those with a high school diploma/GED, those with an associate degree, and those with a higher level of education. Otherwise, no significant differences are indicated when comparing average number correct based on highest level of education.

Participants who indicated an educational background in child development or childhood education had an average of 14.7 of 16 correct – or 91.8%. Participants without this background had an average of 14.4 statements correct – or 90%. Refer to Appendix C, Tables 2-1 and 2-2. These results indicated no significant differences in average number correct when comparing results of participants with a background in child development/childhood education with those participants who reported no background in child development/childhood education.

Participants with one child in their family had an average of 14.5 of 16 correct – or 90.6%. Those with two children had an average of 14.7 of 16 correct – or 91.8%; those with three children an average of 14.1 – or 88.1%; and those with four children an average of 14.4 of
16 correct – or 90%. Participants with more than five children had an average of 14.8 of 16 correct – or 92.5%. Refer to Appendix C, Tables 3-1 through 3-5. These results indicated a slight difference in average number correct between when comparing results of participants based on number of children. However, whether the participants had one child or more than one child did not appear to influence any statement responses or overall scores.
APPENDIX A: Survey Cover Letter & Consent Form
CONSENT FORM

To Whom It May Concern:

You are invited to participate in a research study titled, “Parent Knowledge Regarding the Relationship between Literacy and Language Development.” The purpose of the study is to determine parent knowledge regarding the relationship between literacy and language development, and to compare the results to existing research about this topic. This is a research project conducted by Emily Pankiewicz, under the supervision of Dr. Nancy Hardman, professor of Communication Sciences and Disorders at Ouachita Baptist University. The information collected will allow me to complete my undergraduate thesis and graduate from Ouachita Baptist University with Honors.

Your participation in this research study is voluntary. You may choose not to participate. If you do choose to participate in this research survey, you may withdraw at any time.

Your responses will be confidential and we do not collect identifying information such as your name, email address, or IP address. To help protect your confidentiality, the surveys will not contain any information that will personally identify you.

The procedure involves completing an online survey that will take approximately 15 minutes. After reading each statement, you will be prompted to choose Strongly Agree, Agree, Disagree, or Strongly Disagree in response to what you just read.

For any questions about this study, contact:

Emily Pankiewicz, Principal Researcher
Email: pan62323@obu.edu
OBU Box 4313
410 Ouachita Street
Arkadelphia, AR 71998-0001

Dr. Kluck, Vice President
OBU Box 3758
410 Ouachita Street
Arkadelphia, AR 71998-0001
Telephone: 870-245-5222

Electronic Consent:
Clicking on the “agree” button below indicates that:
1. you have read the above information
2. you voluntarily agree to participate
3. you are at least 18-years of age

*Agree
*Disagree
APPENDIX B: Survey Questionnaire
SURVEY

DEMOGRAPHICS:
Please indicate the following information about yourself.

1. Parental status:
   a. Mother    b. Father    c. Guardian

2. Socioeconomic status:
   a. <$20,000/year   b. $20,000-$50,000/year  c. $50,000-$100,000/year
   d. $100,000-$200,000/year  e. >$200,000/year

1. Highest level of education completed:
   a. High school diploma/GED  d. Master’s Degree
   b. Associate Degree  e. Doctoral Degree
   c. Bachelor’s Degree  f. Other

2. Do you have an educational background in child development or childhood education?
   a. Yes    b. No

3. Number of children:
   a. 1    b. 2    c. 3    d. 4    e. 5+

4. Ages of children (select all that apply):
   a. 0-1    b. 2-3    c. 4-5    d. 6-8    e. 8-10    f. 11+

LITERACY & LANGUAGE:
Please indicate the extent to which you agree with each statement.
Likert scale: Strongly Agree, Agree, Disagree, Strongly Disagree

1. Even if a child cannot read yet, listening and looking at pictures helps the brain prepare for future success.
2. Reading the words of a book is more important to language development than the interactions that take place during shared book reading.
3. Reading aloud with children for 10 minutes a day is one of the best ways to provide learning tools for life.
4. Newspapers, cookbooks, and magazines can be effective literacy materials for parents who want to build a language and reading-rich environment.
5. Reading books to children can have more influence on language learning than oral conversation.
6. In the first 2-4 months of life, reading aloud to a child has more influence on their language development than general language experiences do.
7. Books encourage use of a wider range of words than may occur in everyday conversations.
8. Socioeconomic status is more important than frequency of reading in predicting a child’s language growth.
9. Maternal reading style is related to language growth.
10. Reading aloud to a child before they are 6 months old does not have an impact on their future language development.
11. The quality of reading interactions is more important than the quantity of books read over time.
12. Watching an age-appropriate, educational television show can have the same effect on a 2-3-year-old child’s language development as having a caregiver read aloud to them.
13. Children who have not been read to know the same amount of words by age 2 as children who have been read to.
14. Children can learn how language works by listening to the rhythm and intonation of the voice reading to them.
15. When reading to a child, associating the words with both the pictures on the page and real-world objects can help children learn the importance of language.
16. Reading aloud to a child supports their growth in both vocabulary and grammar knowledge.
APPENDIX C: Additional Data
Additional Data

Total Survey Score Results

1. Highest level of education

Table 1-1: Participants with a master’s degree or higher (n=22).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>5</td>
<td>22.7%</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>27.3%</td>
</tr>
<tr>
<td>14</td>
<td>9</td>
<td>40.9%</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.6

Table 1-2: Participants with a bachelor’s degree (n=34).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>7</td>
<td>20.6%</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
<td>41.2%</td>
</tr>
<tr>
<td>14</td>
<td>8</td>
<td>23.5%</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>11.8%</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.6
Table 1-3: Participants with an associate degree (n=5).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>20%</td>
</tr>
</tbody>
</table>

Average score: 13.4

Table 1-4: Participants with a high school diploma/GED (n=8).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>62.5%</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.1
2. *Educational background in child development/childhood education*

Table 2-1: Participants indicating an educational background in child development or childhood education (n=28).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>6</td>
<td>21.4%</td>
</tr>
<tr>
<td>15</td>
<td>9</td>
<td>32.1%</td>
</tr>
<tr>
<td>14</td>
<td>11</td>
<td>39.3%</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>7.1%</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.7

Table 2-2: Participants indicating *no* educational background in child development or childhood education (n=41).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>7</td>
<td>17.1%</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
<td>34.1%</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td>29.3%</td>
</tr>
<tr>
<td>13</td>
<td>4</td>
<td>9.8%</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>7.3%</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

Average score: 14.4
3. **Number of children**

Table 3-1: Participants with one child (n=6).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.5

Table 3-2: Participants with two children (n=29).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>10</td>
<td>34.5%</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>17.2%</td>
</tr>
<tr>
<td>14</td>
<td>10</td>
<td>34.5%</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>10.3%</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Average score: 14.7
Table 3-3: Participants with three children (n=18).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>1</td>
<td>5.6%</td>
</tr>
<tr>
<td>15</td>
<td>6</td>
<td>33.3%</td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>33.3%</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>16.7%</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>11.1%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.1

Table 3-4: Participants with four children (n=10).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>14</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.4
Table 3-5: Participants with five or more children (n=6).

<table>
<thead>
<tr>
<th>Total Score: (out of 16)</th>
<th># of participants:</th>
<th>% of participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>1</td>
<td>16.7%</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>33.3%</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Average score: 14.8
APPENDIX D: Institutional Review Board Human Subjects Application
Submission Date: 1/27/2020

Project Title: Parent Knowledge Regarding the Relationship Between Literacy and Language Development

Project Personnel

<table>
<thead>
<tr>
<th>Name</th>
<th>Dept.</th>
<th>School</th>
<th>Faculty, staff, student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principle Investigator</td>
<td>CMDS</td>
<td>Natural Science</td>
<td>Student</td>
</tr>
<tr>
<td>Emily Pankiewicz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Investigators</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PI contact information:
e-mail- pan62323@obu.edu telephone- (417) 414-2226 campus box- 4313

Suggested project classification: Exempt _____ Nonexempt _____

Estimate of risk to subjects: None _X__ Low ____ Moderate ___ High ___

Proposed Project Dates: 1/27/2019 to 4/24/2020

Estimated number of participants _50____

Funding Agencies or Research Sponsors: Dr. Nancy J. Hardman, CCC-SLP

Submission Status:

_____X____ New Project

_____ Renewal or Continuation

_____ Change in Procedure for Previously Approved Project

_____ Annual Review

_____ Resubmission

Action of the Research Committee

Project Number _______________ Approve_____

Approve with minor revision_____ Defer for revisions_____ Disapprove_____
Human Subjects Application Checklist

☐ Detailed project description

☐ Selection of subjects
  ☐ Method of recruitment & selection
    Contacts from student researcher’s hometown will be asked to forward the survey to parents with children in second grade or younger. These contacts include church preschool directors, children’s ministers, school teachers/principals, and school SLPs.
  ☐ Recruitment advertisements or script N/A
  ☐ Demographics- Ages and gender, etc.
    Springfield, MO—Ridgecrest Baptist Church/Preschool; All-Saints Anglican Church; Seminole Baptist Temple; New Covenant Academy School; Springfield Public School District; Republic School District.

Parental status of participant (mother/father/other guardian)
SES of participant (range of income amount- i.e. $20,000-$50,000)
Highest level of education completed; background in child development or education.
Number & ages of children

☐ Compensation
  ☐ Compensation conditions and schedule of payment
    Participants will receive no compensation for completing the survey.

☐ Location and duration of experiment
  A Survey Monkey link and cover letter will be sent to the participants.

☐ Investigator’s relationship to subjects
  I am from Springfield, MO, where local participants will be contacted.

☐ Alternatives to participation
  Participation is voluntary.

☐ Purpose of Study
  To determine parent knowledge regarding the relationship between literacy and language development.

☐ Research Procedures
  ☐ Physical/Behavioral aspects N/A
  ☐ Deception or Coercion There is no intentional deception or coercion.
  ☐ Debriefing opportunities

Participants will be given the option of viewing results by attending the Scholar’s Day presentations at Ouachita Baptist University in April, 2020.

☐ Survey/Assessment Instrument(s)
  Demographics section.
  Statements regarding the relationship of literacy to language development will be given & participants will indicate on a Likert-type scale the degree to which they agree/disagree with each statement. This survey should take no more than 15 minutes.
Required policy statements

Benefits to the individual and to the university and to humanity
This project will allow the researcher the opportunity to compare results of her research to the current literature in the field of language development & literacy. This information can be used to raise awareness about the impact reading has on language development.

Risks to the participant No known risks.

Comparison of risks and benefits N/A

Procedures for minimizing risk N/A

Procedures for maintaining confidentiality of data
Researchers will have no access to email addresses of those who participate in the survey.

Procedures for final disposition of data
As a requirement for the Honors Program, the student researcher will participate in Scholar’s Day presentations at the end of next semester.

Conflict of interest statement NA

Elements of Informed Consent Included:

Informed Consent Form X
Parental permission form N/A
Assent form for minors ages 7-17 N/A
Justification for waiver of consent or signed consent NA
Cover letter for mail surveys X (will be provided on Survey Monkey)
Telephone script for telephone surveys NA
Information sheet NA
Videotape/audiotape release form NA

IRB Approval Code: PAN012820
REFERENCES


ACKNOWLEDGMENTS

I would like to thank everyone who participated in this survey and allowed me to complete my Honors thesis. I am especially grateful to Dr. Nancy Hardman for guiding me through the process of creating the survey and for helping me along the way. I would like to thank Mrs. Carrie Sharp for her assistance in the early stages of this project and for her willingness to help. I would also like to thank Dr. Elizabeth Kelly for her help and willingness to step in as my third reader at a last minute’s notice. Also, a special thanks to my mother for sharing this survey with all of her Facebook friends 😊.