This paper reports on a study of primary-grade students (N=79) and their parents in an attempt to identify opportunities for enhancing the collaborative interaction between home and school when designing quality learning environments. In particular, the study looked at the children's print concept development, reading attitudes, and family literacy environments. Participants were enrolled in a summer program designed for gifted and talented students. Survey instruments used were "Concepts about Print" and "Elementary Reading Attitudes Survey"; one parent (or guardian) was asked to complete a literacy survey for each child. Analysis of the data indicated that students' performance on the two survey instruments did not correlate, though the students' scores exhibited a relatively high correlation between academic and recreational reading attitudes. The family literacy survey revealed that as children get older, they have fewer adult reading models within their home environments. The findings of the study reinforce the importance of parent education and intergenerational programs which recognize that parents are their children's first teachers and can play major roles in facilitating their children's literacy development. Also, teacher educators have a responsibility to increase preservice and inservice teachers' knowledge bases regarding how young children acquire print concepts and form attitudes toward reading. (Contains 8 tables and 31 references.)
Home and School as Learning Environments that Impact the Development of Primary Students' Print Concepts and Reading Attitudes

Therese Kiley Shepston & Rita A. Jensen
Bradley University
INTRODUCTION

Is the home a learning environment that impacts the reading attitudes and print concepts that students bring to school? What role do parents play in fostering or discouraging positive reading attitudes and early reading competence? Do teachers acknowledge the importance of the home-school connection, and, if so, what are teachers willing to do to create a collaboration that supports literacy both at home and at school? What do teachers mean when they refer to 2-book kids and 200+-book kids, and how does this relate to family literacy? Furthermore, what differences exist in the reading attitudes and reading competence of primary-grade students by gender and age? In an attempt to develop a range of responses to these questions—responses which would focus on enhancing the development of quality learning environments that support literacy development, both at home and at school—the researchers engaged both students and parents in assessment of their competence and attitudes regarding literacy and learning environments.

In designing a project that focuses on the home as a learning environment, the first complex factor to consider is the dramatic shift in lifestyles and demographics that relate to the "changing family" over the past few years (Salinger, 1993). Initially, we must accept the reality that families have changed in many ways during the past decade. There are many more single parent homes and more working mothers. Also, many children are experiencing the realities of divorce and joint custody. Schools are also changing to accommodate the changing needs of the family. There are more preschool programs, more child care and extended care programs, and more whole language and integrated workshop approaches that may be unfamiliar to parents. In addition to the changing characteristics of families and
schools, society is also changing quite dramatically. Teen pregnancy rates have increased, drug use has increased, and homelessness and poverty have increased, resulting in greater student mobility and impaired socialization of the family. All these factors impact the literacy connection between home and school, as well as the quality of the learning environment that is critical to each student's development of reading attitudes, print concepts, and overall literacy competence.

According to Fredericks and Rasinski (1989), the best possible home-school program is one that encompasses an entire school and seeks to involve, as extensively as possible, parents and caregivers in all aspects of school, from program planning to implementation. Involving parents in the creation, development, and ongoing support of a facilitative learning environment that exists both at home and at school is a critical variable that is absent in many homes, programs, and schools. The study discussed in this paper focuses on primary-grade students and their parents in an attempt to identify opportunities for enhancing the collaborative interaction between home and school when designing quality learning environments.

THEORETICAL FRAMEWORK

Rasinski and Padak (1996) assert that the home as a learning environment yields significant potential for affecting student reading progress. The home and parental involvement are untapped resources for increasing the amount of time that students read, a factor which directly impacts students' proficiency in reading. Certainly, the essentiality of the parent in the child's learning has been well documented (Diamond & Moore, 1992; Teale, 1986; Taylor, 1983; Heath, 1983). There have been several extensive research reviews which focus on the role of
parents in the overall academic achievement of students in general, and on reading
achievement in particular.

Henderson (1988) concluded that parental involvement leads to improvements in student achievement, grades, test scores, and overall academic
durability but significant effect of improving the community perception of school
effectiveness and positively influencing the attitudes that families and educators
have about one another. In homes where parents had high expectations for their
children, the children had more positive attitudes towards learning. According to
the National Assessment of Educational Progress (NAEP), students who were
regularly involved with their families in literacy-related activities had higher levels
of reading achievement than students who were not involved. Postlethwaite and
Ross (1992), in their international study of reading instruction, found that the
"degree of parental cooperation" was the most potent of 56 significant
characteristics of schools most successful in teaching reading.

In studies of early readers (Clark, 1976; Clay, 1980; Durkin, 1966; Taylor,
1983) prominent characteristics of their homes were accessibility of many books
and other print materials, as well as availability to the child of writing materials
including pens, pencils, crayons, and paper. In order to nurture an interest in early
reading, parents need to understand the importance of designing the physical
environment of the home.

Larrick (1988) points out that a child coming from a home with significant
amounts of verbal interaction may enter school with a vocabulary as large as 32,000
words. A child coming from a home with little verbal interaction, however, may
begin school with a vocabulary of only 4,000 words. Larrick contends that parents must understand that reading is a two-way process, with the reader bringing his or her experience to extend the meaning of the printed page.

Clay (1979), Doake (1982), and Holdaway (1979) found early readers were read to often and enjoyed this experience with their parents, while Fredericks and Rasinski (1990) found that children who had been read to on a regular basis exhibited more positive attitudes toward literacy and higher achievement levels in reading than children who had not been read to regularly. Obviously, literacy begins at an early age, as children interact with family members to meet personal needs, gain self-identity, and establish behavior patterns that reflect cultural values and beliefs (Heath, 1989; Schieffelin & Ochs, 1986; Wertsch, 1991). Through a series of "literacy events" that take place in the home, children actually experience the motives, goals, and conditions associated with literacy and its relationship to reading, writing, speaking, and listening (Teale, 1987). If literacy is to emerge, instruction must first embrace and affirm the cultural experience and traditions of children and their families (Franklin, 1986; Harste & Burke, 1978; Heath, 1983).

Need for the Study

Current views of reading and literacy processes necessitate a change in the roles of professionals involved in instruction in schools (Glazer & Burke, 1994). Learning to read and write is now viewed as a natural part of the growing/learning process that begins in the home and is furthered extended and expanded in school. Amazingly, the roles of the family and teachers and school are quite similar. Graves and Stuart (1985) describe a good classroom as a place where "the space is shared, responsibilities are shared, reading and writing are shared, experiences are
shared, and, above all, learning is shared. The teacher works hard to help the children develop their ability to capitalize on their collective power for the common good" (p.53). Teachers also need to extend this sharing to the home. According to Harste (1989), "effective programs of reading treat parents as participants and partners in learning who are permitted options, choices, involvement, and information about the instructional alternatives available to students" (p. 54). Au, Mason, and Scheu (1995) identified two major methods which teachers frequently utilize to strengthen the home-school connection for the purpose of improving their children's literacy development: communicating with parents and enlisting parents' participation in literacy activities for their children.

As has been noted, researchers have begun to explore the role of the home learning environment and its relationship to young children's reading attitudes and literacy development. The study described in this paper builds on the work of those researchers, as well as on the work of Clay (1993), who continues to research young children's development of print concepts, and on the work of McKenna and Kear (1990), who created a survey which measures students' attitudes toward both academic and recreational reading. Tunnell, Calder, Justen and Phaup (1991) join McKenna and Kear in emphasizing the fact that the desire to read is just as important to young children's emerging literacy as is their acquisition of specific skills.

The current study also acknowledges and addresses the need for further exploration of the combination of factors related to emergent literacy. It does so by focusing simultaneously on the three composite variables of print concept development, attitudes toward reading, and family literacy environments.
Purpose of the Study

This study was undertaken to:

1. Assess the print concept development of young primary students.
2. Assess the reading attitudes of young primary students.
3. Collect information regarding the family literacy environments of young primary students.
4. Identify and describe relationships among young primary students’ print concept development and reading attitudes.
5. Identify significant differences among the print concept development, reading attitudes, and family literacy environments of sub-groups within the total sample.

METHODOLOGY

Subjects

Seventy-nine children, all of whom were enrolled in a summer program designed for gifted and talented students, served as the focus of this study. Thirty-five of the students were male (44%), and 44 (56%) were female. The mean age of student participants was 83 months (6 years, 11 months). Twenty-nine of the 79 students (37%) were entering first grade in the fall following the summer program, and 50 (63%) were entering second grade.

One parent (or guardian) was asked to complete a literacy survey for each child. Seventy-two mothers (91%) and 7 fathers (9%) responded to the family literacy survey. Of the 77 respondents who answered this item, 52 were working parents (68%), and 25 (32%) were stay-at-home parents. The mean parent age was 36 years. The majority of the subjects (72) who participated in the study were
Caucasians, residing in the Peoria, Illinois metropolitan area. Four participants identified themselves as minorities, and three respondents did not identify their race.

Materials

Clay's Concepts About Print (1993) was used to assess children's print concept development. Clay's instrument has proved to be an effective indicator of one group of behaviors that support reading acquisition. Its test-retest reliability coefficients range from 0.73 to 0.89 and its corrected split-half coefficients range from 0.84 to 0.88.

Most of the Concepts About Print assessment items provide information regarding what children are attending to on the printed page. Among the concepts which it assesses are:

1. Recognition of the front of the book;
2. Recognition that print, rather than pictures, tells the story;
3. Recognition of letters and clusters of letters called words;
4. Recognition of first letters and last letters in words;
5. Recognition of upper and lower case letters;
6. Recognition that spaces serve a purpose; and
7. Recognition that different punctuation marks have different meanings.

Because changes occur in Concepts About Print scores as non-readers become readers, the instrument can be helpful in identifying change over time. The test also can be used for diagnostic purposes. Teachers can examine children's performance on Concepts About Print and then focus on helping the children acquire the unknown concepts.
Students' attitudes toward reading were assessed using McKenna and Kear's *Elementary Reading Attitude Survey* (1990). McKenna and Kear's survey consists of an academic reading attitude scale and a recreational reading attitude scale. The score resulting from the combination of the two scales yields the full scale score. Results of a large-scale study which implemented the *Elementary Reading Attitude Survey* produced reliability coefficients ranging from .74 to .89 for the different scales.

The McKenna and Kear survey asks students to respond to 20 questions by circling the picture of Garfield (yes, the cat) that most closely illustrates their feelings. The four different Garfield depictions equate to a four-point scale, where four equals very excited, three equals happy, two equals unhappy, and one equals downright upset. The ten items belonging to the recreational reading attitude scale appear as items one through ten on the survey, and the ten items belonging to the academic reading attitude scale appear as items eleven through 20. Sample items for the recreational reading attitude scale include:

How do you feel when you read a book in school during free time?
How do you feel about reading for fun at home?
How do you feel about getting a book for a present?
How do you feel about reading instead of playing?

Sample items for the academic reading attitude scale include:

How do you feel about doing reading workbook pages and worksheets?
How do you feel about the stories you read in reading class?
How do you feel when you read out loud in class?
How do you feel about taking a reading test?
Finally, information regarding students' family literacy environments was collected by means of a literacy survey which students' parents were asked to complete. The 20-item survey includes both close-ended and open-ended items, designed to elicit information regarding the home literacy environments of the primary students who participated in the study. Six of the items asked parents to circle the number from five to one, where five equals strongly agree, four equals agree, three equals neither agree nor disagree, two equals agree, and one equals strongly disagree, that most closely described their responses to the statements:

1. I enjoy reading.
2. I am a good reader.
3. I am a good writer.
5. My child is a good reader.
6. My child is a good writer.

Items seven and eight asked parents to respond, using the following scale: Daily, Frequently (3-4 times a week), Occasionally (Once a week), Seldom (Once a month), Never. The questions posed were:

7. How often does your child see you or other family members reading?
8. How often does your child see you or other family members writing?

The remaining parent survey items focused on the degree to which the children engaged in literacy activities and saw literacy activities modeled within the home environment. Sample items include:

How old was your child when you began reading to him or her?
How often do your child and you (or another significant adult in your child's life) visit the library?

At what age did your child begin reading?

At what age did your child begin writing?

Procedures

While attending either a one-week or two-week course which met for two hours a day, young primary students participated in this study. Two research assistants, who had been instructed in how to administer Concepts About Print and had given it to trial subjects, administered the test to all 79 subjects individually. These same two research assistants also administered the Elementary Reading Attitude Survey to the subjects in group settings. The research assistants came into the classes these first and second grade students were taking and, after explaining the purpose of the survey and giving the students directions regarding how to complete it, read each item of the survey to the students, who then responded by circling the Garfield pictures that most closely described their feelings about the items. The entire administration process for the Elementary Reading Attitude Survey took approximately 20 minutes to complete.

Additionally, students completed two open-ended sentence stems which were intended to provide samples of their writing. These writing samples were collected as part of the course evaluations which students routinely completed at the conclusion of each course they took. The stems were: "The one thing I liked best about this class was...." and "The one thing I didn't like about this class was...." Some of the teachers whose classes were involved in the study assisted students with this writing completion task by writing words on the board and providing
additional types of prompts. Consequently, researchers concluded that the writing samples had been tainted and did not constitute valid or reliable assessments of students' writing abilities.

A brief memorandum stating the purpose of the literacy survey and the survey itself were sent home to parents with the primary students who participated in the study. The memorandum explained: "As part of our efforts to research the development of children's print concepts, we are interested in exploring the relationships between family literacy, young children's understanding of print concepts, and their attitudes toward reading. Consequently, we are asking you to take a few moments to complete this survey." Parents were assured their responses would be kept confidential and were asked to send their completed surveys with their children or to mail their surveys to the researchers.

Data Analyses

The computer software program entitled Statview was used to analyze the data collected. In addition to providing descriptive statistics, it assisted in the process of identifying relationships among the variables of print concept development, reading attitudes, and family literacy. Statview also was used to detect statistically significant differences between the scores of different sub-groups within the total sample.

RESULTS

The following sections describe study results. In order to provide an organizational structure, they are presented in relation to the five purposes which the study addressed.
Print Concept Development

As Table 1 illustrates, the mean of the scores for the 78 primary students who completed the Concepts About Print test was 20.22 on a 24 point scale. As one might predict, the mean for first grade students (17.89) was lower than the mean for second grade students (21.52), indicating that first graders had not yet acquired as many print concepts as second graders. There was also more variation in the scores of first grade students (SD=3.10) than in the scores of second grade students (SD=1.56). However, the Concepts About Print means for male (20.06) and female (20.35) students were only separated by 0.29, and the difference between the standard deviations of male (SD=2.92) and female (SD=2.77) students was only .15.

Reading Attitudes

As Table 2 illustrates, the mean of the Elementary Reading Attitude Survey full scale scores for the 78 primary subjects was 62.66 on an 80 point scale. The recreational reading attitude mean was 32.20 on a 40 point scale, and the academic reading attitude mean was 30.50 on a 40 point scale. In this case, first grade means exceeded second grade means on all three scales, and the means of female respondents exceeded the means of male respondents on all three scales. Variation in scores, as measured by standard deviations, was greater for second graders than for first graders and was greater for males than for females.

Family Literacy Environments

For purposes of this paper, only the first eight items of the 20 item family literacy survey were included in the analyses. Those eight items, which appear on page 10 of this paper, asked parents to respond, using a five-point scale. Total
sample means for the eight items range from 4.01 for item eight (How often does your child see you or other family members writing?) to 4.75 for item seven (How often does your child see you or other family members reading?). Such results indicate that parents reported that their children saw family members reading and writing on a daily basis. Given the fact that the total sample means for all eight items were above 4.00 on a five-point scale, one must consider the possibility that a ceiling effect existed on the family literacy survey items.

Looking at the family literacy survey results by grade and gender, one notes that first grade means range from 3.97 for item six (My child is a good writer.) to 4.90 for item seven (How often does your child see you or other family members reading?). Second grade means range from 3.94 for item eight (How often does your child see you or other family members writing?) to 4.74 for item one (I enjoy reading.). Male student means range from 3.77 for item six (My child is a good writer.) to 4.80 for item 1 (I enjoy reading.) Female student means range from 3.98 for items three and eight (I am a good writer; How often does your child see you or other family members writing?) to 4.84 for item four (My child enjoys reading.).

It should be noted that correlation coefficients for the eight items of the family literacy survey are all less than .50, with two exceptions. Consequently, it is reasonable to conclude that those items with correlation coefficients less than .50 measure different factors. Items one (I enjoy reading.) and two (I am a good reader.) correlate at the .75 level, indicating that, to a significant extent, they measure the same factor. Likewise, items four (My child enjoys reading.) and five (My child is a good reader.) correlate at the .60 level. The fact that these particular
items correlate suggests that the parents who completed the family literacy survey perceive a connection between a positive attitude toward reading and reading ability.

Relationships Between Print Concept Development and Reading Attitudes

As Table 4 illustrates, students' performance on Clay's Concepts About Print does not correlate with their performance on any of McKenna and Kear's Elementary Reading Attitude Survey scales. However, as one might predict, because the full scale score is simply the total of the recreational and academic scale, scores on the full scale reading attitude survey are highly correlated with scores on both the recreational reading attitude scale (.94) and the academic reading attitude scale (.96).

Additionally, the recreational reading attitude scale scores and academic reading attitude scale scores correlate highly (.81) with one another. While one might also reasonably predict such a result, it is significant to note that, in a large-scale study which McKenna and Kear (1990) conducted for the purpose of creating norms for the interpretation of Elementary Reading Attitude Survey scores, the intersubscale correlation coefficient for the recreational and academic scales was .64. Consequently, because only 41% of the variance in one set of subscale scores could be accounted for by the other, McKenna and Kear concluded that the two subscales, while related, also reflected dissimilar factors. For their purposes, that was a desirable outcome.

Although in the current study the recreational reading attitude scale scores and academic reading attitude scale scores are correlated at the .81 level, paired t-tests which compared students' scores on the two scales revealed some statistically significant differences. Table 5 illustrates that, for the total sample, as well as for
first grade students, second grade students, and female students, statistically significant mean differences (P=.05) exist between the recreational reading attitude scale and the academic reading attitude scale.

Differences By Grade and Gender

Turning to analyses of differences between the means of subgroups within the total sample, unpaired t-tests were used to identify differences by grade and by gender. As Table 6 illustrates, the mean differences between first grade students' performance on the Concepts About Print test and second grade students' performance on the Concepts About Print test are statistically significant at the .05 level. However, no statistically significant mean differences exist between the performance of male and female students on the same test.

Table 7 reveals that no statistically significant mean differences were identified between the full scale, recreational, and academic reading attitudes of first grade students and the full scale, recreational, and academic reading attitudes of second grade students, as measured by McKenna and Kear's (1990) Elementary Reading Attitudes Survey. However, mean differences which are statistically significant at the .05 level were detected when the responses of male and female students on the same three reading attitude scales were compared.

Turning to the family literacy survey and Table 8, statistically significant mean differences were detected for four of the items. On item number four (My child enjoys reading.) item number five (My child is a good reader.), and item number six (My child is a good writer.), the mean differences of respondents whose sons participated in the study and respondents whose daughters participated in the study are statistically significant at the .05 level. On item number seven
(How often does your child see you or other family members reading?), the mean differences of respondents whose first grade children participated in the study and respondents whose second grade children participated in the study are statistically significant at the .05 level.

CONCLUSIONS AND RECOMMENDATIONS

Relationships Between Print Concept Development and Reading Attitudes

Some interesting findings emerge as one focuses on the relationships between print concept development and reading attitudes of the primary-grade students. Surprisingly, students' performance on Clay's (1993) *Concept About Print* does not correlate with their performance on McKenna and Kear's (1990) *Elementary Reading Attitude Survey* scales, as researchers might have hypothesized. Perhaps a partial explanation for the lack of a correlation between students' *Concepts About Print* scores and their *Elementary Reading Attitude Survey* scores lies in the fact that *Concepts About Print* constitutes only "...one of a battery of observation tasks in a wide-ranging survey designed to monitor changes in a complex set of reading behaviours..." (Clay, 1993, p. 47).

However, students' scores on the recreational reading attitude scale and their scores on the academic reading attitude scale are correlated. Since a relatively high correlation exists between academic and recreational reading attitudes (.81), the importance of designing academic literacy programs that are meaningful, and constructed from students' prior experiences (including home literacy experiences), seems critical.

Although it seems contradictory to the above finding, paired t-tests that compared students' means on the recreational reading attitude scale and the
academic reading attitude scale detected statistically significant differences. The sample as a total group, as well as the subgroups of first grade students, second grade students, and female students produced significant differences in their recreational and academic reading attitudes, as measured by the Elementary Reading Attitude Survey. Such differences remind the researchers of their own elementary experiences and those scenarios when Aunt Clara or Uncle Fred, upon seeing them reading a book, would inquire, "So, you like reading, huh?" The researchers would then inquire in return, "What do you mean by reading? If you mean what I do in school, then no, I don't like that. If you mean do I like to read real books, then yes."

Such differences also lead one to wonder if similar patterns would be revealed if one replicated the study with progressively higher grade levels. In other words, will the differences between recreational reading attitude means and academic reading attitude means increase as students get older? Using the same line of reasoning, will the differences between females' recreational reading attitude means and academic reading attitude means also increase as they get older?

Differences By Grade and Gender

As one might predict, significant mean differences exist between the Concepts About Print scores of first grade subjects and second grade subjects. Such results are even more predictable in light of the fact that this study's younger students were about to enter first grade, while the older students were about to enter second grade. Given the fact that, in most of the schools these children attend little formal reading instruction takes place at the kindergarten level, the significant differences between the two groups is not surprising.
Looking at Concepts About Print scores by gender, no statistically significant mean differences were found between the performances of male and female students. This finding is particularly noteworthy when one views it in conjunction with the statistically significant mean differences detected on item number five of the family literacy survey. On this item, which states "My child is a good reader.", parent respondents whose sons participated in the study produced an item mean of 4.51, whereas parent respondents whose daughters participated in the study produced an item mean of 4.77. Obviously, the parents' perceptions of their sons' reading ability differs from their sons' actual reading ability, as measured by Clay's Concept About Print.

A pattern of sorts begins to develop when one considers that parents whose sons participated in the study and parents whose daughters participated in the study also produced statistically significant mean differences on family literacy survey item number four (My child enjoys reading.) and item number six (My child is a good writer.). Here again parents as a group assign more literacy competence to their daughters than to their sons. In addition, they perceive their sons as enjoying reading less than their daughters do--a pattern that is reflected in the students' actual reading attitude survey scores. Statistically significant mean differences were, in fact, detected between male and female students' reading attitude scores, for all three scales: full scale, recreational scale, and academic scale. The researchers find such patterns disturbing, as they may signal that the stereotype of reading being a "girl" thing is well entrenched, even for young children.

Also noteworthy are statistically significant mean differences between first grade students' recreational reading attitudes and second grade students'
recreational reading attitudes, as well as between first graders' academic reading attitudes and second graders' academic reading attitudes. As Table 2 demonstrates, first grade means are higher than second grade means on all three scales. Unfortunately, one might reasonably predict that these differences will only be magnified as children get older.

On the family literacy survey, the only statistically significant mean difference by grade exists for item number seven (How often does your child see you or other family members reading?). Parents of first grade students who participated in the study as a group produced a higher item mean (4.90) than parents of second grade students who participated in the study (4.66). This difference may suggest that, as students get older, they have fewer adult reading models within their home environments. It also may suggest that parents of first graders read to their children more often than parents of second graders.

Educational significance

The findings of this study reinforce the importance of parent education and intergenerational programs which recognize that parents are their children's first teachers and can play major roles in facilitating their literacy development. Preprimary and primary educators need to emphasize to parents of young children the benefits of the simple practices of sharing books with, writing with, conversing with, and modeling literacy for their children. Since finding time to spend with their children is often difficult for parents, it is imperative that educators become involved in informing parents and modeling for parents quality literacy interactions. Parent/child interaction time should involve enjoyable print, book, writing, and
The results of this study support the relationship between the family learning environment and the development of young children's reading attitudes.
both academic and recreational. As school learning environments are designed to support emerging literacy in the primary grades, it is imperative that characteristics of home learning environments be studied for infusion into the primary classroom. The concept of parents as active participants in the school environment may need to be further explored in the context of teachers and schools being involved in the study and development of home learning environments.

Research focusing on the relationships among reading attitudes, parent perceptions, and gender differences constitutes a second possible avenue for further study. Particularly intriguing is the notion that parents of boys may perceive their sons' reading ability to be lower than parents of girls perceive their daughters' reading ability to be.

The final recommendation for further study which will be identified here is the relationship between reading attitude and reading ability. It may be both interesting and informative to determine if the use of measures of reading attitude, reading ability, and/or print concept development other than McKenna and Kear's Elementary Reading Attitude Survey and Clay's Concept About Print would uncover correlations between reading ability and reading attitude.
### Table 1

**Concepts of Print: Descriptive Statistics**

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Table 2

Reading Attitude: Descriptive Statistics

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Grade 1: 27
Grade 2: 50
Male: 34
Female: 43

Home and School
Table 3

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Correlations Between Concepts of Print Scores and Reading Attitude Scores

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* Significant at the .05 level
Table 6

Unpaired t-Tests: Concepts of Print

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* Significant at the .05 level
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 & n & Mean Diff. & DF & t-value & P-value \\
\hline
\textbf{Full Scale} & & & & & \\
Grade 1 & 27 & 5.82 & 75 & 1.78 & .0795 \\
Grade 2 & 50 & & & & \\
Male & 34 & -11.40 & 75 & -3.89 & .0002* \\
Female & 43 & & & & \\
\hline
\textbf{Rational} & & & & & \\
Grade 1 & 27 & 2.95 & 75 & 1.80 & .0750 \\
Grade 2 & 50 & & & & \\
Male & 34 & -5.83 & 75 & -4.00 & .0001* \\
Female & 43 & & & & \\
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\textbf{Academic} & & & & & \\
Grade 1 & 28 & 2.90 & 76 & 1.62 & .1097 \\
Grade 2 & 50 & & & & \\
Male & 35 & -5.42 & 76 & -3.30 & .0015* \\
Female & 43 & & & & \\
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\caption{Unpaired t-Tests: Reading Attitudes}
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* Significant at the .05 level
Table 8

Unpaired t-Tests: Family Literacy Survey

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Unpaired t-Tests: Family Literacy Survey

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* Significant at the .05 level
REFERENCES


