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# IMPACTS OF DIALOGICAL STORYBOOK READING ON YOUNG CHILDREN'S READING ATTITUDES AND VOCABULARY DEVELOPMENT

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The current study assessed the impact of parents' dialogical storybook reading on their children's receptive vocabulary and reading attitudes. Forty parents and their preschoolers participated in the study. Parents were randomly assigned to experimental or control groups. The experimental group received dialogical storybook reading training. Children's receptive vocabulary and reading attitudes were measured before the dialogical storybook reading training and seven weeks after the training. Experimental group children showed significant increases in receptive vocabulary and reading attitude scores. There was no relation between reading attitude and receptive vocabulary development.

## Introduction

Reading is one of the most important skills in academic achievement. Several studies (e.g., Cunningham & Stanovich, 1997; Spira, Bracken, & Fischel, 2005) have shown that reading achievement is stable over time. Students who are the poorest readers in the early years of primary school tend to remain poor readers for the rest of their academic lives. Therefore, parents should prepare their children for reading during the preschool and kindergarten years.

Parents should support the development of their children's language skills to facilitate their children's reading acquisition and achievement. Language skills have direct (Nation & Snowling, 2004; Olofsson & Niedersoe, 1999) and indirect (through their impact on decoding skills such as phonemic awareness) (Storch & Whitehurst, 2001; Storch & Whitehurst, 2002) significant effects on reading acquisition and comprehension. Dialogical storybook reading is an effective parental

tool in support of their children's language skills. Several experimental studies reported positive impacts of the technique on language skills, such as receptive vocabulary (Chow & McBride-Chang, 2003), expressive vocabulary (Hargrave & Senechal, 2000), and sentence complexity, syntactic complexity in speech, and variety in use of nouns and verbs (Valdez-Menchaca & Whitehurst, 1992). These studies showed that the dialogical storybook reading technique is an effective method to support children's language development.

Parents should also foster the development of positive attitudes toward reading in their children. For two reasons, it is important to foster the development of positive attitudes toward reading in the early years. First, "Children with more positive attitudes are more motivated to read" (Baker & Wigfield, 1999, p. 452). Children who have positive attitudes toward reading and spend more time on reading are better readers (Gambrell, 1996). Sec-

ond, Morrow (1983) found that kindergartners had well-formed attitudes about reading and longitudinal studies. Smith (1990) and Kush, Watkins and Brookhart (2005) found that earlier reading attitudes were the strongest predictors of future reading attitudes. It is possible to claim that if children acquire positive attitudes toward reading in their early years, they would pursue this positive attitude in the future.

In dialogical storybook reading children are active participants in the storybook reading process. Having a good time with their parents may create a positive attitude toward reading. Also, several studies (e.g., McKenna, Kear & Ellsworth, 1995; Sperling & Head, 2002) revealed the relationship between ability and reading attitude. As a language ability, children's receptive vocabulary level may affect their reading attitudes. Even though many studies have been conducted in different countries such as the U.S. (Hargrave & Senechal, 2000), Mexico (Valdez-Menchaca & Whitehurst, 1992), and China (Chow & McBride-Chang, 2003), no research has been done about the impact of dialogical storybook reading on children's reading attitudes yet, to the author's knowledge. Also, the dialogical storybook technique has never been applied with a Turkish sample before. Therefore, the effects of dialogical storybook reading on Turkish children's receptive language development was also unknown until the study reported on here was conducted. The purpose of this study was to examine the impacts of the dialogical storybook reading technique on Turkish children's receptive language development and reading attitudes.

Accomplishing the purpose of the study required addressing several research questions. These research questions were as follows: (1) Will children's dialogical storybook reading with parents increase their receptive vocabulary level? (2) Will children's dialogical storybook reading with parents have a positive impact on children's reading attitudes? (3) Is there a relationship between children's receptive vocabulary development and reading attitudes?

#### *Participants*

This study's population included Turkish parents over the age of 18 years residing in Bursa, Turkey, who had a child aged 36–48 months old, and their children. In this population, the study involved a sample of 40 parents and 40 children for a total of 80 participants. These participants were selected from among parents with children in a private preschool in Bursa.

Of the 20 children in the experimental group, nine were girls (45%) and 11 were boys (55%). The control group included 12 (60%) girls and eight (40%) boys. Ages of the children in the experimental group ranged from 3.3 to 4.9 years, with a mean age of 3.9 years ( $SD = 1.2$ ). Concurrently, the ages of children in the control group ranged from 3.2 to 5 years, with a mean age of 3.9 years ( $SD = 1.3$ ).

The majority of the parents in the experimental 16 (80%) and control 17 (85%) groups were female. Most of the participants in the experimental (14; 70%) and control (16; 80%) groups had a university education. Also in the experimental group, 17 (85%) of the parents and 16 (80%) of the parents in the control group had monthly incomes above New Turkish Lira (ytl.)

1251. These characteristics make them middle-class in Turkey (Turkiye Istatistik Kurumu, 2002). The majority of the participants came from middle-class families. All parents reported that they read to their children.

#### *Measures*

In this study two measures were used. Children's receptive vocabularies were measured with a Turkish version of Peabody Picture Vocabulary Test (PPVT) (Katz, Onen, Demir, Uzlukaya & Uludag, 1974). During the PPVT test, the investigator showed cards to children. Each card contained four pictures. The investigator asked children to point to the picture that he described. As a valid and reliable measure, the PPVT was used in several other intervention studies such as Bekman, Aksu-Koc and Erguvanli-Taylan (2004) and Erdogan, Simsek-Bekir and Erdogan-Aras (2005) in Turkey.

The investigator adopted the 34-item inventory Preschool Reading Attitudes Scale (PRAS; e.g., Saracho & Dayton, 1989, 1991) into Turkish to measure children's reading attitudes. In the PRAS children were asked how they felt about each of the statements and to point to one of the three (sad, neutral, smiling) smiley faces. The PRAS contains items about school reading activities, non-school reading activities and library reading activities. Library use is not a common practice in Turkey. Therefore, the investigator discarded 15 items from the original PRAS that had to do with library reading activities. Two Turkish Ph.D. candidates in early childhood education from a Big Ten University in the U.S. provided back-to-back

translations for the remaining 19 items. There was 100% agreement between the experts.

Twenty children from each group answered the reading attitude questionnaire twice as a pretest and posttest; thus, the scale was applied across treatments four times. Cronbach alpha coefficients established the reliabilities of each application of the questionnaire. The reliability scores for the experimental and control groups for the pretests were 0.88 and 0.92, and for the posttests were 0.8 and 0.74, respectively. These Cronbach's coefficients are considered indicative of sound reliabilities for education (Issac & Michael, 1995).

All instruments were applied individually in the same order. The investigator administered the instruments aloud.

#### *Research Design*

The study utilized a pretest-posttest, control-group design with random assignment of parents to dialogic reading and control groups. Control group parents did not receive dialogical storybook reading training. Thus, no intervention occurred with the control group children during the seven-week control phase.

Regardless of the experimental condition, all groups completed the pre- and posttest. Before parents answered the demographic questionnaire and were randomly assigned to either the experimental or control group, their children's vocabulary level and reading attitude were measured.

Participants in the experimental group received instruction. The experimental instruction session lasted two hours. Dur-

ing the instruction session the parents in the experimental group received education on dialogic storybook reading techniques. The session lasted 120 minutes and consisted of two 20-minute sessions, a 15-minute break and a 65-minute session.

In the first 20 minutes parents received information about the importance of vocabulary development and the impacts of dialogical storybook reading techniques on vocabulary development. The trainer presented examples from research studies that showed the importance of vocabulary development for education and how dialogical reading techniques affected children's vocabulary development.

In the second 20 minutes, the trainer and his assistant taught parents how to apply dialogical storybook reading techniques through modeling and role-playing. After the second 20 minutes, participants took a 10-minute break.

The third section of the training session lasted 65 minutes. Participants spent this time applying dialogical reading techniques to each other using role-play. One participant played the role of a child and the other participant played the role of a parent, and then switched roles. Once both of the participants had a chance to apply the techniques, they switched partners. At the end of the session, all participants received dialogic storybook readings prepared by the trainer. Participants were asked to apply dialogic reading techniques with their own children. Parents received a checklist to report how many times they applied the techniques in a week.

Seven weeks after the program ended, all participants' children's vocabulary levels were measured with the Turkish version

of the PPTV, and their reading attitudes were measured with an adaptation of the PRAS (Saracho & Dayton, 1989, 1991).

### Results

Paired t-tests, for both groups, compare means of the pre-test and post-test scores within the groups. Also applied was ANCOVA in order to discover any differences in post-test scores between the experimental and control groups.

The experimental group's pretest/posttest mean scores from the reading attitude scale were 42.8 and 49.4, with an SD of 8.9 and 6, respectively. The paired t-test revealed a statistically significant difference between the means of the pretest and the posttest ( $t = -3.47$ ;  $df = 19$ ;  $p < 0.01$ ). The control group's pretest/posttest mean scores were 43.8 and 46.3, with an SD of 10.2 and 6.4, respectively. The increase in the mean score was not statistically significant ( $t = -1.34$ ;  $df = 19$ ;  $p > 0.05$ ). Groups' posttest means were compared with ANCOVA, with the pretest as the covariant. The difference between the means scores on reading attitude was close to significant ( $p = 0.06$ ) but not significant.

Paired t-test and ANCOVA also were applied to analyze the PPVT results. The mean score for the experimental group's pre-test was 40.25, with the mean ranging from 24 to 64, and an SD of 12.06. The mean score for the experimental group's posttest was 47.15 with a mean ranging from 29 to 66, and an SD of 6.17. The mean difference for the paired t-test was 6.9 with an SD of 7.88. The difference between the means for the pre-test and posttest is statistically significant ( $t = -4.12$ ;  $df = 19$ ;  $p < 0.001$ ). The mean for the

posttest ( $M = 47.15$ ) was greater than the mean for the pre-test ( $M = 40.25$ ). Seven weeks after their parents' dialogical storybook reading training, the children in the experimental group had significantly increased PPVT scores.

The mean PPVT score for the control group's pre-test was 39.1 with the mean ranging from 26 to 63 and an SD of 9.13. The mean PPVT score for the control group's posttest was 41.25 with the mean ranging from 27 to 58 and an SD of 9.31. The mean difference for the paired t-test was 2.15 with an SD of 5.25. The difference between the means for the pre-test and the posttest was not statistically significant at the 0.05 level ( $t = -1.83$ ;  $df = 19$ ). A small numerical increase (2.15) appeared for the control group children's pre-test and posttest PPVT scores.

Children in the experimental group had a higher mean score ( $M = 40.25$ ) on the PPVT than that for children in the control group ( $M = 39.1$ ). To control for this difference in the comparison of posttest means, ANCOVA was used. Results from ANCOVA for the posttest scores, with the pre-test as the covariant, indicated significant differences ( $F = 6.91$ ;  $df = 1$ ;  $p < 0.05$ ). PPVT scores for the children in the experimental group increased significantly more than those of their peers in the control group.

Pearson correlations were run to assess the relationship in the increases in PPVT and reading attitude scores. The correlation score for the experimental group was  $r = 0.3$ . In neither group was the increase in PPVT scores and reading attitude not correlated.

### Discussion

Separate paired t-test results revealed that the increase in the experimental group's PPVT scores was significant, whereas the control group's increase was not significant. As the pre-test covariant, a comparison of posttest scores with ANCOVA showed significant differences between PPVT mean scores for the two groups.

Several studies (e.g., Crain-Thoreson & Dale, 1992; Debaryshe, 1993) found no relation between reported frequencies in parents' storybook reading and children's language development and performances on the PPVT. These results showed that frequent storybook reading is not related to children's receptive vocabulary and language development. Contrarily, this study showed that experimental group children's receptive vocabulary level significantly increased. This finding was consistent with the other experimental studies (e.g., Chow & McBride-Chang, 2003; Hargrave & Senechal, 2000; Valdez-Menchaca & Whitehurst, 1992) that investigated the impact of the dialogical storybook reading technique on different aspects of children's language development. In these studies, investigators found significant increases in the experimental group and significant differences between the control and experimental groups favoring the experiment over the control group. These studies showed that changing the quality of the storybook reading with the dialogical storybook reading technique had positive impacts on different aspects of children's language development. Therefore, dialogical storybook reading support may have a greater impact on the receptive

vocabulary development of children than typical storybook reading. Further studies are needed to explore these hypotheses.

Language skills have indirect and direct impacts on the acquisition of reading skills in the early years of schooling, and a direct impact on reading comprehension in the later years of schooling (Nation & Snowling, 2004; Olofsson & Niederson, 1999; Spira, Bracken & Fischel, 2005; Storch & Whitehurst, 2001, 2002). Receptive vocabulary is one of several language skills. It is defined formally as follows: "Receptive vocabulary in young children means words child can name when he or she see picture representing the word" (Whitehurst et al., 1988, p. 553). An increase in receptive vocabulary will have positive impacts on children's language skills. Therefore, it is possible to claim that the application of dialogical storybook reading can have an impact on children's reading development through its impact on receptive vocabulary development.

Data revealed significant increases in experimental group children's reading attitude scores. Although the relationship between attitude and ability has been documented (McKenna, Kear & Ellsworth, 1995; Sperling & Head, 2002), there was no significant relationship between the increase in PPVT and reading scale scores for either group. Even though receptive vocabulary development was expected to support future reading acquisition, it was not related to the increase in current reading attitude. Considering that all parents reported reading to their children, it is possible to claim that the change to dialogical storybook reading causes an interaction between parents and children during sto-

rybook reading and thereby causes a significant increase in experimental group children's reading attitude.

In this study, the vast majority (83%) of the participants were from the middle class. Demographics were based on the residency of families (Turkiye Istatistik Kurumu, 2002). Therefore, a future research study might involve samples from different socioeconomic populations. For example, a comparison between low- and middle-income levels might be done. In addition, differences between middle- and high-income levels and low-, middle-, and high-income levels could be examined.

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