Affects of Parent-Mediated Television Viewing Strategies with Pre-school Children with Language Delays

The purpose of the Project was to examine the effects of teaching parents to use praise, comments, pause, and open-ended questions on the acquisition of language skills and language usage of children with language delays. The above parental strategies were employed in the context of parents watching television with their children. Specifically, the aim of the proposed research was to examine (a) the acquisition and use of praise, expansions, pauses, and open-ended questions by parents in the context of joint television viewing (of educational programs) with their children with language delays, (b) the effects of the strategies on vocabulary, mean length of utterance, turn-taking skills in children with language delays, and (c) parental satisfaction with the procedures, their opinion on the feasibility of implementing the strategies in the context of daily routines, and their perceived effectiveness of the strategies in enhancing the language skills of their children.

The Project activities included (a) a pilot study to test the intervention strategies (procedures) and the dependent measures with five parent-child dyads and (b) a RCT group study with 30 parent-child dyads to examine the effectiveness of the four language facilitation strategies with children with language delays. A summary of the results of both the studies is provided below.

Pilot Study

Results

The results for the parental use of strategies during TV viewing:

(a) After training (in the use of praise, commenting, and questioning strategies) and during week one of intervention, four out of the five parents had increases (in average rates) in use of the praise, commenting, and questions. One parent showed increases in the average rate of asking questions.

(b) After training (in the use of pausing and expansion strategies) and during the second week of intervention, only one parent had increases in the use of both strategies. Two parents showed increases in the use of pausing strategy and one parent had increases in the use of expansion strategy.

The results on child-behaviors during TV viewing:

(a) All children had increases (as measured by average rates) in responding to parent questions at the end of the study.

The results of the children’s scores on the vocabulary tests and language sample (SALT analysis):

(a) All five children had moved to the next Brown’s Stage of language development.

(b) All children had increases in expressive vocabulary.

The results of the social validity questionnaire: The results of the social validity questionnaire indicated that (a) all parents perceived the strategies to be useful, (b) all parents perceived the strategies to be effective in promoting their child’s language skills, and (c) some parents indicated that certain strategies were not easy to use. Two parents indicated that expansion strategy was not easy to use; two parents indicated that pausing was not easy to use; and one parent indicated that open-ended questions strategy was not easy to use.
RCT Group Study

Results of the Study:

Both groups were assessed using standardized tests at three time points. Once at the beginning of the study (T1), once after the Group A completed the intervention procedures (T2), and once after the Group B completed the intervention procedures (T3). Three measures were used to examine the effectiveness of the strategies on language skill development and vocabulary: Expressive One-word Picture Vocabulary Test (EOWPVT), Receptive One-word Picture Vocabulary Tests (ROWPVT), and Preschool Language Scale-4 (PLS-4).

ANCOVA results: The ANCOVA to test the differences between the two groups on the three standardized measures after the Group A received intervention training did not reveal any statistically significant differences between the groups. However, as the sample size was small, the effect size index (partial $\eta^2$) was computed. Partial $\eta^2$ of .01, .06, and .14 are considered indicative of small, medium, and large effect sizes (Green & Salkind, 2003). The effect size index, partial $\eta^2$, indicated that the effect size was medium between the groups on the ROWPVT, with the Group A having a higher mean than the Group B. Similarly, the effect size index, partial $\eta^2$, indicated that the effect size was small between the groups on the EOWPVT, with the Group A having a higher mean than the Group B. Further, the effect size index, partial $\eta^2$, indicated that the effect size was medium between the groups on the PLS-4, with the Group A having a higher mean than the Group B.

The ANCOVAs to test the differences between the two groups on the three standardized measures after the Group B received intervention training did not reveal any statistically significant differences between the groups. However, as the sample size was small, the effect size index (partial $\eta^2$) was computed. The effect size index, partial $\eta^2$, indicated that the effect size was medium between the groups on the ROWPVT, with the Group B having a higher mean than the Group A. Similarly, the effect size index, partial $\eta^2$, indicated that the effect size was large between the groups on the EOWPVT, with the Group B having a higher mean than the Group A. Further, the effect size index, partial $\eta^2$, indicated that the effect size was medium between the groups on the PLS-4, with the Group B having a higher mean than the Group A.

Social Validity Results: Regarding the strategies, 100% of them agreed that the strategies were easy to learn. However, only 80% thought that the strategies were effective in promoting their children’s language. Further, 84% of the parents indicated that the strategies were easy to use. Ninety percent of the parents indicated that they enjoyed implementing the strategies and would recommend it to other parents. Approximately 95% of the parents indicated that the training provided was sufficient enough to learn the strategies and 90% of the parents indicated that the data collection procedures (intervention logs) were easy to undertake. The parents were provided some open-ended questions and a space to write their comments regarding the study. The following are some of the comments made by the parents:

1. "I can’t think of anything – it helped my son’s speech a lot. It is also helping my younger daughter! Thank you so much!"

2. "learning how to ask the right questions in order to get him to say longer sentences, not just one or two words."

3. "Seeing a huge difference in my child speech develop in short time frame."

4. "helping learn what question to ask."

5. "I think the expansion strategy was the most helpful. I have always interacted with my children but never thought much about the importance of them talking about what they watched after it was over."

6. "Using praise & open ended questions with K."

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