The Effects of TPR on the Second Language Learning of 3-4-year-old Children

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Abstract: This paper focuses on comparing the efficacy of the Total Physical Response (TPR) and Audio-Lingual Method (ALM) for teaching a second language to children aged 3-4. TPR is a language learning method that employs physical movements and commands to facilitate language acquisition, while ALM focuses on accurate pronunciation and grammar through repetitive practice and reinforcement. Research has shown that early language exposure has long-term benefits for children, including improved cognitive development, academic performance, and socio-emotional outcomes. However, previous studies have focused on older children or adults, and there is limited research on TPR's effectiveness for 3-4-year-olds. The proposed study aims to address this gap by testing whether TPR is better than ALM in teaching a second language to young children. The study involved sixty 3-4-year-old children from a kindergarten in Hangzhou, China, and used the Preschool Language Scale-5 (PLS-5) as an assessment tool.

Keywords: Total Physical Response (TPR), second language acquisition, 3-4-year-old children, language learning

1. Introduction

Early years of life are the period when language development is very fast. It is the most valuable time to start teaching a foreign language to young children. Research has shown that early language exposure, especially for the second language, have long-term benefits for children, including improved cognitive development, academic performance, and socio-emotional outcomes [1].

Total Physical Response (TPR) is a language learning method developed by James Asher in the 1960s, which uses physical movements and commands to aid in language acquisition. Audio-Lingual Method (ALM) is a method that focuses on the development of accurate pronunciation and grammar through repetitive practice and reinforcement, using techniques such as pattern practice, dialogues, and audio materials. This paper will focus on the efficacy of TPR teaching method for the second language acquisition of children aged 3-4, and compare it with the ALM teaching method, to explore which teaching method is most effective for the second language development of children.

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Table 1: The difference of TPR and ALM.

Features	TPR	ALM
Teaching approach	Based on action and body language	Based on listening and imitation
Emphasis	Action ver bs and prepositions	Speaking and pronunciation
Teacher's role	Order taker; model provider	Model and corrector
Student's role	Imitator and performer	Imitator and practitioner
Teaching materials	Pictures and real objects	Dialogues and sentences

2. Background Literature

Research studies have shown that TPR can be effective in helping learners acquire vocabulary, grammar, and other language skills [2][3]. For example, a study conducted by Dewi [3] examined the mastery of preposition placement in sentences among Grade 5 students using the TPR method, comparing it with students who did not use it. Reflected by the pre-test and post-test data, the tests found the effectiveness of TPR method.

There also have been several studies that have compared TPR with other language learning methods, and the findings have been mixed. For example, a study [4] compared TPR with the Direct Method, a language teaching approach that uses practical situations, pictures and demonstrations to teach new words, to find whether there is or not any significant difference between the mastery of English vocabulary of the fourth graders in an academic using. The average score of experimental groups which used TPR was higher than of control group, which showed that TPR was effective in vocabulary teaching. However, not all studies have shown that TPR is superior to other methods. Omari and Deena [5] compared TPR with the songs/chants method, a language teaching approach that utilizes songs and chants as a means to teach Spanish vocabulary to twenty kindergarten students. The comparison of the test scores found no significant differences between teaching methods.

One limitation of the existing literature on TPR is that previous studies have focused on older children or adults, such as primary students and college students, with less focus on 3-4-year-olds. By targeting this specific age group, I aim to provide novel insights into the effectiveness of TPR for second language acquisition in young children. This will help address the gap in the existing literature and contribute to a better understanding of the applicability of TPR in early childhood language learning.

3. Proposed Study

The proposed study will determine whether TPR strategy is better than ALM in the teaching of second language acquisition of children aged 3-4. Based on some previous literature, the hypothesis is that TPR is better than ALM and can improve children's language ability, the TPR group will show a significant improvement in language scores from pre to post assessment. One alternative answer is that TPR and ALM have no significant difference, both of them cannot improve the second language acquisition of children aged 3-4. The reason why I chose ALM as the control group, not only because

they are often used to teach oral communication skills, which are in line with the learning characteristics of 3-4-year-olds but can better compare the uniqueness and advantages of TPR method. After the teaching, the Preschool Language Scale-5 (PLS-5) Scale will be used to score the children. If the scores of the children in the TPR group show a significant improvement from pre to post assessment and are higher than that in the ALM control group, it will indicate that TPR is a better teaching method than ALM. If the scores of TPR group show no significant improvement from pre to post, and are lower than ALM's, it means that TPR is not good as ALM method.

4. Methods

4.1. Participants

To test the effect of different teaching methods, sixty 3-4-year-old children from a kindergarten in Hangzhou, China, will participate in the study. They are similar in language ability and learning style, with no cognitive or developmental disorders. All of them have never studied English before and are not attending English training classes outside of the classroom. The children will be randomly divided into two groups. One group (N=30) will use TPR as a teaching method, while the other (N=30) will use the ALM method as a control group. To better control for variables, both groups will be taught by the same trained teacher.

4.2. Materials

The teaching materials used in this teaching experiment are children's English textbooks New Yippee Red Book, compiled by H.Q. Mitchell and published by MM publications. The Preschool Language Scale-5 (PLS-5) will be used as the assessment tool to measure the language abilities of the children. The evaluation will be conducted before and after the program to assess the language development.

4.3. Procedures

Prior to the start of the program, children will undergo a pre-assessment using the PLS-5. This assessment will provide a baseline measure of their language abilities before any intervention. Trained assessors, who are familiar with the administration of the PLS-5, will individually administer the assessment to each child. Following the pre-assessment, children will undergo an 8-week English teaching program, with two lessons per week, each lasting for 50 minutes. The teaching process is as follows.

- (1) As for TPR, it is mainly divided into three steps: the first step is demonstration and imitation. The teacher demonstrates while the students imitate, and then the students practice while speaking and doing. For example, when teaching shape-related words such as "triangle," the teacher can use their hands to draw the three sides of a triangle. The second step is instruction and action. The teacher asks the children to listen to English and perform corresponding actions to connect abstract language with intuitive actions. For example, when teaching "open" and "close," the teacher can give instructions like "open/close your book," "open/close the door," "open/close your eyes," and so on. The teacher demonstrates first and then lets the students follow the instructions. The third step is situational interaction. Children have strong imitation abilities and a desire to perform.
- (2) As for ALM, the process is mainly divided into three steps. The first step is to organize children to watch English video material. In the next stage, the teacher repeats the animated video in segments. The second step is listening to immersion, which requires the cooperation of parents. Parents are required to play the audio every night and repeat one teaching clip every week. The third step is imitation and role play, the teacher says the first sentence, the child takes the next sentence, the child repeats the sentence. Children are asked to imitate the pronunciation and intonation in the animated

video and perform role play. To make the ALM method more interactive and engaging, additional activities will be incorporated. Interactive exercises, games, and discussions will be included to encourage active participation and interaction among children.

At the end of the 8-week program, children will undergo a post-assessment using the same PLS-5 assessment tool. The post-assessment will be conducted in a similar manner to the pre-assessment, with trained assessors individually administering the PLS-5 subtests to each child. The assessors will record the child's responses during the post-assessment, following the same procedures as the pre-assessment.

5. Results and Discussion

The data collected from the pre-assessment and post-assessment using the PLS-5 will be analyzed using statistical software SPSS. Descriptive statistics, such as means, and standard deviations will be calculated to summarize the data. A t-test will be used to compare the language scores of the TPR group and the ALM group before and after the 8-week English teaching program. A repeated-measures analysis of variance (ANOVA) will be used to compare the language development of the two groups over time.

One possible outcome will be that the TPR group will show a significant improvement in language scores from pre to post assessment, and total score is significantly higher than the ALM group, which indicates that TPR is a better teaching strategy than ALM. Another possible outcome will be that the language scores in the TPR group does not change from pre-assessment to post-assessment, and total score is lower than ALM, which indicating that TPR may not be a better strategy for children aged 3-4 to learn a second language.

6. Conclusion

Overall, the purpose of this study is to determine whether TPR as a second language learning method is better than ALM method for 3-4-year-olds to learn second language. While this study has the potential to shed light onto the field of second language acquisition and compare the effects of TPR and ALM teaching methods, there are still limitations. One limitation of this study is about the sample, it only involves one kindergarten in China with a sample size of 60 children from the same school, so the results may not generalize to other regions, cultures, and language environments. At the same time, because the subjects are at a low level, it may be too difficult for 3-4-year-old children to master short sentences. Based on this, future studies could expand the scope by including other teaching methods commonly used for second language acquisition and can explore the impact of age-related factors on second language acquisition. Comparing the language development of 3-4-year-olds with younger or older age groups can help identify critical periods for language acquisition and understand how instructional approaches may vary across different age ranges.

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