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Application of the Whole Brain Teaching Method as an Effort to Improve Early Childhood Listening Skills

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ABSTRACT

This study was motivated by the findings of children who did not pay full attention to the teacher during learning activities at TK ABA 27 Semarang. This resulted in children not being able to understand information and simple commands given by the teacher. The improvement effort that can be done is by applying the whole brain teaching method in the learning process. So, this study aims to analyze the effectiveness of applying the whole brain teaching method to improve listening skills in early childhood. This study uses a quantitative approach with a one group pretest-posttest reasearch form, with a sample size of 12 children. From the results of the analysis that has been done using thet T-test formula, paired sample t-test with 95% significance, it is stated that the probability value is 0,00 which is < 0,05, it can be concluded that H_0 is rejected and H_1 is accepted, which means that the application of the whole brain teaching method has effectiveness in improving listening skills in early childhood at TK ABA 27 Semarang. The application of this method shows several positive findings, namely increasing focus, understanding of the material, creating a

conducive and pleasant learning atmosphere, and fostering enthusiasm.

Introduction

Early childhood education (ECE) is a form of education that focuses on the basic attachment of growth and development in early childhood. Early childhood in Indonesia is defined as children who are in the age range of zero to six years (Jaoza & Kanda, 2024). Early childhood education (ECE) is a structured coaching effort specifically aimed at children from zero to six years of age. This coaching process involves providing various educational stimuli designed to facilitate children's growth and development which includes physical and spiritual aspects, so that children have optimal readiness to continue to the next level of education. This is because one of the levels of education taken before the basic education level is the ECE level (Waluyo & Latiana, 2014). Early childhood is the most important and crucial period for early childhood because it only happens once and cannot be repeated. So that this period becomes the basis for the quality of development in various aspects of child development (Zulaeha & Setiasih, 2025).

At the ECE level, there are six fundamental developmental aspects that are essential to be stimulated in children. These aspects include moral-religious, physical-motor, cognitive, language, social-emotional, and artistic development (Mulyati & Faridayani, 2024). One aspect that cannot be missed by teachers and parents from the stages of child development is the aspect of language development. This is because

language development is the basic development or main foundation for early childhood in the scope of ECE which can affect all aspects of growth and development in children.

Reading, writing, speaking, and listening are the four forms of language skills in a person (Adib, 2024). With the development of these four language skills that can make children able to understand information, convey their thoughts and feelings with language that is easily understood by others.

Bourdead, Aesaert, Keer, and Braak (Hafrianti et al., 2020) argue that the first ability of language development is listening ability. Listening is an activity of listening carefully with full concentration or focus on what is conveyed by others (Weger et al., 2010). Listening is the process of hearing to get and understand the information or message given (Bu'ulolo et al., 2024). The information and meaning of communication conveyed by the speaker is obtained and understood through the listening process. This listening process is carried out by actively listening to spoken symbols, involving full attention, understanding, interpretation, and appreciation (Cusnaki & Syamsudin, 2022). Therefore, listening can be said to be a process of receiving and understanding something that has been obtained.

According to Tarigan (Ismail, 2024) there are several aspects in the listening process that need to be considered, namely aspects of listening, aspects of understanding, aspects of interpreting, and aspects of evaluating. In the listening aspect, the listener only needs to listen to all

the utterances delivered by the speaker attentively. After the listening aspect is carried out, then the next is the aspect of understanding, the listener is required to understand the content of the speech delivered by the speaker. Furthermore, the aspect of interpreting, in this aspect the accuracy and thoroughness required by the listener so that they can interpret the implied message of the speaker. After that the aspect of evaluating, in this aspect the listener must be able to evaluate the message conveyed by the speaker.

Listening skills cannot be learned independently by children, meaning that listening skills will be obtained through the learning process or require development efforts (Webb et al., 2023). The uninteresting learning process is one of the factors in the low level of children's listening skills. This is evident from the observation of learning activities in group B at TK ABA 27 Semarang, it was found that there were still children who did not focus their full attention on the teacher during learning activities, the material presented by the teacher was not listened to properly by the child, simple commands delivered by the teacher were not understood by the child, also when the teacher explained the material in class the child was more engrossed in chatting with the friend next to them than listening to the explanation from the teacher.

Some of the findings above are due to the use of the same methods repeatedly. The use of monotonous methods and media can make children no longer interested in the learning activities being carried out

(Siagian et al., 2025). Therefore, it makes the child's focus not fully on the teacher, so that it makes the child unable to listen to the material delivered by the teacher properly.

Quality early childhood education must be supported by a quality learning program (Waluyo et al., 2024). One of the steps that can be applied is by choosing learning methods that are appropriate for early childhood. The selection of appropriate learning methods in ECE can help children to develop listening skills. Learning methods refer to systematic strategies or techniques that have been designed by teachers to deliver structured teaching materials to students, this also includes teacher interactions and treatment of students during learning activities (Albar, 2020).

Innovative learning methods are applied with the aim that children are not easily bored, feel comfortable, and happy in the process of learning activities, but do not ignore the most important aspects of learning (Magdalena et al., 2020). An innovative learning method that can be applied as an effort to improve listening skills in early childhood is the whole brain teaching method. This is in line with research conducted by Hafrianti et al. (2020) that the ability to listen to children in TK Pertiwi Lebak Wonogiri in the 2019/2020 school year aged 5-6 years can be improved through the whole brain teaching method.

The whole brain teaching method is a learning method developed by Chris Biffle with the aim of assisting learning activities that fully involve brain function. The main characteristics of this method are quick

instructions, unique expressions, accompanied by meaningful movements that can attract children's attention. Attracting children's attention so that they focus on the learning activities being carried out and understand the material presented is the core strategy of the whole brain teaching method.

Referring to research conducted by Aulina (2018). The novelty of this study lies in the dependent variable used. If the previous study focuses on learning motivation, this study specifically examines early childhood listening skills. The main purpose of this study is to analyze the effectiveness of the implementation of the whole brain teaching method as an effort to improve early childhood listening skills.

Methods

This research will use quantitative research in the form of pre-experimental designs with one group pretest-posttest designs. This research will be conducted in Group B2 TK ABA 27 Semarang. Researchers will take two measurements, namely before treatment (pretest) and after treatment (posttest).

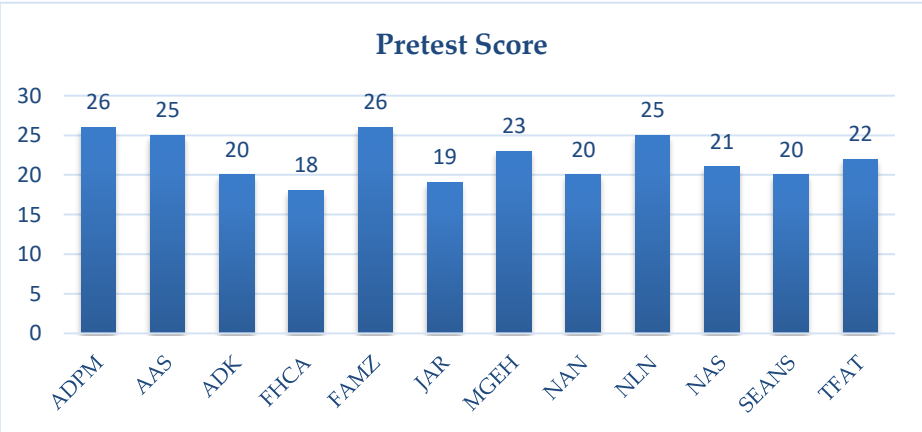
The data collection technique in this study is observation. Observations will focus on children's listening skills which include indicators of listening, understanding, interpreting, and evaluating. When carrying out observations, the researcher will record the value on the observation sheet during learning activities. Filling in the observation sheet is adjusted to the actual state of the child. The instrument data validity technique used in the study will be tested for

validity and reliability. Data analysis techniques in this study by using the t-test (paired sample t-test). The prerequisite test, namely the normality test of the Saphiro-Wilk method, will be carried out before the t-test (paired sample t-test). The use of SPSS version 26 will assist researchers in conducting tests in this study.

Result and Discussions

In the early stages before the implementation of the study, researchers used observation sheets as research instruments to assess early childhood listening skills. Before use, the research instrument was tested for validity and reliability by researchers through validity tests and reliability tests. Through the test results it can be stated that the research instruments used are valid and reliable. The next step was to fill in the observation sheet as a pretest. The pretest filling is in accordance with the real conditions of the child.

Figure 1. Graph of Pretest Score



Based on Figure 1, it can be seen that the highest pretest score is 26

and the lowest is 18 with 12 children responding. The total number of pretest score data is 265. The mean score of the pretest results was 22,08. These results show that children's listening skills in Group B2 are still low.

After carrying out the pretest, the next step is to provide treatment to early childhood as many as twelve meetings. The treatment is in the form of a lesson plan that is in accordance with child development and is carried out using the whole brain teaching learning method.

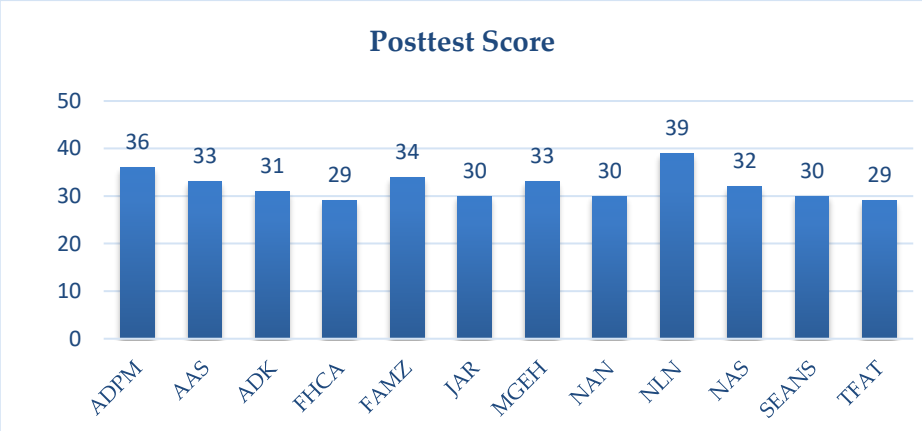
The whole brain teaching method is a learning method that recognizes the principles of learning in children consisting of visual, verbal, and kinesthetic (Hafrianti et al., 2020). So that it helps children to play an active role in the learning process. The application of this method is in line with the learning principles of constructivism by Lev Vygotsky and Jean Piaget. The theory states that a knowledge or insight is not an entity that can be transferred directly, but rather the knowledge is created and actively developed by the individual through a continuous process of interaction with the environment and experience (Ramadhan Lubis et al., 2024).

Chris Biffle (2013) states that there are seven steps in learning using the whole brain teaching method, namely a greeting call by the teacher to the class (class-yes), the teacher teaches while making meaningful symbolic movements (gestures), imitating the teacher's explanation and gestures (mirror), between children teaching each other (teach-ok), between children teaching alternately (switch-ok), scoring the

assessment of children's participation in the learning process on the scoreboard, comprehension check. So that the seven steps are applied systematically in the implementation of learning.

After the treatment was completed, posttest data collection was carried out according to the real conditions of the children.

Figure 2. Graph of Posttest Score



Based on the data in Figure 2, the posttest results show a total score of 386 with the lowest score of 29 and the highest score at 39. The mean score of the pretest results was 32,16. It can be clearly seen that there is an increase in scores after being given the treatment of applying the whole brain teaching method in learning activities.

From the data collection that has been carried out twice, namely pretest and posttest. The results obtained show that the average posttest score (32,16) is higher than the average pretest score (22,08). This difference descriptively indicates a variation in the achievement of children's listening skills after the application of the whole brain

teaching method in learning activities.

The collected data were then analyzed using the paired sample t-test. In this study, the hypothesis is formulated as follows: H_0: the application of the whole brain teaching method does not have effectiveness in improving early childhood listening skills and H_1: the application of the whole brain teaching method has effectiveness in improving early childhood listening skills.

Table 1. *Paired Sample T-Test*

Data Pair	Mean	Std. Deviation	Std. Error Mean	f	Sig. (2-tailed)
Pretest - Posttest	-10,08333	1,83196	0,52884	1	0,000

Based on the statistical test results presented in Table 1, the significance value (Sig. (2-tailed)) of 0,000. Because this significance value is smaller than the specified significance level ($p < \alpha$) which is 0,05, H_0 is rejected and H_1 is accepted, it can be concluded that the application of the whole brain teaching method has effectiveness in improving listening skills in early childhood. This indicates that early childhood listening skills have increased significantly after being treated with the whole brain teaching method compared to the condition before treatment.

The application of the whole brain teaching method is effective to be applied as an effort to improve listening skills in early childhood. This is because the application of the whole brain teaching method is

able to create a pleasant interaction, make children focus or attention to the teacher during learning activities, help children to understand and interpret the information obtained, encourage children to be more active, and foster children's enthusiasm during learning activities.

In this learning context, children are not just active recipients of information, but active participants. Giving exclamations and instructions in the implementation of the whole brain teaching method is proven to support the development of children's listening skills, facilitating understanding and retention of information conveyed by the teacher. This can be attributed to the stimulation of the right and left brain through meaningful movements given by the teacher in the gestures and mirrors step, which ultimately increases the child's concentration level. This is in line with Nunung's opinion (Yanti & Bahri, 2018) which states that simple motor activities are effective in integrating brain functions, which leads to harmonious brain coordination, resulting in significant improvements in body coordination, attentional focus, memory capacity, analytical skills, and creativity.

In addition, the whole brain teaching method can teach cooperation to children. Giving instructions between children to teach each other (teach-ok), encourages children to interact and cooperate with their peers. Cooperation in a learning activity is very important, through these cooperative activities, children will feel involved in learning activities, support each other with their peers, be motivated to achieve

learning goals, and help children to gain self-confidence. This is in line with Cannon's opinion (Kharsati & Prakasha, 2017) that children are given the opportunity to gain confidence and get involved through the teach-ok step.

Conclusion

Based on the results of research and data analysis, it is concluded that the application of the whole brain teaching method has effectiveness in improving the ability to listen to early childhood. The study showed an increase in the average score on the pretest (22,08) and posttest (32,16). Hypothesis testing using paired sample t-tests on pretest and posttest data shows significant results with a significance value. (2-tailed) of 0,000 < 0,05. This indicates that H_0 is rejected and H_1 is accepted. Thus, it can be confirmed that there is a significant increase in children's listening skills after being given treatment in the form of applying the whole brain teaching method. The application of this method shows several positive findings, namely increasing children's focus on the teacher, facilitating understanding and retention of information, creating a conducive and fun learning atmosphere, and fostering enthusiasm. Furthermore, this method encourages children's active participation in learning and develops the spirit of cooperation and self-confidence in children.

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