



De La Salle University – Dasmariñas

The Effect of Dichotic Listening on Speech Sound Perception
on Public and Private Preschool Students

An Undergraduate Thesis
Presented to the Faculty of the
Behavioral Sciences Department
De La Salle University – Dasmariñas

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ABSTRACT

Name of Institution: De La Salle University – Dasmariñas

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Title: The Effect of Dichotic Listening on Speech
Sound Perception between Public and
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Statement of the Problem:

1. What are the mean scores of the participants in the different categories of speech sound perception when they are grouped according to (a) mode of listening; and (b) type of school?
2. Is there significant difference between the traditional and dichotic listening



methods in terms of (a)Voicing and place, (b)Voicing alone, (c)Place alone, (d)Total?

3. Is there significant difference between the private and public school's participants in terms of (a)Voicing and place, (b)Voicing alone, (c)Place alone, (d)Total?

4. Is there significant interaction between mode of listening and type of school on the following (a)Voicing and place, (b)Voicing alone, (c)Place alone, (d)Total?

Scope and Delimitation:

Speech perception of preschool children with normal hearing ability was the focus of this research. Since the researchers' study focused on preschool children, only children whose ages ranged from 4-6 were the participants of this study. One hundred (100) preschool children participated, fifty (50) of



which came from a public school, and the other fifty (50) came from a private school. Regardless of the age level, all the participants had undergone the same procedure. Fifteen (15) pairs of CV syllables were used in this experiment which also employed stop consonants. The study did not use audiometry as baseline data for the hearing status of the students. Instead it used bedside testing such as “tick” of the retractable pen.

Results of this study could be affected by possible extraneous variables while conducting the experiment. In the private school, the experiment was held in an office which was small and had limited chance of interruption from the exterior environment. However, in the public school, the experiment was conducted in a classroom which had open windows and



doors, a possible cause of distraction of the participants.

Methodology:

The study employed factorial experimental design with the use of stratified random sampling. The quantitative data were subjected to analysis using computation for mean scores and two-way Analysis of Variance. One hundred (100) preschool students ranging from 4 to 6 years old in God's Grace de Salitran Preschool and Dasmariñas II Central School were the participants of this study. Fifty (50) students from the public school and the other Fifty (50) students were from the private school.

Major Findings:

Based on the results, the following findings were obtained:

1. When the participants were grouped according to the mode of listening and traditional listening control group had



the higher mean ($X=11.52$) in all the categories of speech sounds. When participants were grouped according to the type of school, the private school had the higher mean ($X=8.52$) in all categories of speech sounds.

2. Results show that there is a significant difference between traditional and dichotic listening methods in terms of voicing and place $F(1, 96)=125.46$ $p<.0001$, voicing alone $F(1, 96)=66.45$ $p<.0001$, place alone $F(1, 96)=85.89$ $p<.0001$ and total categories of speech sounds $F(1, 96)=176.69$ $p<.0001$.

3. Results show that there is no significant difference between private and public school in terms of voicing and place $F(1, 96)=0.79$ $p>.05$, voicing alone $F(1, 96)=1.45$ $p>.05$, place alone $F(1, 96)=0.20$ $p>.05$ and total categories of speech sounds $F(1, 96)=1.37$ $p>.05$.



4. Results show that there is no significant interaction between the mode of listening and the type of school in terms of voicing and place $F(1,96)=1.46$, voicing alone $F(1, 96)=0.16$, place alone $F(1, 96)=1.31$ and total categories of speech sounds $F(1, 96)=0.1322$.

Conclusion:

Based on the findings, the researchers conclude the following:

1. Traditional listening has higher mean score than dichotic listening in terms the categories of speech sounds. The private school has the higher mean in all the categories of speech sounds.
2. The mode of listening significantly affects the speech sound perception of the participants in terms of voicing and place, voicing alone, and place alone.
3. The mode of listening does not significantly affect the type of school the participants came from.



4. The mode of listening and type of school have no significant interaction on the speech sound perception of the preschool students. Mode of listening in itself has an effect but is not dependent on what type of school the participants came from.

Recommendations:

The researchers of this study would like to recommend the following:

School (Dasmariñas II Central School and God’s Grace de Salitran Preschool).

They should teach thorough listening skill to maximize a child’s auditory potential or auditory self-monitoring of speech.

Listening is a cognitive process and the teacher’s job is to stimulate a child’s brain so he can understand what his ears hear.

They could provide a program that would expose a child to a sound or word(s) using auditory input only.

Preschool Teachers. Articulation should



also be considered by the teachers because there are syllables that have the same place of production but differ in their voicing. The speaker's rate of speech and loudness must be emphasized in order for the preschoolers to perceive the sound.

Parents. They should be aware that a child's production of sounds at every stage, correct productions are encouraged and expected. If a child has had sufficient time and experience in learning a speech sound through listening, it may be appropriate to use the strategy called "the auditory sandwich" where a child is exposed to an auditory presentation three times followed by a visual or tactile cue and then again through listening alone.

Speech Pathologist. They could use dichotic listening to educate speech sounds not only to children in the mainstream education but maybe also to those children



who have special needs.

Future Researchers. They could use this study to make a comparative research to know if listening and reading have an effect on the speech sound perception of preschool students.

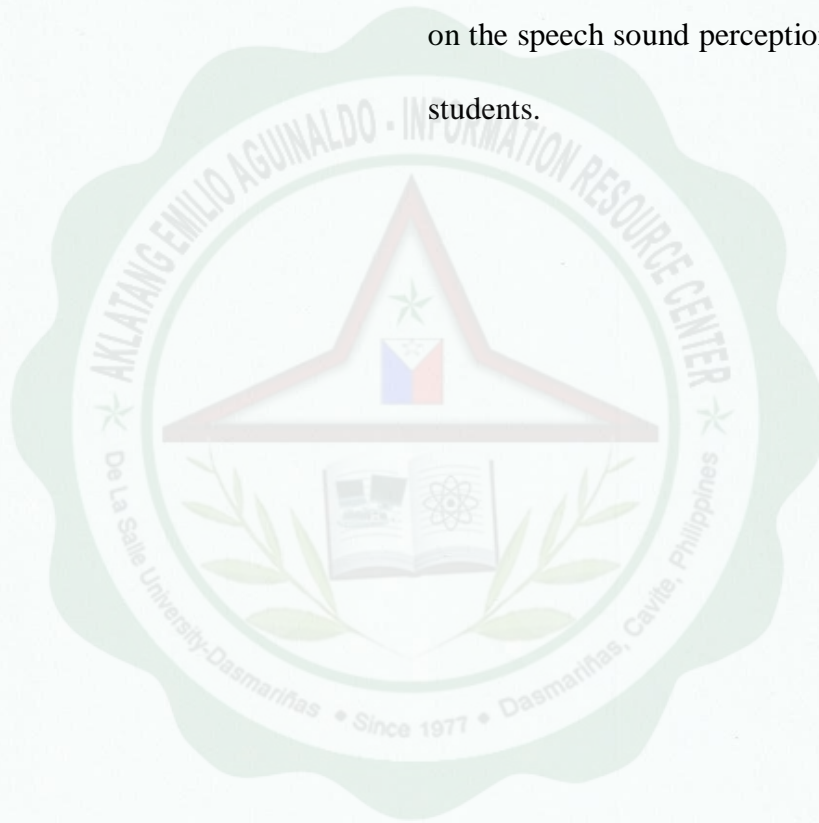




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