

New Therapy Technique For The Voiced And Voiceless Distinction In The Speech Of The Hearing Impaired

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Several researchers have attempted to describe the characteristics of speech of the hearing impaired. The characteristics of speech of the hearing impaired. The characteristics include articulation errors, high pitched noise, improper intonation, improper rhythm, slow rate and nasality.

Analysis of articulatory errors showed that of errors of omissions, substitution, distortion and additions. The most common error as far the consonants are concerned is voiced-voiceless distinction.

Several investigators found that preponderance of substitution of voiceless cognates for voiced cognates is high.

Monsen (1975,1976,1978) studied the VDT values of the deaf subjects and found that they did not have clear cut distinction in VDT values of voiced and voiceless when compared to normals.

Shukla (1987) reported that negative VDT (prevoicing or voicing lead) which is a characteristic feature of voiced sound in normals who use Kannada as their languages, was absent in the speech of the hearing impaired and concluded that absence of negative VDT value is the acoustic reason for voiced-voiceless confusion in the hearing impaired.

Based on this, Shukla (1987) designed a new therapy technique "closed mouth voicing initiation technique" to teach voiced-voiceless distinction among the hearing impaired. This technique mainly involves the placement of articulators at an appropriate position for the production of stop consonants (b, d, d, g) and voicing is initiated before the release of the articulation. This results in the production of voiced stop consonants.

The present study was aimed to study the efficacy of the therapy technique using a single subject design. Five hearing impaired subjects in the age range 10 years 3 months to 13 years 7 months with substitution errors of voiceless for voiced were taken as subjects.

Therapy was given individually to each subjects for 15-20 minutes a session and 3 sessions a week, till the experimenter felt that the children have achieved the distinction.

Each subject was asked to read out a word list consisting of 36 bisyllabic meaningful words. Among which 18 words consists of voiced sound (b, d, d,g) and 18 words consists of voiceless sounds (p, t, t, k) in both initial and medial position.

Pre therapy and post therapy recorded word list of each subject were perceptually analyzed in terms of:

- 1) Percentage of word intelligibility before and after therapy.
- 2) Percentage of substitution errors before and after therapy.

Results indicate that:

- 1) All the five subjects showed significant increase in percentage of word intelligibility score after the therapy.
- 2) All the fives errors showed decrease in the percentage of substitution errors after the therapy.

The above results indicate that the therapy technique "closed mouth voicing initiation technique" was effective in achieving the voiced-voiceless distinction among the hard of hearing children.