Managing Sound System Development using the Delayed Auditory Feedback, Wave Signal and Speaking Rate with Pausing for Stutterer Speech Therapy

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ABSTRACT

Stuttering is a type of speech disorder in which a person knows what to say but at the moment cannot say. Struggling to speak, anxious to speak, avoids the words and the conversation situation is also related with stuttering. Stuttering on a person can be accompanied by a range of behaviors, such as rapid eye blinking, pulsate (tremor) on the lips or a sudden stop talking where it is difficult to get the word (sound blocking).

The author use a method which was considered effective therapy has discovered by an expert of pathologist that is Delayed Auditory Feedback method (DAF), which the person of stuttering speech and hearing his/her own voice with a time delay, such as “echo”, which has the effect to trick the brain into thinking that while speaking as if coincided with others or speaking in harmony, as well as methods of Speaking Rate with Pausing is to train stuttering people in managing the rate of speech and trained in finding the style of speech. Also stimulated of the sound waves with a frequency of 8 Hz as a brainwave synchronization to add the details of sound system as a speech therapy for stuttering patients.

By using technology Digital Signal Processing (DSP), the methods that we have developed into a system become a single unit as a new tool in helping speech therapy for stuttering people and help synchronize the brain as the organ that regulates all organs of the body, especially speech organs.

Keywords: Stuttering, speech therapy, delay, pausing, brain waves, audio.