

**Critical Review:**

**Does Delayed Auditory Feedback Improve Speech Intelligibility in Parkinson's Disease?**

Steph nie Bro n

M C Sc SLP C ndid te

Uni ersity of estern Ont rio Schoo of Co munication Sciences nd Disorders

This critic re ie e ines the effect of de yed auditory feedb c DAF on speech inte igibi ity in P r inson s dise se. Each of the eight rticles inc luded in this re ie e ines speech r te nd inte igibi ity ith the use of DAF in p tients. It

four month period in an attempt to decrease speech rate. Both of these patients had rapid speech rates and reduced intelligibility prior to the study. Readings presented from the Grandfather Passage and conversation speech samples were used to determine intelligibility and rate. A delay of 10 seconds was used for both patients and resulted in significant decrease in speech rate for reading and conversation. Intelligibility was significantly improved in conversation for one patient and significantly improved in both reading and conversation samples for the second patient.

McMetten and Bernard studied the effects of DAF in combination with frequency filtered feedback (FAF) on nine patients with Parkinson's disease. Prior to treatment these patients presented with disorders characterized by paucity and hesitations. As speech rates were measured on a three-point scale rather than words or syllables per minute it is unclear whether the pre-treatment speech rates were below or above the reading and controlled monologues were used to measure intelligibility under similar conditions to those in the open lab.



research using patients with varying degrees of pre-treatment intelligibility

Another factor that could have affected the results in many of these studies is the pre-treatment rate of speech of the patients. Since DAF is often used to decrease speech rate in an attempt to improve intelligibility using DAF on patients with normal or decreased rates of speech may have negative effects on

auditory feedback  
L n e o o y -

Do nie A Lo M Linds y  
D D Speech disorder  
in P r insonis usefulness of de yed  
auditory feedback in selected cases  
Br o rn of D order of  
Co n c on  
H nson R Metter E  
DAF speech r te odific tion in