THE IMPACT OF PAUSE USE ON FLUENCY IN MULTILINGUAL SPEAKERS IN SOUTH AFRICA

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ABSTRACT

Background: Speech rate plays an essential role in overall speech intelligibility in fluent speakers and is an important variable affecting fluency in people who stutter (PWS). There are no normative speech rate data for South African English (SAE). In PWS, attempts to manipulate speech rate for improved fluency have mostly focused on articulation rate. Revisiting the role of pauses in speech rate and the manipulation of both frequency and duration of pauses was deemed necessary to investigate a potentially valuable alternative strategy to assist PWS in rate reduction and possible improved fluency.
Aims: The aims of this study were to investigate the speech rate and pause use for first language (L1) and second language (L2) SAE fluent speakers and PWS in both monologue and reading tasks. In addition, this study investigated if the manipulation of pause use could increase fluency in L1 and L2 PWS given six sessions of pause instruction in SAE.
Methods: 80 fluent speakers (40 L1 SAE and 40 L1 isiZulu) and 14 PWS (7 L1 SAE and 7 L1 isiZulu) were asked to engage in a 2-minute monologue and a reading task in order to calculate the mean speech rate, frequency of pauses and average pause duration for each group. Following baseline measures, the 14 PWS were randomly assigned to either immediate or delayed intervention consisting of 6 sessions addressing manipulation of pauses. A crossover treatment design allowed for repeated measures of speech rate and pause use across three data collection periods.
Results: Results revealed L1 and L2 SAE fluent speakers differed significantly in speech rate and frequency of pauses in reading and in pause length in the monologue. L1 and L2 PWS differed in frequency of pauses in reading. L1 fluent speakers and PWS differed in speech rate and both measures of pause use in reading. L2 fluent speakers and PWS differed in frequency of pauses in the monologue. Results from the crossover intervention for the PWS revealed a significant decrease in percentage syllables stuttered (% SS) for the delayed treatment group and a clinically significant decrease in % SS for both groups, in conjunction with a reduced speech rate that could be linked to increased frequency and/or average duration of pauses.
Conclusions: This study presented speech rate and pause use norms for both fluent speakers and PWS, L1 and L2 SAE speakers that may provide useful guidelines for speech language pathologists in South Africa. Additionally, the intervention results for PWS presented efficacy data for six sessions of pause manipulation with measurable findings for improved fluency.

Key words: Speech rate, people who stutter (PWS), pauses, fluency