Are some letter cues more important than others in alphabet supplementation?

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Alphabet supplementation is a compensatory strategy that increases speech intelligibility for persons with motor speech impairment. It appears to do so by slowing the speaking rate as the speaker points to the first letter of each spoken word while speaking, imposing pauses at word boundaries. Alphabet supplementation also provides phonemic information about word beginnings. This combination appears to have a dramatic effect on speech intelligibility with documented increases of 25%-36% at the sentence level. This study tested the hypothesis that some types of words were more important for conveying sentence meaning than others when it comes to alphabet supplementation. Visual alphabet cues were selectively omitted, based on word class, from videotaped sentences from 6 speakers with dysarthria. In addition, a no-cues condition provided only a supplemented speech signal without any visual cues. A total of 120 listeners transcribed sentences. Results showed no statistical difference among the supplemented conditions regardless of which cues were omitted. The no-cues condition resulted in intelligibility scores that were equivalent to the habitual, or baseline, condition.