Effect of phonological complexity on speech planning in persons who stutter.
Jayanthi Sasisekaran & Luc F. De Nil, Graduate Department of Speech-Language Pathology, University of Toronto, Canada.

The purpose of the present study was to assess empirically the effect of phonological complexity on speech planning in persons who stutter (PWS) and persons who do not stutter (PWDNS). Participants were eight PWS between the age range of 18 and 47 years, matched in age, gender, and handedness with eight PWDNS. Participants performed phoneme monitoring during 1) a silent naming task and 2) during perception. In the silent naming task, participants were presented with a picture and silently monitored for the presence of a target phoneme in the picture’s name. In the perception task, participants monitored for a target phoneme in the auditory presentation of each target word. The number of phonological words in the target items defined phonological complexity and the study investigated whether phonological complexity influenced phoneme monitoring across silent naming and perception in both PWS and PWDNS. Average response time and percentage errors were the dependent variables investigated. Results indicated that phonological complexity influenced task performance in both the groups. PWS were significantly slower, compared to PWDNS, in performing phoneme monitoring during silent naming of complex stimuli, while the two groups were comparable in monitoring during perception. Findings will be discussed in light of the current theories of stuttering that postulate a link between deficits in specific stages of speech planning and fluency in PWS.