

# The Effect of SPEAK-OUT!<sup>®</sup> Voice Therapy on Prosody in Persons with Parkinson's Disease

Eunsun Park, a doctoral student in the department of Communication Sciences and Disorders at the University of Oklahoma Health Sciences Center (OUHSC), presented her research findings recently at the Graduate Research Education and Technology Symposium 2015 at OUHSC on April 1, 2015.

This study evaluated the efficacy of the "12-session over 4 weeks" SPEAK-OUT!<sup>®</sup> voice program in terms of prosody changes such as speech intensity and pitch range for a group of local Oklahoma patients with idiopathic Parkinson's disease (PD). These patients underwent speech therapy at Jim Thorpe Rehabilitation Center using a newly developed intervention method called SPEAK-OUT!

Results indicate that participants benefitted greatly from SPEAK-OUT! therapy. Specifically, they showed a significant increase in speech intensity (i.e., 8.3 and 7.8 decibels in two types of speaking tests) and pitch range (about 8 Hz) along with improved self-report voice scores. The latter indicate that

participants felt that voice quality for daily living was improved after therapy. Longer Parkinson's disease duration was associated with lowered training effectiveness. Therefore, data indicate that speech deficits in Parkinson's disease should be treated as early as possible after disease onset.

Overall, results suggest that the SPEAK-OUT! intervention is a viable treatment for persons with Parkinson's disease. Not only does it improve their speech loudness but also other prosodic features including more natural intonation and descriptively slower speech rate.

Eunsun Park's research is supervised by Dr. Frank Boutsen, director at the Motor Speech and Prosody Research Laboratory, who is widely published and recognized internationally as an expert on speech prosody. Data collection is still ongoing with extended follow up to evaluate short and long term maintenance. Findings will be submitted for presentation and publication at national and international venues.

*Copyright © 2015 Parkinson Foundation of Oklahoma, All rights reserved.*