

TITLE: Emotional dysprosody in speakers with hypokinetic dysarthria associated with Parkinson's disease.

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Parkinson's disease (PD) impairs individuals' encoding of emotions and speech prosody. Speakers with PD produced diminished prosodic inflections that confused listeners. This study investigated the deficits in emotional prosodies produced by speakers with hypokinetic dysarthria (HD) associated with PD.

METHODS: Eighteen speakers with PD and HD, 19 speakers with matched disease progression of PD but without HD, and 40 healthy controls with matched age, gender, and education levels participated in this study. The participants produced sentences with six emotions including anger, happiness, sadness, surprise, disgust, and neutral. Acoustic correlates of emotional prosodies were measured in terms of mean and range of intensity, mean and range of fundamental frequency (F0), and mean speech rate, and were statistically analyzed. **RESULTS:** The results revealed significant between group differences. Range of intensity, and range of F0 were more reduced in speakers with PD and HD than PD without HD. Speech rate was increased in speakers with PD and HD than PD without HD. Mean F0 of speakers with PD with HD was higher than speakers with PD without HD. **CONCLUSION:** PD and HD both impact on emotional prosodies.