

Christodoulides 2016). With respect to biomarkers, saliva samples are processed using H-NMR spectra and a multivariate analysis of the salivary metabonomic profile is performed in order to identify potential biomarkers; additionally, an analytical quantification of salivary biomarkers known to be associated with emotional states (such as 3-Methoxy-4-hydroxyphenylglycol; cf. Yang et al 1997) is performed. We discuss the merits of combining biomarker data with speech production measures in studying the effects of stress and cognitive load in speech, and we present the design of future studies in this direction.

TALK 12 – 17:15

Perceptual judgment of voice quality in non-dysphonic French speakers: Effect of task-, speaker- and listener-related variables

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Auditory-perceptual evaluation remains the most commonly used method for the assessment of clinical voice. Several perceptual scales have been developed over the years to assess voice quality in dysphonic voices, among which the GRBASI scale (Grade; Roughness; Breathiness; Asthenia; Strain; Instability) is probably the most commonly used. Quite surprisingly, this clinical tool has not been properly validated with a normophonic population yet.

For the present study, samples of speaking voices from a large population of healthy, normophonic French native speakers were perceptually assessed by a panel of raters using the GRBASI scale. The aim was to provide a first set of reference data gathered from a normal population, which could be useful as a base of comparison for vocologists and laryngologists working with French-speaking patients. Results showed that the average overall grade was close to 1 on the 4-point scale (from 0 "normal" to 3 "severe"), questioning the very notion of "normal" voice as opposed to dysphonic voice.

A second goal was to investigate the influence on this normal voice dataset, of variables known to affect perceptual judgments of clinical voice. Specifically, we showed that rating reliability as well as perceptual scores were affected by: (i) task-related factors, i.e. the nature of the stimuli and the specific dimension of voice quality to be evaluated; (ii) speaker-related factors: age (but not sex); and (iii) listener-related factors, namely their level of expertise in voice quality assessment. Theoretical as well as clinical implications will be discussed at the workshop.