USING FINE AND BROAD TERMINOLOGY SYSTEMS IN AUDITORY-PERCEPTUAL EVALUATION OF DYSPHONIA

J. Iwarsson¹, A. Bingen-Jakobsen¹, D. S. Johansen¹, I. E. Kølle¹, S.G. Pedersen^{1,2}, S. L Thorsen¹ & N. R. Petersen¹

¹ Speech Pathology and Audiology, Department of Nordic Studies and Linguistics, Copenhagen University, Copenhagen, Denmark

> ² Department of Otorhinolaryngology and Maxillofacial Surgery, Zealand University Hospital, Køge, Denmark

> > Corresponding address: jiwarsson@hum.ku.dk

Auditory-perceptual evaluation of the voice can serve different purposes and may be performed using different terminology systems. A multi-parameter system may serve important aims as a tool in the first-visit assessment relevant to diagnostics and treatment. A more reductionist approach on the other hand, may be enough for treatment outcome measurements. These two approaches may be compared to fine and broad phonetic transcription and used interchangeably, depending on the purpose. The aim of this study was to investigate the perspectives of a translation of the terminology used in the 'fine' multi-parameter Danish Dysphonia Assessment (DDA) approach into the 'broad' five-parameter GRBAS system.

Method: With the aim of estimating inter- and intra-rater reliability, voice samples illustrating type and grade of the voice qualities included in DDA were rated by five SLP's using the GRBAS system. The same samples were then rated using the DDA terminology.

Results: Inter- and intra-rater reliability of the GRBAS-ratings were shown to be very high, with significant correlation coefficients (Pearson's r) for the pairwise comparisons in the vast majority of cases. The relation between the DDA and GRBAS ratings showed multiple correlation coefficients (R) exceeding 0.9 in all cases.

Conclusion: The data strongly support that the fine DDA system for auditory perceptual voice analysis can be translated into the broad GRBAS system. The consensus discussion prior to the listening test is believed to have contributed to the high degree of inter- and intra-rater reliability. The results attested a need for more precise definitions of the GRBAS parameters, especially ASTHENIC, which is provided. Audio examples illustrating the voice quality parameters will be included in the presentation.