Dr. Hendrik Husstedt Lübeck

Listening effort for soft speech in quiet

Apart from speech intelligibility, listening effort has become an important indicator for hearing performance. It can be defined as the effort experienced, or invested, in solving an auditory task. In studies, subjective, behavioural, and physiological methods were used for evaluation. All studies have in common that auditory tasks were performed at clearly audible levels, e.g. investigating speech intelligibility in noise. We shall present results of a study where listening effort was evaluated in speech in quiet at low presentation levels. To this end, sentence testing (OLSA), adaptive scaling (ACALES), and pupillometry were performed on 24 young adults with healthy hearing. These results indicate that speech needs to be presented well above the speech reception threshold in quiet to reach ease of listening. We believe that this finding has several implications, e.g. on the benefit of linear amplification, which will be discussed in our contribution.