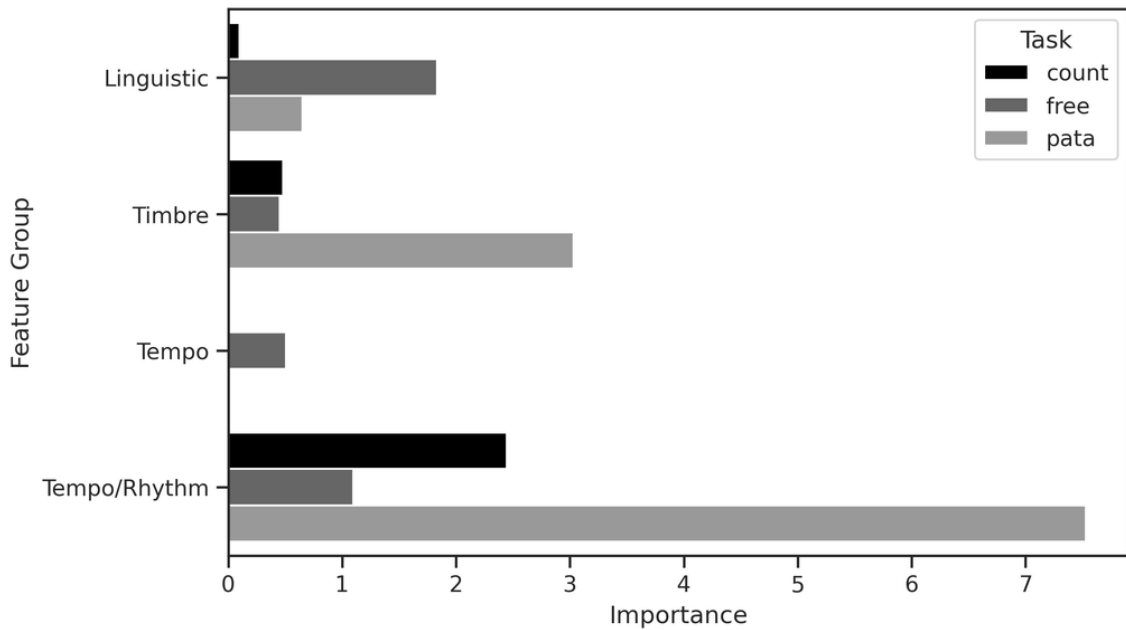
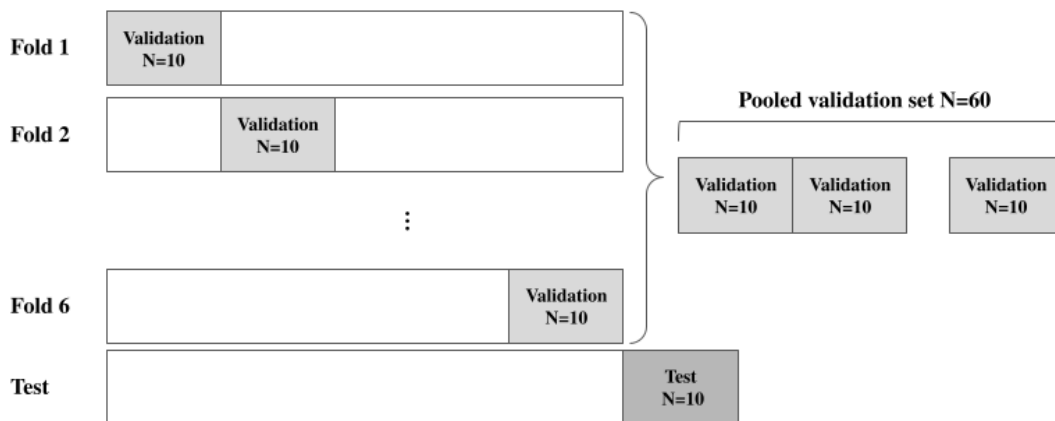


**Supplementary Figure 1:** Confusion matrix of true and predicted SARA-scores in an additional hold-out set based on SARA<sup>speech</sup> machine learning approach using a broad set of voice features.



**Supplementary Figure 2:** Top ten voice and speech features contributing to prediction analysis results depending on specific speech task.



**Supplementary Figure 3:** Performance of the trained SARA<sup>speech</sup> system was evaluated in a 6-fold cross validation scheme with an additional hold out set.

Domain	Name	Capturing	Basis	Implementation of Basis	Comment
Paralinguistic	Spectral	Timbre	STFT-Spectrogram	<a href="#">librosa.stft</a>	Further developed
	Tempo	Speech Tempo	(Fourier) Tempogram	<a href="#">librosa.feature.tempogram</a> <a href="#">librosa.feature.fourier_tempogram</a>	Further developed
	Rhythm	Speech Rhythmicity, Variability	Onset-Envelope	<a href="#">librosa.onset_strength</a>	Further developed
Linguistic	Pronunciation	Intelligibility Speech Tempo	Speech-to-text	<a href="#">sttWithMetadata</a>	- Count of words - Count of real-words - Confidence score (intelligibility) - Duration of words

**Supplementary Table 1:** Open-source features used for further development and analysis.