Purpose: Theater actors are a special group of elite vocal performers where the slightest vocal difficulty can have serious professional consequences. Little is known about vocal habits on stage and the impact of a theater performance on vocal quality. The purpose of this study is to describe the vocal habits of theater performers on stage and to compare the impact of a performance on the objective and subjective vocal quality between theater actors and dancers. Hypothetically, the impact of a performance on vocal quality is greater in actors compared to dancers.

Methods: Speech samples of the subjects are recorded before and after a performance of one and a half hour using PRAAT. The samples consist of a combination of sustained phonation and continuous speech. For each speech sample the multiparameter index Acoustic Voice Quality Index is calculated. Secondly, maximum phonation time, frequency and intensity range and jitter (%) of an isolated vowel /a/ was determined using PRAAT for the calculation of the Dysphonia Severity Index. Auditory perceptual evaluations were performed using the GRBASI scale. Questionnaires were used to inventory vocal symptoms and influencing factors. The experimental group consists of professional actors between 18 and 40 years old. The control group consists of age and gender matched professional dancers. The duration of each theater and dancing performance is one and a half hour.

Results: The study continues until April 2017. Results will be analyzed using SPSS. Data before and after the theater performance will be compared using a paired statistical test.

Conclusion: The results of this study will gain insight in the vocal habits of theater performers on stage. Secondly, the results will show the impact of a performance on the voice quality of theater actors compared to dancers. In the future these results will help optimizing the guidance of the elite vocal performance.