



Editorial

Communicating voice research

The International Journal of Voice Sciences (IJVS) is a scientific journal dedicated to voice research and sees itself as a catalyst for dynamic exchange between science and the professional community.

The journal is aimed at voice researchers in the fields of medicine, voice therapy, health professions, psychology, linguistics, physics, phonetics, and education, and publishes original scientific articles (studies and reviews) on the following topics:

- Clinical questions and evidence of the effectiveness of therapies
- Assessments and outcomes
- Work on innovative research methodology issues
- Health services research/basic research
- Patient perspective and participation/clinical reasoning
- Evidence in diagnostics, therapy, and prevention
- Digital health

The IJVS publishes original work on innovative research methodology issues as well as health services and basic research. However, patient perspective and participation, contributions to clinical reasoning, and, in particular, contributions to evidence base in diagnostics, therapy, and prevention are central topics.

The overarching goal of the IJVS is to make external evidence accessible and applicable for the further development of medical and therapeutic practice, as well as to reflect on and further develop its research methodology.

The idea of creating a high-quality, freely accessible journal with double-blind peer review of voice research was born in 2023, when four editors launched the project.

Prof. Dr. Ulla Beushausen, HAWK University of Applied Science and Arts, Hildesheim, Holzminden, Göttingen, Germany

Prof. Dr. habil. Meike Brockmann-Bauser, University of Education Weingarten, Germany

Priv. Doz. Dr. Markus Gugatschka, Murau, Austria

Prof. Dr. Anna-Katharina Rohlf, University of Ulm, Germany

We now proudly present the first edition as a special issue on the topic of voice diagnostics.

Special Issue on trends in voice diagnostics

Voice disorders can cause considerable negative consequences for individuals and pose a substantial socio-economic burden on societies. In approximately one third of all clinical patients diagnosed with so-called functional voice disorders, visual assessment results need to be supplemented by outcomes describing functional deficits, symptoms and the impact of a voice disorder on patients' daily lives. Moreover, these outcomes are essential for investigating the effect of treatment schemes on overall voice function.

In this special issue, various authors report not only on currently recommended examination methods for children and adults with suspected voice disorders, but also on more fundamental questions concerning the collection, interpretation and relevance of examination data. There is growing evidence that speech-related characteristics such as speaking voice intensity and fundamental frequency affect all currently internationally recommended acoustic voice quality parameters. Artificial intelligence (AI)-based approaches have the potential to adequately address this large, to date unaccounted natural variance in diagnostic questions.

Furthermore, currently available technologies, such as voice mapping strategies may help to resolve this measurement challenge in voice clinics in the future. For this reason, this special issue will discuss current developments as well as critical gaps in knowledge in several key areas on the basis of tutorials, reviews, and research studies.

This special issue begins with two reviews and one tutorial article addressing current clinical voice assessment guidelines in Germany, Europe, and the USA, the knowledge base regarding singing voice diagnostics, as well as an overview of current electroglottographic (EGG) voice analysis techniques in combination with acoustic markers. Based on a review of recent literature since 2020, C. Baker describes and extends on current developments in the assessment of singing voice disorders. The invited instructional paper by S. Ternström and P. Pabon gives a comprehensive introduction to EGG measurements, their potentials and limitations, and proposes a promising mapping solution for measuring voice intensity, fundamental frequency changes and their effects on novel electroglottographic as well as clinical acoustic voice measures.

The second part presents experimental works addressing new approaches to the assessment of specific demands of professional voice users as well as respiration processes during phonation. While the pausing during respiration is considered as physiological part of the natural breathing cycle in several voice training and treatment methods, this phenomenon has yet to be documented and proven. In an experimental study, Ch. Mueller and J. Lukaschik introduce not only a low-cost approach for studying respiration processes during voice production, but also demonstrate for the first time the presence of respiratory pauses during speech in healthy individuals.

In the field of prevention of voice disorders, B. Meier discusses the use of questionnaires evaluating subjective symptoms to monitor the effectiveness of voice training. She presents results of a structured voice training programme for teachers in Germany, evaluated through self-report measures. H. Ehlert and B. Meier also contribute normative data for a questionnaire targeted at professional speakers, the *Occupational Voice Use Profile* (OVUP), which can be used in health-promotion and prevention contexts to measure the effectiveness of voice seminars. Finally, J. Lukaschik et al. investigate the relationship between subjective self-assessment and standardised questionnaires (here, Vocal Tract Discomfort) in adult cochlear implant (CI) users, as well as the relationship between symptoms and improved speech comprehension within the first year of CI use.

We thank all authors of this issue for critically evaluating current research standards and new developments and for their reports on experimental work. We look forward to further discussion of how to best define, assess, prevent, and treat human voice disorders.

M. Brockmann-Bauser and U. Beushausen

Our warmest thanks are extended to all authors and reviewers who have made this special issue possible. We welcome correspondence, suggestions, and criticism.

Editors

M. Brockmann-Bauser, U. Beushausen

Prof. Dr. M. Brockmann-Bauser

Pädagogische Hochschule Weingarten
University of Education
Kirchplatz 2
D-88250 Weingarten
Germany
meike.brockmann-bauser@ph-weingarten.de

Prof. Dr. Ulla Beushausen

HAWK Hildesheim/Holzwinden/Göttingen
University of Applied Science and Arts
Goschendorf 1
D-31134 Hildesheim
Germany
ulla.beushausen@hawk.de