

What is vocology?

¿Qué es la vocología?

Ingo R. Titze¹     

¹National Center for Voice and Speech; University of Utah, Salt Lake City, UT; United States.


Correspondence

Ingo R. Titze. Email: ingo.titze@utah.edu

How to cite

Titze, Ingo R. (2021). What is vocology? Revista de Investigación e Innovación en Ciencias de la Salud. 3(2): 01-02. <https://doi.org/10.46634/riics.121>

Invited editor

Carlos Manzano Aquihuatl, MD, MSc. 

Editor en jefe

Jorge Mauricio Cuartas Arias, Ph.D. 

Coeditor

Fraidy-Alonso Alzate-Pamplona, MSc. 

Copyright © 2021. Fundación Universitaria María Cano. The *Revista de Investigación e Innovación en Ciencias de la Salud* provides open access to all its content under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International](https://creativecommons.org/licenses/by-nc-nd/4.0/) (CC BY-NC-ND 4.0).

In its broadest definition, Vocology is the *study of vocalization*, much like audiology is the study of hearing. Vocology includes the exploration of the full capability of human and animal sound production, some of which is embedded in human speech. For professional practice, a secondary definition of Vocology is *the science and practice of voice habilitation*, concept that has been in existence for more than two decades [1-4]. The emphasis is on habilitation rather than re-habilitation, so that the field does not infringe on speech-language pathology. Besides, it does include the important area of animal vocalization, as many vertebrate species (humans, other mammals, birds, and reptiles) vocalize to:

- Warn others of danger.
- Express hunger, pain, or other discomforts.
- Locate or be located.
- Express emotion (aggression, fear, love, joy).
- Demonstrate artistry.
- Convey messages.
- Be identified by others (or not).
- Attract a partner.
- Show strength and fitness.
- Express gender and age.

Not all vocalization is habilitated naturally or socially, without the necessity of intervention. This includes voice training for special skills, as well as rehabilitation when injury and disease has altered the system. Singing, chanting, calling, healthy screaming, ventriloquism, auctioneering, impersonation, vocal disguise, or imitation of animal calls are all in the purview of professional habilitation. Habilitative Vocology also includes the investigation of multiple sound sources in contemporary singing, as well as differences between electronically amplified and unamplified voice production. Vocalization for emergency dispatching, cadence calling in athletics, and military combat are also part of voice habilitation.

A central focus of Vocology is vocal fitness, which is closely coupled to general well-being. Conversational speech alone does not guarantee a high level of vocal fitness, because it seldom uses full fundamental frequency and intensity ranges. Developing the best vocal exercise for general health is part of habilitative Vocology. Evidence is growing that heart-beat, hormone balance, respiration, emotional, and social well-being, as well as some brain functions, are improved with singing, chanting, acting and other *exceptional vocal skills* beyond conversational speech.

Vocal recovery from injury or disease involves professional re-habilitation. Multiple alternative solutions for voice repair and voice therapy are sought for voice rehabilitation. The process relies on what evolution has offered across species, based on vocal needs in light of body size, environment, and various selective pressures. Both surgical repair and behavior modification in therapy can benefit from the study of nature's many alternative solutions for effective vocalization.

References

1. Titze IR. Principles of voice production. New York: Prentice-Hall; 1994.
2. Titze IR. Principles of voice production. 2nd ed. Salt Lake City: National Center for Voice and Speech; 2000.
3. Titze IR. What is vocology? Logopedics Phoniatrics Vocology. 1996;21(1):5-6, doi: <https://doi.org/10.3109/14015439609099196>
4. Titze IR, Verdolini Abbott K. Vocology the science and practice of voice habilitation. Salt Lake City: National Center for Voice and Speech; 2012.