

# **Exercises for Voice Therapy**

*Third Edition*



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# Preface to the Third Edition

This book consists of 84 exercises contributed from 55 therapists. The purpose of this book is to assist speech-language pathologists in developing treatment plans and session materials for clients—children and adults—with all types of voice disorders. A wealth of information has been published regarding the nature of voice disorders and theoretical approaches to behavioral intervention, with case studies to illustrate conceptual approaches to different types of clients. However, only a few published resources are available that provide the step-by-step process for achieving vocal change. Books on singing and acting techniques may offer good information for developing new ideas for voice therapy. Conferences and workshops on voice disorders provide excellent opportunities to learn new approaches, observe our colleagues in demonstrations, discuss ideas, and receive inspiration. In addition, e-mail is available for a quick note to a colleague, “Help, I’ve tried everything I know and she’s still squeezing. Any ideas?” However, no manual is available that represents a range of methods from a variety of clinical viewpoints for day-to-day planning of sessions.

So, we thought, why not broaden our circle of colleagues and share our ideas and suggestions in a format that can be accessed easily? Voice therapists around the world, working in a variety of clinical environments, have many great ideas, and we can all benefit from each other’s experiences and creativity. Thus, this book is motivated by our desire to help all of us share our therapy techniques so that we may all become better voice therapists.

We use the term *exercise* to identify a set of tasks that has been organized into a cohesive activity for one or more therapeutic goals. From the Latin *exercitare*, to train, among its many meanings are “the act of bringing into play or realizing in action . . . something performed or practiced in order to develop [or] improve” (Merriam-Webster, 2004). The difficulty levels of the exercises are varied. Some of them are

suitable for novice voice therapists, whereas others require a greater depth of experience to be used most effectively. Similarly, voice clients will find some exercises more challenging than others. Although each exercise is presented in a consistent format, the different writing styles and topics reflect different theoretical approaches and training backgrounds of the contributors, thus adding richness to the book that would not otherwise have been possible. The exercises are organized into chapters, each with a brief introduction. Mainly, we elected not to organize the chapters by type of voice disorder. Instead, each chapter focuses on a particular topic or parameter of the voice production system that may need to be addressed. We expect that these exercises will be used in a variety of ways, depending on the personal approach of each therapist and the needs of the individual client. Some of the exercises offer a basic framework for building an entire session, whereas others may fulfill a more specific need within a broader framework.

How did the contributors of this book come to be selected? In part, they selected themselves. We tried to contact many of the speech-language pathologists who have presented instructional clinical sessions at conferences, or published articles on clinical methods in voice therapy. We called colleagues, and we asked colleagues to recommend other colleagues. We invited therapists to contribute one or more of their favorite exercises, to tell us from where the exercise originated, and how they modified the exercise from the original source to make it “their own.” Most of the therapists we contacted agreed to participate. Some could not, for a variety of personal and professional reasons, and we are sorry to have missed their contributions.

Sharing therapy techniques is not easy. Voice therapy has been called both an art and a science, and many of the exercises may reflect more art than science. The evolving focus on the efficacy of voice therapy techniques may cause all of us to experience some reluctance to say, “This exercise has worked with

many of my clients and I'd like to share it with my colleagues." Therefore, when we share our therapies, we put our professional selves on display for everyone to judge. Fundamentally, we each ask ourselves "Am I a good voice therapist?" The evidence lies herein. Each voice therapist whose exercises are included in this book is an accomplished and thoughtful therapist who has been willing to share his or her ideas with you, the reader. Each therapist responded patiently through our editing process, answering our many questions and reviewing multiple changes, as we sought to clarify wording and intent. We are lucky indeed to be part of this community of voice therapists, and we owe a heartfelt *thank you* to each contributor.

### New to the Third Edition

Seventeen new exercises are included in this third edition, and eight new contributors have joined the team since the second edition. Some of the chapters have been reorganized. Thus, it's possible that your favorite exercise from the second edition is located in a different chapter.

We are particularly excited to create a new chapter—Chapter 2, "Counseling in Voice Therapy." Most seasoned voice therapists will agree that voice therapy is 50% teaching vocal technique and 100% counseling! The chapter contains four new exercises from three new contributors who are experts in the field of counseling. We are lucky that they have joined our team of contributors. In addition, two counseling-focused exercises from the prior edition are now included in this chapter.

Another new chapter in this third edition is Chapter 3, "Adherence and Generalization." Client adherence to the therapeutic program and carryover of gains achieved in therapy to everyday communication are the two greatest challenges of voice therapy. This chapter includes a new contributor and three new exercises.

Some reorganization of exercises has also occurred to make the chapters more cohesive and, hopefully,

to allow the reader greater ease in using the book. "Vocal Warm-Ups and Cool-Downs" are now grouped into their own chapter, Chapter 4. The chapter on breathing, Chapter 5, has been expanded and is now divided into two sections. The first section—*Breathing Awareness*—includes exercises that do not incorporate voice production. Four exercises, including a contribution by a new author, are included in this section. The second section—*Breathing Exercises That Incorporate Voice Production*—allows the therapist to locate desired breathing exercises more quickly. Chapter 11, "Pediatric Voice Therapy," has been expanded, and now includes three new exercises and two new contributors. Chapter 12, "Special Cases," has been reorganized to help the reader locate and compare exercises intended for similar client populations. The chapter is now divided into *Exercises for Transgender Clients*, *Exercises for Paradoxical Vocal Fold Motion*, *Exercises for Voice Problems Associated With Motor Speech Disorders* (with a new exercise by a new contributor for clients with Parkinson's disease), and a *Special Cases* section for exercises that don't easily fit into other groupings.


New to this third edition is the use of the Plural-Plus companion website. In place of the audio CD that accompanied the first and second editions, all accompanying audio or video files are now located on this website.

The process of creating a book is always a team effort. We thank our colleagues at Plural Publishing, a professional and knowledgeable team, both past and present: Dr. Sadanand Singh, Angie Singh, Sandy Doyle, Valerie Johns, Kalie Koscielak, Linda Shapiro, and Jessica Bristow. We thank Maury Aaseng, illustrator, who created many of the illustrations throughout the book. In addition, we thank our colleagues, clients, and students on whom we tested these exercises. We dedicate this book to our voice clients—past, present, and future—whom we hope to serve well.

Do you have a voice therapy exercise to contribute to the next edition? New submissions are always welcomed for review. Contact [Alison.Behrman@lehman.cuny.edu](mailto:Alison.Behrman@lehman.cuny.edu)

# A Word About the PluralPlus Companion Website

A companion website accompanies this book, containing recordings of 28 of the exercises. The purpose of the companion website is to provide an aural model for those exercises that may be difficult to interpret from the written text alone. Many of the exercises do not require a recording for comprehension of the exercise, whereas others may leave a reader uncertain as

to how a task should sound without a recording for guidance. Those exercises included on the companion website, many of which were recorded by the contributing author, have a website icon  next to the title. The list below details the contents of the companion website organized by chapter, in which each corresponding written exercise can be found.

## Contents of Companion Website

### Chapter 4

- Track 1 LeBorgne, “Gentle Vocal Stretch and Contraction” (Vocal Warm-Up)
- Track 2 Tennyson, “Laryngeal Self-Massage”
- Track 3 Carroll, “Vocal Cool-Down I”

### Chapter 5

- Track 4 Klimek, “Balancing Breath and Tone Through Advanced Trill/Flutter Tasks”
- Track 5 Gherson, “Trilled Carryover”

### Chapter 7

- Track 6 Carroll, “NG Sniff”
- Track 7 Yiu, “Hong Kong Humming”
- Track 8 Lader, “Chant Talk”
- Track 9 Schneider, “Chant to Speech”
- Track 10 Morsomme, “How to Improve Your Vocal Resonance”
- Track 11 Pinho, “Spaghetti”
- Track 12 Haxer, “Hyperfunctional Dysphonia”

### Chapter 8

- Track 13 Haskell, “The Chewing Method”
- Track 14 Schneider, “Hum-Sigh with Chewing”

- Track 15 Schneider, “Tongue-Out Phonation”
- Track 16 Fava & Oliveira, “Tongue Teaser”

### Chapter 9

- Track 17 Behrman, “Calling the Text”
- Track 18 Phyland, “Cooee” (The Aussie Bushman’s Call)
- Track 19 Ostrowski, “Vocal Intensity Play”
- Track 20 Klimek, “Using Twang”

### Chapter 10

- Track 21 Stemple, “Vocal Function Exercises”
- Track 22 Carroll, “Vocal Fry to Modal”
- Track 23 Haxer, “Hypofunctional Dysphonia”
- Track 24 Miller, “Sharp Onset Vowel Sentences”
- Track 25 Miller, “Up and Down Staccato”

### Chapter 12

- Track 26 Block, “Chant Your Pitch” (Voice Feminization)
- Track 27 Block, “Count Big” (Voice Masculinization)
- Track 28 Carroll, “Julliard Snore-/k/”



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# Chapter 1

## THE PRACTICE OF VOICE THERAPY

### “I’m Seeing a Case of Nodules . . .”

No matter how much experience we gather in voice therapy, we each recall our early clinical introduction. “Can I use this exercise with nodules?” “What do I do with presbyphonia?” Each question was asked with a certain sense of alarm, as though a different “recipe” for therapy was required for each diagnosis. With experience, we came to realize that we do not do “nodules therapy” or “polyp therapy”—that the commonalities across voice therapy patients are very much greater than the differences. The biomechanics of voice production is the glue that binds our clients together. And that commonality of experience helps build our clinical expertise, for we can say, “I have seen this problem before, and these are some of the types of approaches that have worked for others with this problem.” If we had to start from the very beginning with each voice therapy client, our work would be difficult, indeed. Yet at the same time, each client brings unique features to the therapy—laryngeal pathology, anxieties, vocal needs, to name a few—requiring us to make choices in our therapies regarding how best to serve their needs.

### Making Choices

Voice therapy is, to a great extent, about making choices. We help our clients to increase the number of vocal choices available to them. Pitch and loudness can be used with greater flexibility. Breathing can be adapted to meet the demands of the phrase. Resonance can be altered to achieve a different internal sensation for the speaker, and a different voice quality for the listener. Often, our clients are not aware that vocal choices are available to them (“I’ve always run out of breath easily when I talk”), or they don’t know how to access those choices (“I try to talk louder but it’s just so tiring”). The voice

therapist, therefore, has the challenge and responsibility to shape the client's conceptual approach to voice, as well as the client's vocal behaviors, so that the client becomes self-reliant and is able to make healthy and useful vocal choices.

Our therapeutic decision-making process also includes selection of vocal tasks, or exercises, and this book is designed to facilitate that process. However, prior to task selection, we choose the portion of the voice production system to which we want to direct our efforts. We may elect to focus on the subsystem of voice production that we believe is driving the problem. ("If he'd use more coordinated speech-breathing, many of his other symptoms would be minimized.") We may also choose to focus on a specific feature, or component, of the voice production system. For example, for a client with muscle tension dysphonia, we might select exercises that address reduction in tension of the tongue by changing its posture and movements. Another client with tongue tension might benefit from a focus on thoracic tension, which appears to be limiting speech breath, and, in turn, triggering articulatory tension.

Alternatively, we might choose to take a more holistic approach. The word holistic is defined as "relating to or concerned with . . . complete systems rather than with the analysis of, treatment, or dissection into parts" (Merriam-Webster, 2004). The holistic approach reaches across many components at once, and may involve a single gesture or behavioral focus, for example, chewing, or lip buzzes, that affects the entire system. Holistic approaches are "therapies that strive to balance the three subsystems of voice production (respiratory, phonatory, resonatory) at once, as opposed to working directly on single voice components (segmental framework)" (Stemple, Roy, & Klaben, 2018). Ultimately, we are always asking and choosing, "What's suitable for the patient, and what's suitable for me as the therapist?"

### Using New Vocal Skills Outside the Therapy Room

The exercises contained in this book are procedures to be included within a broader therapeutic approach. We integrate these exercises into our broader therapeutic approach based upon, among other factors, the identification and analysis of a problem and the establishment of goals. We make choices in voice therapy about facilitating transfer of new vocal behaviors from the therapy session to life outside the session. This process is no simple matter and it requires some strategizing on our part.

Part of the transfer process, of course, includes practice within naturalistic contexts. Clients are asked to integrate, in a hierarchic

manner, a specific technique into communicative activities of daily living. (“Use the increased breath support when taking on the telephone at work.”) But the transfer process also includes practice of drills, often assigned for a given duration and/or number of times per day, in a given order and with specific utterances. (“Do the lip buzzes, the chanted phrases, and then the articulation exercise for five minutes four times daily.”) It is hoped that the act of focused practice session will help to remind clients about the techniques and strategies that are developed during the therapy sessions. It is hypothesized that the drills improve the clients’ abilities to produce the target motor skills, and increase the likelihood the skills will carry over into subsequent talking, at least for a short time. And it is hoped that increasing the frequency with which clients think about new voice production behaviors helps them to change their vocal behaviors.

To help clients transition from therapy room to “real life,” clients may also be asked simply to think about or be aware of target vocal behaviors within a communicative context. (“In class, observe your posture and head positions as you talk to the students.”) Often, when a client is asked to produce a series of utterances and simply to pay attention to a variable (lip movement, for example), the client does make some motor adjustments, despite the therapist’s urging to “not change anything, just observe.” An example (true story) will illustrate this point. A therapy session is started with the query “How did your homework practice go this week?” The client reports that he did not have an opportunity to practice at all because the week had been so hectic. Yet in the next breath, he reports that the exercises are helping his voice tremendously. Further discussion revealed that he thought about the exercises frequently and he considered that this process resulted in increased awareness of his vocal targets, which helped him to achieve those targets. The improvement in his voice during the therapy session seemed to support his statement. Although we might prefer him to think about and to perform the exercises, the anecdote does remind us that we may not always know how the client is performing a task, or how the effect is achieved.

Some information can be conveyed to clients with relative speed, such as much of the standard vocal hygiene advice. And sometimes, a vocal exercise is a one-time event, used to instill awareness or facilitate a simple motor behavior. Other novel motor behaviors, such as how to achieve a forward oral resonance, for example, may require a slower and more complicated learning process across multiple sessions with home practice between sessions. Our clients can surprise us, however, in what they find easy or difficult to learn, and what facilitates or inhibits carryover. And, of course, it is these surprises that challenge us as voice therapists to forever remain flexible in our therapeutic approaches.

## Leading Clinical Influences in Voice Therapy

As voice therapists, we owe much to a number of clinical leaders in our field, among them Moya Andrews, Arnold E. Aronson, Daniel R. Boone, Janina K. Casper, Lorraine O. Ramig, Nelson Roy, Joseph Stemple, and Katherine Verdolini. Their collective works provide the cornerstone of our voice therapy. Andrews' (2002) expertise in pediatric voice therapy has guided many therapists in working with children and adolescents with voice problems. Although many features of voice therapy are similar across all ages of our clients, different types of voice disorders are more prevalent at specific ages, and the goals and therapeutic approaches are different depending on the age of the client.

Through their teachings and writings, Aronson (1981) and Boone (2004) have provided considerable direction in regard to theoretical and practical approaches to voice therapy. One of the many practical concepts that Boone has addressed, for example, is use of facilitating techniques. How can we alter our clients' biomechanics quickly and easily so that their voices are more efficient, more easily produced, more pleasing in vocal quality, and better meet their communicative needs? In our evaluation and therapy, we seek to find facilitative techniques—triggers that help our clients move toward target vocal behaviors. Those facilitative techniques are then shaped into manners of voice production that serve our clients best.

Casper (Colton, Casper, & Leonard, 2006) has explored the connection between therapeutic techniques and the pathophysiology of vocal fold vibration, as observed through videolaryngeal stroboscopy. She guides us in the repair of damaged voices through confidential voice, in which the client uses a soft and breathy speaking voice to reduce the force of vocal fold contact. Ramig (Ramig, Fox, & Sapir, 2004) has developed and researched Lee Silverman Voice Therapy, a programmatic therapy for clients with Parkinson's disease. Her program offers a novel and proven approach for those of our clients with a specific neurologic disease. Roy (Roy, Bless, Heisey, & Ford, 1997), through his work with digital laryngeal manipulation, has helped us to learn how to use our hands to reposition the larynx, thereby eliciting more coordinated and efficient voice production from our clients who demonstrate muscle tension dysphonia. Stemple's, *Vocal Function Exercises* (2000), a program of vocal "stretching" exercises, gives our clients a hierarchical set of phonatory tasks that addresses a variety of symptoms by targeting vocal flexibility and stamina. And Verdolini's development and research of the Lessac-Madsen Resonant Voice Therapy program (Verdolini, Druker, Palmer, & Samawi, 1998) offers us an approach that can be used with a wide range of clients experiencing vocal problems.



Numerous other outstanding clinicians have helped to lead our clinical work forward. And certainly, each of us has had our own teachers, clinical supervisors, colleagues, and mentors who have provided training, guidance, and new ideas for our clinical practices. The exercises contained within this book draw on the expertise of all of these individuals, adding new pieces, reshaping others, but always with the greatest respect for their origins.

## Evidence-Based Voice Therapy

Evidence-based practice (EBP) has three components. Therapists are encouraged to (1) use the best available research data, together with (2) personal clinical expertise, while considering (3) the specific characteristics, values, and circumstances of the given patient (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). These three components have been referred to as a three-legged stool of EBP, each of which equally informs clinical care. Others have argued that the three components should not be equally weighted (Eure, 2016). In regard to clinical expertise, innate human characteristics make us poor objective judges of our treatments. Furthermore, the passage of time in itself does not render a therapist's experience valuable if the experience lacks self-awareness and insight. In regard to the "leg" of patient characteristics, if a patient does not like a specific approach, should the therapist abandon it? Where does patient adherence intersect with clinical knowledge? These questions are offered without answers. Although we firmly believe that most speech-language pathologists try hard to be the best voice therapist possible, it is also likely true that some therapists overly-weight research data, while others look only to their own experience and opinions. In preparation of the first edition of this book, one of the therapists we invited to contribute an exercise gave us a firm no. The therapist objected (quite aggressively) that to publish a volume of unproven exercises goes against current ethical standards of practice. To what extreme do we take the interpretation of "proven"? In Chapter 5, we present semi-occluded vocal tract exercises, the basis of which is well-grounded in scientific evidence. Yet each individual exercise in the chapter has not been tested experimentally. Where do we draw the line to identify "proven" and "unproven"?

The exercises contained in this book are largely unproven. The current interest in evidence-based therapy is substantial and continues to grow. And whereas many voice scientists and therapists call for objective data to support the efficacy of voice therapy, few are willing or able to provide the data. Designing and conducting clinical trials that appropriately test the outcomes and efficacy of our therapies is extraordinarily difficult. Funding, subject accrual, a multitude of design factors with the potential to confound our

ability to test clinical hypotheses, and lack of rigorous and objective outcome measures are among the most significant impediments to obtaining evidence of efficacy. And so, what are we to do in our therapies? At one end of the continuum, we could use only those techniques that have been proven to work and for which the underlying biomechanical changes are certain. But then we would have little to offer our clients. At the opposite extreme, we could rely wholly on our clinical experience and assert confidently to our clients that the exercises we use will most certainly address their vocal problems, providing, of course, that our clients are diligent in their practice and adhere to all therapeutic recommendations. In this vein, we could proceed to explain, with clarity and assurance, the biomechanisms by which our exercises are effecting the desired vocal change. But unfortunately, if we took that approach, we would be misleading our clients. For no matter how certain we are that our clinical judgments are accurate, often our therapeutic outcomes are not what they appear to be. Perhaps an exercise may work, but not for the reasons that we think. Or perhaps, the client is doing something different from what we believe to be occurring. Or perhaps, we have been swayed by current dogma and our perception of events is biased.

Thus, we ask again, given the paucity of efficacy data, what are we to do in our therapies? The imperfect answer lies somewhere along the continuum between the extremes, of course. We can be cautious in our hypotheses of the biomechanical factors that drive our clients' voice problems, and the ways in which our exercises address those factors. We can qualify our discussions with clients, using words like beliefs, hypotheses, and assumptions. We can question our own beliefs about what is true and false, and continue to read the current literature in our own and related fields. We can refuse to become complacent. We can share our ideas, approaches, and exercises in an effort to help each other think along different pathways, explore new ideas, and continue to grow and improve, benefiting ourselves, our clients, and our field.