

# **Psychology of Voice Disorders**

*Second Edition*

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# CONTENTS

<i>Preface</i>	<i>ix</i>
<i>Acknowledgments</i>	<i>xiii</i>
<i>About the Authors</i>	<i>xv</i>
<i>Contributors</i>	<i>xix</i>
<b>1</b> Introduction	1
<i>Deborah Caputo Rosen, Johnathan Brandon Sataloff, and Robert Thayer Sataloff</i>	
<b>2</b> Anatomy and Physiology of the Voice	7
<i>Robert Thayer Sataloff and Deborah Caputo Rosen</i>	
<b>3</b> The Medical History and Physical Examination of the Disordered Voice Patient	23
<i>Robert Thayer Sataloff and Deborah Caputo Rosen</i>	
<b>4</b> Research Approaches in the Intersection of Voice Disorders and Psychology	33
<i>Miriam van Mersbergen</i>	
<b>5</b> Common Medical Diagnoses and Treatments in Patients With Voice Disorders: An Introduction and Overview	63
<i>Robert Thayer Sataloff, Mary J. Hawkshaw, and Johnathan Brandon Sataloff</i>	
<b>6</b> Psychiatric Manifestations of Medications Prescribed Commonly in Otolaryngology	113
<i>Steven H. Levy, Mona M. Abaza, Mary J. Hawkshaw, Robert Thayer Sataloff, and Reinhardt J. Heuer</i>	

<b>7</b>	Psychoactive Medications and Their Effects on the Voice <i>Johnathan Brandon Sataloff, Deborah Caputo Rosen, and Robert Thayer Sataloff</i>	123
<b>8</b>	Psychological Assessment of Patients With Voice Disorders <i>Deborah Caputo Rosen and Robert Thayer Sataloff</i>	151
<b>9</b>	Comorbid Psychopathology <i>Deborah Caputo Rosen, Johnathan Brandon Sataloff, and Stephanie Misono</i>	161
<b>10</b>	Voice Professionals: Special Psychological Considerations <i>Deborah Caputo Rosen and Robert Thayer Sataloff</i>	179
<b>11</b>	Psychogenic Dysphonia <i>Deborah Caputo Rosen, Maximillian H. Schmidbeiser, Johnathan Brandon Sataloff, Jesse Hoffmeister, and Robert Thayer Sataloff</i>	187
<b>12</b>	Response to Vocal Injury <i>Deborah Caputo Rosen, Johnathan Brandon Sataloff, and Robert Thayer Sataloff</i>	211
<b>13</b>	Trauma in Voice <i>Elisa Monti</i>	221
<b>14</b>	Response to Voice Surgery <i>Deborah Caputo Rosen and Robert Thayer Sataloff</i>	241
<b>15</b>	Neurological Disease Affecting the Voice <i>Shyam K. Akula, Johnathan Brandon Sataloff, Alyssa R. Rosen, Deborah Caputo Rosen, and Robert Thayer Sataloff</i>	249
<b>16</b>	Cancer and Voice <i>Johnathan Brandon Sataloff, Deborah Caputo Rosen, and Robert Thayer Sataloff</i>	273

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<b>17</b>	Stress Management	295
	<i>Deborah Caputo Rosen, Johnathan Brandon Sataloff, and Robert Thayer Sataloff</i>	
<b>18</b>	Performance Anxiety	305
	<i>Deborah Caputo Rosen, Johnathan Brandon Sataloff, and Robert Thayer Sataloff</i>	
<b>19</b>	Psychotherapeutic Management of Patients With Voice Disorders	321
	<i>Deborah Caputo Rosen, Johnathan Brandon Sataloff, and Robert Thayer Sataloff</i>	
<b>20</b>	Perceived Voice Loss in Professional Voice Users: Principles and Case Studies With Guided Drawing Assignments	363
	<i>Deborah Caputo Rosen and Robert Thayer Sataloff</i>	
	<i>Appendix I. Psychological Assessment Instruments</i>	413
	<i>Index</i>	419



# PREFACE

This book is intended as a text to guide mental health professionals called on to care for patients with voice disorders, as well as a resource for speech-language pathologists, physicians, and other members of the medical team who care for voice patients. As the voice is a central part of human communication and connection, voice disorders can have profound psychological impacts on many patients, and these can be particularly prominent in professional voice users. At one time, this population was considered to be limited to singers, actors, and a few other professionals. However, it is now clear that many others use their voices professionally and may have a substantial part of their self-concept, self-esteem, and personality invested in vocal quality, health, and endurance. In our medical practice, we conduct approximately 2,000 professional voice visits annually; and psychological factors are important to some degree in nearly all of them. A minority of those patients requires formal psychological therapy; but without evaluation that is sensitive to potential emotional consequences, most would go unrecognized and untreated. Unfortunately, this is the case in most medical centers, and even when patients with psychological problems are recognized and referred for therapy, too often they are treated by therapists without expertise in voice-related issues.

This book attempts to provide therapists with the special knowledge that they need. Although it is directed primarily at psychological professionals, it is also intended to be useful for voice pathologists, nurse clinicians, singing and acting voice specialists, laryngologists, and other physicians. In order to manage psychological problems in voice patients expertly, it is essential that psychological professionals caring for such patients understand the psychological impact of disorders of the voice and that clinicians be knowledgeable about many aspects of voice care provided by other disciplines. In addition to providing an introduction to relevant medical management of voice patients and

treatment strategies that have proven efficacious, current theories on the etiology and major identifying features of common voice-related psychological problems are presented in detail. This book is intended to introduce many of the medical subjects with which psychological professionals should be familiar. However, interested readers are encouraged to consult other sources<sup>1-3</sup> for more information and to affiliate with a medical voice care team to acquire practical knowledge and insights.

The first edition of the *Psychology of Voice Disorders* was the first textbook on this interdisciplinary subject, and this second edition 20 years later is still the only book dedicated to the topic. Omissions and shortcomings have become apparent over the years, and ongoing research by arts medicine and other health psychology specialists has offered contributions that have extended clinical practice. The book has been revised in an effort to share extensive clinical experience, provide updated information, and encourage further investigation.

In Chapter 1, the authors introduce the field of voice and the importance of knowledgeable interactions between psychological professionals and other voice team members, including laryngologists, speech-language pathologists, singing voice specialists, acting voice specialists, and others. Chapter 2 on anatomy and physiology of the voice and Chapter 3 on the history and physical examination in voice patients required only minor updates and provide core information for psychological professionals who do not have extensive experience working with voice patients and voice health care teams. Chapter 4 is new to the second edition. It reviews approaches to research involving psychology and voice disorders. It also highlights the fact that much of this research has been done by speech-language pathologists and that there is need for more research interest in voice among clinical psychologists and psychiatrists, and other psychological researchers. Chapter 5 has been updated and provides core information on common medical diagnoses and treatments in patients with voice disorders. This introduction and overview should be useful for speech-language pathologists and especially for psychologists who care for voice patients in their practices. In Chapter 6, the authors review psychiatric manifestation of medications prescribed commonly in otolaryngology for non-psychological conditions. Many have psychological side



effects that could be mistaken for psychopathology. Chapter 7 on psychoactive medications and their effects on the voice has been rewritten completely. This new, heavily referenced chapter provides the most comprehensive overview on this topic available. Chapter 8 on psychological assessment for patients with voice disorders has been updated substantially, and additional material on assessment and other topics has been added. Chapter 9 on comorbid psychopathology also has been rewritten extensively and expanded, as have Chapter 10 on special psychological considerations for voice professionals and Chapter 11 on psychogenic dysphonia. “Response to Vocal Fold Injury” (Chapter 12) also has been rewritten and updated, including current approaches to assessment and treatment. Chapter 13 on trauma in voice is new. It provides invaluable insights from a psychologist with exceptional experience in this complex problem. Chapter 14 on response to voice surgery required only moderate revision; but Chapter 15 on response to neurological disorders affecting communication has been rewritten almost entirely. It includes much greater depth and breadth from both psychiatric and neurological perspectives. The chapter on cancer and the voice (Chapter 16) also has been rewritten extensively. In the first edition, it addressed primarily cancers involving the vocal tract. That material has been updated; but it also has been supplemented with psychological and vocal consequences of non-laryngeal cancers, and with a broader discussion of the cancer experience for the patient and the patient’s family and friends, including effects on the voice. Chapters 17 on stress management, 18 on performance anxiety, and 19 on psychotherapeutic management of patients with voice disorders have been updated and supplemented with the perspectives of an additional author. The final chapter on perceived voice loss in professional voice users (Chapter 20) required only modest updates. This chapter retained the guided drawing assignments that were particularly popular among readers of the first edition.

The terms “psychological professional” and “psychotherapist” are used throughout the text to refer to caregivers from any of the mental health disciplines, including psychiatrists, psychologists, clinical social workers, psychiatric nurse clinical specialists, and mental health counselors. The term “arts medicine medical psychologist” is applied to any psychological

professional with advanced clinical training in arts medicine, including issues involving voice, foot, and ankle (dance); hand, elbow, and shoulder (instrumentalists); as well as other areas and disciplines. The authors are aware of and support the use of gender-neutral and preferred gender pronouns. In this book, we have chosen to retain the traditional he/she and his/her terminology merely for efficient reading but we intend it to be inclusive of all gender identifications.

It is our hope that this text will improve therapists' insight into and treatment of this patient population, as well as inspire additional research that advances this young and vital subspecialty of psychological care.

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In addition to her clinical, administrative and educational roles in nursing and behavioral health, Dr. Caputo Rosen designed and delivered interventions to promote health equity, language access, and patient safety in academic health care institutions as an executive and, later, as a consultant.

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In addition to her licensure as a registered nurse and clinical psychologist, Dr. Caputo Rosen is a certified practitioner of Ericksonian hypnosis and Neurolinguistic Programming. She serves on the Editorial Board of *Journal of Voice*. Dr. Caputo Rosen has authored or co-authored a textbook, numerous book chapters, and journal articles. She presents seminars, lectures, and courses on psychological components of patient safety, health maintenance, communication disorders, end-of-life care, and bereavement.



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*To our families*



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# 1

## Introduction

Deborah Caputo Rosen, Johnathan Brandon Sataloff,  
and Robert Thayer Sataloff

“Voice” is the newest subspecialty of otolaryngology. It evolved as an outgrowth of interest in the problems of professional singers and actors.<sup>1</sup> Voice medicine and hand medicine led the way for the development of Arts Medicine, a multispecialty discipline dedicated to the care of performers and other artists.<sup>2</sup> As Arts Medicine in general and voice medicine in particular have evolved, health care providers have learned a great deal from their involvement with performing artists, and all areas of Arts Medicine have advanced.<sup>3</sup>

Professional performers are not only demanding, but also remarkably self-analytical. Like athletes, performers have forced health care providers to change our definition of normalcy. Ordinarily, physicians, psychotherapists, and other professionals are granted great latitude in the definition of “normal.” For example, if a microsurgeon injures his or her finger, and the hand surgeon restores 95% of function, the surgeon-patient is likely to be satisfied. If the same result occurs in a world class violinist, that last 5% (or 1%) may mean the difference between renown and

obscurity. Traditionally, we have not been trained to recognize, let alone quantify and restore, these extremes of physical perfection. Arts medicine practitioners have learned to do so, especially in the field of voice. The process has required advances in scientific knowledge, clinical management, technology for voice assessment, voice therapy and training, medications and their therapeutic and adverse effects, and surgical technique. The drive to expand our knowledge also has led to unprecedented teamwork and interdisciplinary collaboration. As a result, voice care professionals have come to recognize important psychological problems commonly found in patients with voice disorders. Such problems were ignored routinely in past years. Now, they are sought out diligently throughout evaluation and treatment. When identified, they often require intervention by a psychological professional who is as specialized and knowledgeable about performers as other members of the voice care team.

Arts Medicine psychologists specializing in management of performance anxiety are becoming more common; but there are still very few psychological professionals with extensive experience in diagnosing and treating other psychological concomitants of voice disorders. The information in the second edition of this book has evolved over the course of more than three decades of close collaboration among voice team members including laryngologists, psychological professionals, nurses, speech-language pathologists, singing voice specialists, acting voice specialists, and others. The insights and recommendations contained in this volume have evolved from extensive clinical experience with professional voice users and other voice patients, experience with general psychotherapeutic practice, and applied clinical research. The understanding that we have gained regarding psychological problems associated with voice disorders apply not only to voice professionals, but also to nearly all voice patients.

The first task in treating any patient with a voice complaint is to establish an accurate diagnosis. This responsibility falls largely on the laryngologist. Diagnosis is achieved through a thorough, comprehensive history and physical examination, objective testing, assessment by other voice team members, and specialized examination.<sup>4</sup> It is essential for psychological professionals working with voice-disordered patients to be familiar with this process and to understand the nature and implications



of organic voice disorders. Clarification of organic dysfunction and medical prognosis is essential in the psychological management of these patients. Psychological responses in voice patients frequently do not seem initially to be proportional to the severity of voice complaints. In some people, even minor voice injuries or health problems can be very disturbing; and seemingly trivial problems can be devastating to some professional voice users. In some patients, they even trigger responses that delay return of normal voice. Stress, and fear of the evaluation procedures, often heighten the problem and may distort diagnostic assessment. So, the primary voice team is always alert for psychological problems separating minor issues that can be addressed through education and support by the voice team from those that might benefit from assessment by a psychologist or psychiatrist. Moreover, some voice disorders may be entirely psychogenic, necessitating professional psychological assessment as an essential component of the diagnostic evaluation.

Patients seeking medical care for voice disorders come from the general population. Consequently, a normal distribution of comorbid psychopathology can be expected in a laryngology practice. Psychological factors can be causally related to a voice disorder and/or consequences of the vocal dysfunction. Usually, they are interwoven. The essential role of the voice in communication of the “self” creates special potential for psychological impact. Severe psychological consequences of voice dysfunction are especially common in individuals in whom the voice is pathologically perceived to be the “self,” such as professional singers. However, the sensitive clinician will recognize varying degrees of similar reaction among most voice patients who are confronted with voice change or loss.

In all human beings, self-esteem comprises not only who we believe we are, but also what we believe we do. A psychological “double-exposure” exists for performers who experience difficulty in separating those two elements. The voice is in, is therefore of, indeed *is* the self. Even in 1990, Aronson’s extensive review of the literature provided an opportunity to examine research that supported the maxim that the voice is the mirror of the personality, both normal and abnormal.<sup>5</sup> Experience over the subsequent three decades has reinforced the importance of this association. Parameters such as voice quality, pitch, loudness,

stress patterns, rate, pauses, articulation, vocabulary, syntax, and content are described as they reflect life stressors, psychopathology, and discrete emotions. As early as 1985, Sundberg described the research of Fonagy<sup>6</sup> on the effects of various states of emotion on phonation. These studies revealed specific alterations in articulatory and laryngeal structures and in respiratory muscular activity patterns related to 10 different emotional states. Two and a half decades ago, a large number of works on voice and emotion were published, but only a few are referenced here.<sup>7</sup> Vogel and Carter<sup>8</sup> were farsighted enough to include descriptive summaries of the features, symptoms, and signs of communication impairment in their text on neurologic and psychiatric disorders. The mind and body are inextricably linked. Thoughts and feelings generate neurochemical transmissions which affect all organ systems. Therefore, not only can disturbances of body function have profound emotional effects, but disturbances of emotion can have profound bodily, vocal, and artistic effects.

The following chapters are designed to supply psychological professionals with the specialized background necessary to provide optimal treatment for professional voice users and all patients with maladaptive psychological responses to vocal dysfunction. They also offer information that should enhance interaction with laryngologists, speech-language pathologists, and other professionals involved with the patient's treatment. Psychotherapists interested in working with voice-disordered patients are encouraged to arrange an internship in the medical office of a laryngologist specializing in voice disorders. The insights gained in working with physicians, speech-language pathologists, singing teachers, and others in a center specializing in the care of voice patients are invaluable. Practically, this is not always possible; and this text is intended to disseminate the experience and clearly discuss the therapeutic approaches and recommendations that have arisen from our collaboration in one of the most active voice care centers. However, no book is a substitute for clinical observation, interdisciplinary teamwork, and patient contact. Psychological professionals who are seriously interested in pursuing this fascinating, specialized area are strongly encouraged to create a collaborative opportunity of supervised practice working with an active voice team.

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