

POSITION PAPER | PEER REVIEWED

Revisiting the Question: Music Therapists and Their Vocal Health

Sharon R. Boyle ^{1*}, Rebecca L. Engen ²

¹ Ohio University, Athens, Ohio, United States

² Alverno College, Milwaukee, Wisconsin, United States

* boyles2@ohio.edu

Received 18 September 2024; Accepted 3 March 2025; Published 1 July 2025

Editor: Rebecca West

Reviewers: Eric Waldon, Ericha Rupp, Maevon Gumble

Abstract

Vocal health issues were not a focus in the music therapy literature until the early 2000s. Beginning with a seminal article in 2008, the question of whether music therapists were at risk for voice problems, along with a comparison with literature about teachers with voice disorders was broached. Subsequent research articles, Continuing Music Therapy Education (CMTE) courses, conference sessions, online resources, and social media have emerged since that time indicating that vocal health and the use of clinical voice skills are of concern to the profession. This article discusses what resources and research have been generated 2000-2024, responding to the initial question posed and providing suggested paths for research and a more integrated music therapy education and training in clinical voice skills and vocal health for student and professional music therapists.

Keywords: vocal health; music therapy education; clinical voice skills; occupational harm

Vocal health for music therapists is a topic that remained unconsidered in the literature until the early 2000s. At that time, there were music therapy clinicians who centered their practice around voice, such as Uhlig (2006), yet the American Music Therapy Association (AMTA) Professional Competencies only minimally referenced necessary clinical voice skills. The Professional Competencies document was revised a little over 10 years ago and the expectations for voice skills have not significantly changed (AMTA, 2013). Since the mid-2000s, music therapy sessions, webinars, and Continuing Music Therapy Education (CMTE) courses addressing vocal health needs for music therapists have become increasingly available through conferences and online opportunities. The music therapy community regularly expresses concerns about vocal challenges in clinical work, posing

questions and seeking solutions on social media platforms. The authors have also observed a growing number of sessions about music therapists' vocal health at state, regional, and national conferences. Over the past 20 years, there have been some published research articles and books about vocal health and clinical voice skills, with these publications appearing to become more prominent approximately six years ago. There is a need to examine the literature about music therapists' own vocal health to determine what is currently needed to promote sustainable professional work in all settings.

The use of voice is an essential skill for music therapy training in clinical practice and is included in the AMTA Professional Competencies (2013) and Certification Board for Music Therapists (CBMT) Board Domains (2020). Music therapy articles about voice in the field have tended to focus on voice use in clinical work as a technique or approach, and less about the vocal demands and vocal health of the music therapist (Austin, 2009; Baker & Uhlig, 2011; Bradt et al., 2016; Engen, 2005; Iliya, 2011; McHugh et al., 2012; Norris, 2019; Schick, 2021; Uhlig, 2006; Uhlig, 2009). Baker and Uhlig (2011) provided an extensive overview of research in voicework for music therapy clinical practice, which demonstrated an increased focus on vocal music therapy and voicework that was also missing from the professional literature. In reviewing more recent literature from the United States, vocal health in music therapy has been the focus of a variety of theses and dissertations across programs of all sizes and with varied clinical approaches (Cho, 2022; Larsen, 2020; Loewy, 2015; Manternach, 2015; Murray, 2015; Parkinson, 2016; Rush, 2020). The purpose of this article is not on how to work with clients with vocal health needs, which may require additional training or referral, but rather on the music therapy professional's own vocal health and clinical voice skills in context of their work demands.

Where We Were

Music therapy education in the mid-1990s, and in the years prior, had not emphasized clinical voice skills beyond the basic competencies of singing in tune, sight singing accurately, singing and speaking with a pleasant vocal tone, being able to lead others in singing, learning a diverse repertoire of songs, and being able to compose or extemporaneously create a song (vocally or instrumentally). Competency-based education is central to music therapy education in the United States, not specific coursework. The AMTA Professional Competencies (2013) have not changed in this area since they were developed after the 1998 unification of the National Music Therapy Association and the American Association for Music Therapy (AMTA, 2024). While there was a growing community of voice-based music therapy clinicians emerging in the early to mid-2000s (Uhlig, 2009), music therapy coursework did not seem to address unique vocal demands of the music therapist and there was minimal research that explored the extent to which music therapists used their voices in their professional work.

Vocal health literature for teachers, including music educators, emerged in the early 2000s and this was research that formed the question about whether music therapists were also at risk of voice problems (Boyle & Engen, 2008). A web-based, self-directed resource called the Voice Academy (Hansen, 2004) was launched to provide teachers with needed information to manage the vocal demands of their jobs. This resource is still available online today, sponsored by the University of Iowa (2003). In addition, while there was some literature related to aging, menopause, and hormones as related to the voice available in the early 2000s (Brodnitz, 1971; Chatwin, 2002; Clair & Memmott, 2009; The University of Iowa, 2003), there was no known literature about gender affirming voicework in music therapy.

In 2008, a seminal article posed the question about whether music therapists were at risk for voice disorders because of their work (Boyle & Engen, 2008). This article focused

on resources centered in the United States. At the time, no known research had been conducted about vocal health in music therapists, nor the potential impact the professional work might have on the music therapy professional's vocal health and wellness. Boyle and Engen drew upon the education literature for teachers, comparing occupational hazards, vocal fatigue, and varied environments of teaching to that in music therapy. In addition, the article categorized music therapists as professional voice users. The minimal professional competencies that mentioned voice were presented and future research was encouraged in the areas of reviewing educational practices and training, determining prevalence of voice problems in music therapists, developing prevention strategies, and exploring potential work hazards that may be contributing to vocal health issues for music therapists.

Prior to the release of the article, a 5-hour CMTE course was led by the authors at the 2004 conference of the AMTA in Austin, TX. This CMTE was developed by the authors after they connected on the topic in November 2003 at the AMTA national conference in Minneapolis, Minnesota. This session had over 30 participants who expressed concern about their vocal well-being, citing specific issues related to allergies, asthma, and reflux disease, and not knowing how to promote vocal health in their professional practice. Many of these participants considered voice a secondary instrument, but even those with extensive vocal training expressed concerns.

At another AMTA national conference in November 2007, a research poster was presented based on the results of descriptive research about vocal health among music therapists that was completed the prior summer (Engen & Boyle, 2007). Surveys were sent to 750 professional music therapists (randomized) and 349 participants responded. With a 51% response rate, results indicated 83% scored within the range for a moderate handicap of the voice using the Vocal Handicap Index (VHI; Jacobson et al., 1997). There was no difference between new and seasoned professionals, but there was a significant difference between those practicing with a bachelor's degree and those with advanced credentials having lower incidence ($p < .05$). Males, only 9.34% of the sample, scored lower (less handicap) than females. There was a significant difference in scores between persons whose primary instrument was symphonic and those whose instrument was voice ($p < .013$) and with those who played another instrument ($p < .004$), with voice having lower scores in each case. At the end of the survey participants were offered a chance to make additional comments about their voice. A voluntary response was given by 48%, yielding valuable insights. For example, the number of persons identifying with a voice disorder earlier in the survey was 7.6%. When the comments of individuals were compared to self-identified diagnostic labels, the incidence rose to 18%. Themes identified as contributing factors for vocal health concerns included the routine need for projection, lack of hydration, fatigue, and holistic habits (Engen & Boyle, 2007).

A more recent literature review of vocal health implications for music teachers highlights additional research from the early-mid 2000s and suggests additional support for the need for vocal health considerations for professional voice users (Hackworth, 2023; Manternach & Schloneger, 2021; Manternach, 2015). Early music therapy vocal health research was shared at subsequent conferences to further the conversation brought to light by the often cited 2008 article by Boyle and Engen. The authors began talking to colleagues about voice use and habits, looking at curriculum, and continued offering conference sessions echoing these discussions and offering suggestions to those experiencing vocal challenges. Timmermans et al. (2005) studied a multifaceted 18-month program for vocal training, pedagogy, and hygiene. Their results emphasized the need for well-organized voice training programs that can be accomplished in 9 months. Their model was successful in some areas at 9 months, but others took 18 months and the impact of vocal hygiene (e.g., smoking, drinking, late night eating) never achieved the change they sought (Timmermans et al., 2005). A study by Baker and Cohen (2016) sought to describe the university vocal

training and vocal health of music educators and music therapists, finding that more than 50% of participants reported singing at least 50% of the workday. Their conclusion suggested that university training could help prevent vocal abuse and misuse among music therapists and educators.

Where We Are Now

In 2018, a new book on functional voice skills was released that featured an entire chapter on vocal health for music therapists (Schwartz et al., 2018). This sparked further interest in the topic. Bingham (2019) and Bingham et al. (2022) examined music therapy clinicians' specific voice use to define the therapeutic singing voice as part of clinical work. The development of gender affirming voicework by Gumble (2019) was also an important expansion in the music therapy voice-based literature providing an autoethnographic perspective and information on gender affirming voicework. The scope of this literature review centers on vocal health of music therapists and the unique demands of the work on the physical mechanism. While gender affirming voicework can center on both training behavioral voice shifts for people of all genders and/or navigating the impacts of hormone therapy on transmasculine voices, this paper focused on the impact of hormones, particularly for music therapists. The complexities of transfeminine and transmasculine vocal needs are important and similarly underrepresented in music therapy literature. A recent phenomenological interview study by music therapy undergraduate students sought experiences of one's voice during hormone replacement therapy and recommendations for other individuals in treatment as well as for vocal educators (Artman & Smurawa, 2024). All participants commented that it would have been helpful to have someone available with knowledge about singing, vocal health, and the effect of transitioning on the voice. They sought reassurance that they were not damaging their voice and that their dysphoria and vocal range limitations would improve. They all said it took about a year of taking testosterone before feeling like their voice matched their gender (Artman & Smurawa, 2024).

A clinical musicianship chapter in a music therapy textbook included a section on clinical voice skills and considerations about vocal health in practice (Boyle, 2018). Waldon and Isetti (2018) completed a descriptive study examining voice disorders and related risk factors for music therapists. An article on occupational health and well-being, taking a broader perspective by including physical challenges of music therapy work, but also addressing vocal health considerations was released by Gooding (2018). This, alongside an unpublished study completed by Engen and Boyle (2018) that examined music therapists' perceptions of vocal health and challenges, helped to clarify that music therapists do, in fact, seem to be prone to voice disorders and/or voice issues related to their work. Engen and Boyle (2018) presented their study in a research poster at the AMTA's Southeast Regional Conference. This study reflected similar results to their first descriptive study (Engen & Boyle, 2007) presented in a research poster at the AMTA national conference and closely matched results found by Waldon and Isetti (2018) whose study took place about 2 years after the data collected by Engen and Boyle (2018).

A separate study was shared at the Great Lakes Regional Music Therapy Conference in 2020 that examined satisfaction with vocal preparation for clinical practice in the field of music therapy (Engen & Boyle, 2020). In this study 51.2% of respondents in a convenience sample of students, faculty, and recent graduates of the authors' music therapy programs expressed concern about their voice quality or ability to use it effectively in their personal or professional life. In order, emergent themes were overuse, training, integration of training and clinical application, age related decline, and confidence. Additionally, 53.5% of respondents felt their vocal training as a music therapy student adequately prepared

them for the music they were currently making with clients or other vocal demands of the profession. Four themes emerged in analysis of all responses that showed the importance of technique, style, sufficiency of training and preparation, and clinical transfer of training to their work (Engen & Boyle, 2020).

These descriptive studies help to demonstrate the impact of various challenges of music therapy work (fatigue, overuse and voicing time, clinical voice training, etc.) on vocal health and that these have existed over at least 10 years (Engen & Boyle, 2007, 2020; Waldon & Isetti, 2018). Specific research on voice use and vocal dosing has underscored the need to examine the vocal demands on music therapy students and music therapy professionals (Manternach, 2015; Manternach & Schloneger, 2021). In addition, Meashey's (2021) book *The Use of Voice in Music Therapy* further deepened the methodology of clinical voice skills and provided a new resource for educators.

More recently, the AMTA Commission on the Education and Clinical Training of 21st Century Music Therapists shared a report after years of research and discussion (2024). In this report there were recommendations to decrease the focus on Western classical training in music for music therapy students, instead increasing focus on commercial music styles and improvisation, and emphasizing functional and foundational skills on music instruments over a focus on a primary instrument. Furthermore, the report recommended a shift in focus for lessons and ensembles from performance-based to clinical and therapeutic application (AMTA Commission, 2024). While there was discussion of the need to develop clinical musicianship, there was no strong recommendation to connect these skills in practical ways within clinical settings. Vocal training may be most beneficial to music therapy students, particularly when the focus is on developing vocal stamina, range, sensitivity, resonance, and flexibility using diverse musical styles that they might encounter in their clinical work. Music therapy faculty can foster strong relationships and communication with voice faculty in universities and colleges to clarify the vocal needs of music therapy students in their future work. In some larger universities, graduate teaching assistants may be teaching voice to music therapy students without knowledge about the unique vocal demands in music therapy. An examination into how graduate teaching assistants are being supported in teaching music therapy students would be beneficial. Voice teachers will hopefully continue to adapt and utilize versatile vocal pedagogy that helps to develop solid vocal technique while including diverse musical styles.

For this article, a dozen conference sites and journals from around the globe including Music Therapy Today from the World Federation of Music Therapy, excluding publications from the United States, were searched for uses of voice in therapy as well as discussion of educational practices or health and maintenance of the instrument. Vocal techniques and applications, including but not limited to vocal psychotherapy as introduced by Austin (2009), abound in the literature. Only one article related to vocal training for music therapists was found and nothing related specifically to health.

Based on the recommendations and findings of the current authors, the transfer of learning and assessment of clinical musicianship needs to be further developed. In the area of clinical voice skills, there is a need to develop specificity in teaching beyond just a pleasing tone, good sense of pitch and learning varied styles and genres of music as required by the AMTA Professional Competencies (2013). Teaching and engaging in healthy vocal technique while meeting clinical needs includes also understanding interpretive qualities of the music, projecting as needed in various spaces and with groups, the ability to support a range of dynamic levels, being cognizant of posture, and remaining hydrated in varied environments. Adaptability in clinical sessions for specific therapeutic outcomes while sustaining vocal health also needs to be included in education and clinical training. This may include knowing when and how to add amplification, how to shift the environment, how and when to incorporate vocal improvisation in meaningful ways and demonstrating voice adjustments to reflect emotional or psychological changes.

Saulnier (2022), in the *Canadian Journal of Music Therapy*, provided a philosophical model for vocal training that could meet the needs of music therapists. In this article, Canadian music therapy education practices for vocal preparation of music therapists were considered. Acknowledging the benefits of adapted vocal training, Saulnier seemed to accept that this is indeed something of concern for our clinicians. Then, dividing the voice into three aspects for development, vocal identity, emotional elements, and physical structure and production, Saulnier put together a model to provide directional support for educators to better meet various developmental needs for music therapists during their academic and clinical training to prepare them for professional workplace demands.

The model of vocal explorations proposed by Saulnier (2022) included four steps. The first was instinctive vocal exploration, improvisation and exercises with the aim of sensing and feeling rather than understanding or evaluating. The next step was physical voice exploration to understand the anatomy and explore how that affects the sound. When the student is ready, emotional vocal exploration begins, considering their own reactions to the use of their voice. This step also reflected on identity and one's emotional relationship with their voice. "Deepening one's vocal technique and one's connection with one's voice in tandem can stimulate the music therapist's desire to better understand the vocal instrument and all the colors the voice can [produce]" (p. 68 [Google translate]).

The final stage in the model proposed by Saulnier (2022) was free speech. The notable thing about this is the inclusion of clinical scenarios to reflect on and integrate the physical demands with emotional experiences. This may include things like body position, range, volume, tone, style, personal response, or adjustments to the client's response. The dynamic and reflexive understanding of the voice, in theory, would provide the best client care and sustainability of the instrument for the clinician. The author suggested implementation of the model in conjunction with recommendations from Bingham (2019) and Bingham et al. (2022) and learning tools from Schwartz et al. (2018). This specific protocol recommendation for the profession in terms of creating a standardized practice of preparing students vocally for clinical practice is shared here, in hopes that it will be more widely considered. The lack of clinical carry-over in most curricula today is troubling and may create issues for future professional music therapists if not addressed.

Where We Need to Go

We need to prepare clinicians for whatever clinical situations they may encounter as a professional. As experienced clinicians we know that vocal challenges will occur, including the amount of voice use often required daily with the work. With more focused effort in preparing students vocally, such as the use of clinical scenarios and specific vocal practices within these situations, the readiness for the profession and healthful practice for longevity in the field may be improved. Manternach and Schloneger (2021) completed a study with 7-days of vocal dosimeter readings with college students from varied majors. Their conclusion stands out: "Preservice music therapists and preservice music teachers may experience extreme increases in vocal load when they enter the field. Absent training protocols, these increases could be detrimental to their vocal health and long-term viability as practitioners" (p. 328.e1).

The original question posed by Boyle and Engen (2008) was whether music therapists are at risk for voice problems. The affirmative answer to this question is supported by the current authors' review of the research literature, research posters, workshops, presentations and other information available online about the impact of voice use, voice training, and vocal health in music therapy over the past twenty years. The training model proposed by Saulnier (2022) is one potential direction for restructuring the way students are prepared and assessed for adaptive vocal training and clinical application of their voice.

No known research testing of this model in action is known and may be a good place to begin.

With ongoing access to basic information about vocal health, new questions arise. What are the current needs for music therapists related to their vocal health in clinical work today? Do these needs differ across the globe, or are there commonalities? Does the existing literature and research meet the needs of music therapists? Has the literature helped support change in education and coursework or clinical training, particularly in the United States? Beyond the music therapist's own vocal health, for the advanced clinician who may be interested in working with individuals who have more complex vocal needs, such as vocal paralysis or transfeminine and transmasculine vocal development, what additional training and education might be necessary? How much of this vocal clinical work is within our current scope of practice? Where is the line for making a referral—it is likely different from the line for seeking professional medical advice for ourselves. Do other related professionals learn how to address their own vocal health needs as part of their education and training?

It is interesting that the only pedagogical references to vocal health or support in music therapy curriculum noted in our global search were from North America. There is a need for collaborative research looking into vocal strain changes with common music therapy tasks, such as accompanying oneself while sitting on the floor, singing and holding an instrument out over bed rails, or singing and dancing around the room. In addition, it may be beneficial to further study the impact of more organized voice training programs specifically for music therapists (Timmermans et al., 2005). To study environmental factors that can impact voice use, music therapists could use free apps on a device to gather and track dB levels of ambient noise in their clinical spaces before beginning a session. Having a large sample of music therapists log environmental changes and their reasons for health and safety may be beneficial clinical research. Examples include studying the impact of using a foot or knee support for guitars, routinely closing or covering windows, moving or removing furniture, utilizing a microphone or amplification for large spaces or long days, making a recording of a song to use when repeated many times throughout the day, or other physical tasks that may take a toll on singing. How we use our voices in our off time matters too, so training on awareness of hormonal changes, medication effects, sleeping and eating habits in addition to vocal dose, environment, and stylized singing techniques must be addressed and integrated into lifestyle and daily habits while still a student. A potential longitudinal study evaluating vocal health of music therapists from internship or early career through several years of clinical work may help improve understanding of the impact of clinical work on music therapists' voices, which are central to their work.

Conclusion

Over the past two decades, there has been some development in the research literature related to clinical voice skills and vocal health needs of music therapists. Despite the AMTA Professional Competencies (2013) remaining unchanged about the expectations of voice use in music therapy, music therapists are professional voice users with a high demand placed on the use of voice in their work. The expansion of music styles and genres and the cultural considerations that are needed in clinical work require unique vocal pedagogy and consideration of vocal stamina and hygiene practices. With the anticipated release of revised Professional Competencies from the American Music Therapy Association, there will be a need to evaluate any changes to voice-based expectations. The work group for revising the competencies stated an intention for the new drafted competencies to include a stronger focus on functional and clinical musicianship than the current competencies.

The CBMT Board Certification Domains (2020) do include some specific voice skills, but there are still limitations in the language. There is an increasing need for music therapists to better navigate voice use and develop clinical voice skills for therapeutic outcomes. In addition to the need to re-evaluate the AMTA Professional Competencies (2013) and the CBMT Board Certification Domains (2020), discrepancies in vocal health information may exist across music therapy education programs. An in-depth look at how proficiencies are taught and assessed at a variety of schools was not found in the literature.

Sixteen years ago, Boyle and Engen (2008) stated, “If music therapists further understood the impact of vocal issues upon their clinical work, they might better understand the impact of these same problems upon the clients they serve” (p. 49). In that article, the authors stressed the need for exploring educational practices and curriculum, examining voice problems that may exist among music therapy professionals, the need to determine work-related hazards that could affect music therapists’ vocal health, and the importance of formulating strategies to specifically prevent voice problems (Boyle & Engen, 2008).

Since then, the literature has provided some insights into occupational risks (Gooding, 2018; Manternach & Schloneger, 2021) and voice problems that exist among music therapists (Engen & Boyle, 2007; Engen & Boyle, 2018; Larsen, 2020; Murray, 2015; Waldon & Isetti, 2018). There remains a need for more research and more action that addresses common vocal concerns for music therapists related to specific work demands and environmental concerns. Extensive voice use, prolonged singing out of comfortable ranges, the Lombard Effect (one’s tendency to automatically increase vocal effort when speaking in a noisy ambient space), vocal strain related to postural issues due to positioning needed in diverse clinical environments, lack of vocal technique to sing in diverse styles in a healthy manner, and continued lack of amplification are consistent issues. Another concern is the general need for music therapists to understand how their work voice is affected by lifestyle choices and concerns may not be solely attributable to their work.

This is a call to focus on: 1) the inclusion of vocal health practices and their application to clinical work embedded into the music therapy educational curriculum in intentional ways; 2) assessment of vocal habits in practicum and internship experiences to build knowledge and safety among new professionals; and, 3) continued education for clinicians’ health to meet the needs of those we serve. These can help music therapy professionals provide relevant and effective music therapy treatment while maintaining their own vocal health and well-being. The increased demand of voice-based music therapy and voicework also supports the need for increased focus on vocal health strategies and considerations as part of overall music therapy education. By prioritizing vocal health and development of clinical voice skills in the music therapy profession, we may help retain healthy professionals and expand the treatment options available in music therapy in the future.

Acknowledgements

We would like to acknowledge the contributions provided by the following readers of this article pre-submission: Dr. Yasmine Iliya, Dr. Lisa Gallagher, Mary Stryck, M.S., MT-BC, and Michael B. Boswell, M.M.

About the Authors

Sharon R. Boyle, D.H.Sc., LPMT, MT-BC, is Associate Professor of Music Therapy, Director of Arts in Health, and Program Director for the Master of Applied Arts in Health program at Ohio University. A co-author of the book *Functional Voice Skills for Music Therapists*, she

has written chapters in several music therapy textbooks on the role of voice in clinical musicianship along with topics related to music therapy education curriculum and assessment. Recently, her research has explored relationships, growth, and connection for mid-life women who sing together.

Rebecca L. Engen, PhD, MT-BC, is Professor and Director of Graduate Music Therapy and Doctorate in Education Advisor for Alverno College. She has presented internationally, often on the topic of voice use in clinical practice and strategies for maintaining vocal health in a demanding profession. Also an accomplished editor and writer, she has published in multiple journals and is a co-author of the book *Functional Voice Skills for Music Therapists*.

References

- American Music Therapy Association. (2013). *Professional competencies*.
<https://www.musictherapy.org/about/competencies/>
- American Music Therapy Association. (2014). *2014 Annual report*.
<https://www.musictherapy.org/assets/1/7/annualreport14.pdf>
- American Music Therapy Association. (2024). *Music therapy historical review*.
https://www.musictherapy.org/about/music_therapy_historical_review/
- AMTA Commission on the Education and Clinical Training of 21st Century Music Therapists. (2024). *The final report of the AMTA Commission on the education and clinical training of 21st century music therapists*. <https://amta-u.thinkific.com/courses/commission-on-the-education-and-clinical-training-of-21st-century-music-therapists>
- Artman, M., & Smurawa, S. (2024). *Transgender singers on testosterone replacement therapy: An interview study* [Unpublished manuscript]. Department of Fine Arts, Alverno College.
- Austin, D. (2009). *The theory and practice of vocal psychotherapy: Songs of the self*. Jessica Kingsley.
- Baker, F., & Uhlig, S. (2011). *Voicework in music therapy: Research and practice*. Jessica Kingsley.
- Baker, V. D., & Cohen, N. (2016). University vocal training and vocal health of music educators and music therapists. *Update: Applications of Research in Music Education*, 35(3), 46–54. <https://doi.org/10.1177/8755123316638517>
- Bingham, M. C. (2019). Defining the therapeutic singing voice: An analysis of four music therapists' clinical work. *Music Therapy Perspectives*, 37(2), 176–186.
<https://doi.org/10.1093/mtp/miz001>
- Bingham, M. C., Schwartz, E. K., & Meadows, A. (2022). Defining the therapeutic singing voice: Further examination of the everyday singing practices of music therapists. *Music Therapy Perspectives*, 40(1), 3–13. <https://doi.org/10.1093/mtp/miab023>
- Boyle, S. R. (2018). Voice—a vital instrument in music therapy. In A. Knight, A. B. LaGasse, & A. A. Clair (Eds.), *Music therapy: An introduction to the profession* (pp. 72–76). American Music Therapy Association.
- Boyle, S., & Engen, R. L. (2008). Are music therapists at risk for voice problems? Raising awareness of vocal health issues in music therapy. *Music Therapy Perspectives*, 26(1),

- 46–50. <https://doi.org/10.1093/mtp/26.1.46>
- Bradt, J., Norris, M., Shim, M., Gracely, E. J., & Gerrity, P. (2016). Vocal music therapy for chronic pain management in inner-city African Americans: A mixed methods feasibility study. *Journal of Music Therapy*, 53(2), 178–206. <https://doi.org/10.1093/jmt/thw004>
- Brodnitz, F. S. (1971). Hormones and the human voice. *Bulletin of the New York Academy of Medicine*, 47(2), 183–191. <https://pmc.ncbi.nlm.nih.gov/articles/PMC1749777/>
- Certification Board for Music Therapists. (2020). *Board certification domains*. <https://www.cbmt.org/resources/>
- Chatwin, F. L. (2002). 28 Days and the female voice. *Classical Singer*, 26–29. <https://www.csmusic.net/content/articles/vocal-health/>
- Cho, A. (2022). *Functional music proficiency exams: A survey of music therapy educators* [Master's thesis, Texas Woman's University]. Texas Woman's University ProQuest Dissertations Publishing, 30381409. <https://www.proquest.com/dissertations-theses/functional-music-proficiency-exams-survey-therapy/docview/2784394216/se-2>
- Clair, A. A., & Memmott, J. (2009). *Therapeutic uses of singing with older adults* (2nd ed.). American Music Therapy Association.
- Engen, B., & Boyle, S. R. (2020, March 6). *From classical to practical: Applying vocal talent in clinical practice* [Conference session]. Great Lakes Region of the American Music Therapy Association Regional Conference, Schaumburg, IL, United States.
- Engen, R. L. (2005). The singer's breath: Implications for treatment of persons with emphysema. *Journal of Music Therapy*, 42(1), 20–48. <https://doi.org/10.1093/jmt/42.1.20>
- Engen, R. L., & Boyle, S. R. (2007, November 17). *A first look: A survey of the current vocal health status among practicing music therapy clinicians* [Poster Presentation]. 9th Annual Conference of the American Music Therapy Association, Louisville, KY, United States.
- Engen, R. L., & Boyle, S. R. (2018, March 29–31). *A descriptive analysis of the perceived vocal health and vocal challenges for music therapists* [Poster presentation]. Southeastern Region of the American Music Therapy Association Regional Conference, Chattanooga, TN, United States.
- Gooding, L. (2018). Occupational health and well-being: Hazards, treatment options, and prevention strategies for music therapists. *Music Therapy Perspectives*, 35(2), 207–214. <https://doi.org/10.1093/mtp/miw028>
- Gumble, M. (2019). Gender affirming voicework: An introduction for music therapy. *Voices*, 19(3). <https://doi.org/10.15845/voices.v19i3.2661>
- Hackworth, R. S. (2023). Vocal health implications for music teachers: A literature review. *National Association for Music Education*, 42(1), 12–21. <https://doi.org/10.1177/87551233211061119>
- Iliya, Y. A. (2011). Singing for healing and hope: Music therapy methods that use the voice with individuals who are homeless and mentally ill. *Music Therapy Perspectives*, 29(1), 14–22. <https://doi.org/10.1093/mtp/29.1.14>
- Jacobson, B. H., Johnson, A., Grywalski, C., Jacobson, G., Benninger, M. S., & Newman, C. W. (1997). The Voice Handicap Index (VHI): Development and validation. *American Journal of Speech-Language Pathology*, 6(3), 66–70. <https://doi.org/10.1044/1058-0360.0603.66>
- Larsen, B. (2020). *Examining music therapists' singing and playing-related injuries: A collective case study* [Master's thesis, Saint Mary-of-the-Woods College]. Woods

- Scholars. https://smwc.hykucommons.org/concern/etds/a9b30315-c299-45cc-96ac-130cda041c9c?parent_query=examining_music_therapists&highlight=true
- Loewy, J. (2015). NICU music therapy: Song of kin as critical lullaby in research and practice. *The Neurosciences and Music*, 1337(1), 178–185. <https://doi.org/10.1111/nyas.12648>
- Manternach J. N. (2015). Voice use and self-reported voice health of preservice music educators. *Journal of Music Teacher Education*, 24(3), 53–66. <https://doi.org/10.1177/1057083714525176>
- Manternach, J. N., & Schloneger, M. J. (2021). Vocal dose of preservice music therapists, preservice music teachers, and other undergraduate students. *Journal of Voice*, 35(2), 328.e1–328.e10. <https://doi.org/10.1016/j.jvoice.2019.09.008>
- McHugh, L., Gardstrom, S., Hiller, J., Brewer, M., & Diestelkamp, W. S. (2012). The effect of pre-meal, vocal re-creative music therapy on nutritional intake of residents with Alzheimer's disease and related dementias: A pilot study. *Music Therapy Perspectives*, 30(1), 32–42. <https://doi.org/10.1093/mtp/30.1.32>
- Meashey, K. (2021). *The use of voice in music therapy*. Barcelona.
- Murray, L. H. (2015). *A phenomenological investigation of the experience of music therapists with vocal health issues* [Master's thesis, Molloy College]. Digital Commons. <https://digitalcommons.molloy.edu/cgi/viewcontent.cgi?article=1009&context=etd>
- Norris, M. (2019). *Between lines: A critical multimodal discourse analysis of Black aesthetics in a vocal music therapy group for chronic pain* [Doctoral dissertation, Drexel University]. Open Access Theses and Dissertations. [https://www.proquest.com/docview/2285147209?pq-origsite=gscholar&fromopenview=true&sourcetype=Dissertations & Theses](https://www.proquest.com/docview/2285147209?pq-origsite=gscholar&fromopenview=true&sourcetype=Dissertations%20&Theses)
- Ostrem, J. (2004). On the voice: Voice academy opens its virtual doors to support the vocal health of teachers. *The Choral Journal*, 45(2), 53–56. <http://www.jstor.org/stable/23555354>
- Parkinson, M. (2016). *Vocal problems of music therapists in North America: A survey* [Master's thesis, Concordia University]. Spectrum Research Repository. <https://spectrum.library.concordia.ca/id/eprint/980974/>
- Rush, E. (2020). *A multiple case study of music therapists' perceptions of vocal health* [Master's thesis, University of Kentucky]. Open access theses/dissertations. <https://doi.org/10.13023/etd.2020.381>
- Saulnier, V. (2022). La formation vocale des musicothérapeutes: Une réflexion philosophique [Vocal training for music therapists: A philosophical reflection]. *Canadian Journal of Music Therapy*, 28, 57–72. <https://cjmt-rcm.musictherapy.ca/index.php/cjmt-rcm/article/view/57/63>
- Schick, S. (2021). The music therapist's experience of the client-therapist relationship in improvisational voicework: An interpretive phenomenological inquiry [Master's thesis, Molloy College]. Molloy College ProQuest Dissertations & Theses, 28643895. <https://digitalcommons.molloy.edu/etd/115/>
- Schwartz, E., Boyle, S., & Engen, R. (2018). *Functional voice skills for music therapists*. Barcelona.
- Timmermans, B., DeBodt, M. S., Ven der Heyhning, P. H., & Wuyts, F. L. (2005). Analysis and evaluation of a voice-training program in future professional voice users. *Journal of Voice*, 19(2), 202–210. <https://doi.org/10.1016/j.jvoice.2004.04.009>
- Uhlig, S. (2006). *Authentic voices authentic singing: A multicultural approach to vocal music*

therapy.

Uhlig, S. (2009). Voice forum: The voice as a primary instrument in music therapy. Report from a symposium at the XII World Congress of Music Therapy, Buenos Aires, Argentina, 22–26 July 2008. *Voices: A World Forum for Music Therapy*, 9(1). <https://doi.org/10.15845/voices.v9i1.365>

The University of Iowa. (2025). *Voice academy*. <https://voice-academy.uiowa.edu/>

Waldon, E., & Isetti, D. (2018). Voice disorders and related risk factors among music therapists: Survey findings and strategies for voice care. *Music Therapy Perspectives*, 37(1), 37–44. <https://doi.org/10.1093/mtp/miy010>