Vocal Problems of Music Therapists in North America: A Survey

Mary Parkinson

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By: Mary Parkinson

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Signed by the final Examining Committee:

_____ Chair
Sandra L. Curtis

_____ Examiner
Deborah Seabrook

_____ Examiner
Laurel Young

_____ Supervisor
Sandra L. Curtis

Approved by _____
Yehudit Silverman, Chair of the Department of Creative Arts Therapies

_____ 2016 _____
Rebecca Taylor Duclos, Dean of the Faculty of Fine Arts

ABSTRACT

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Mary Parkinson

A music therapist's voice is often an invaluable tool used in practice. Although maintenance and care of the voice appears to be an issue for music therapists, little research has been conducted to explore this topic. Research in other fields has shown symptoms, causes, and prevention measures for vocal problems as experienced by other occupational voice users. The purpose of this study was to investigate the prevalence and perceived symptoms and causes of vocal problems as they occur in credentialed North American music therapists. E-mails were sent to 6880 credentialed North American music therapists and 735 participants (response rate of 10.7%) completed an online survey that examined their use of voice, their self-reported experiences with vocal problems, the possible physiological symptoms, etiology, and psychological symptoms associated with the vocal problem, and the types of voice and vocal health educational formats they had partaken in. Results indicated that over half of respondents (59.5%) reported using their voice for 22 or more hours a week and that approximately half of respondents reported having experienced a vocal problem (53.9%). The most commonly reported physiological symptom was dysphonia, and the most commonly reported psychological symptom was dissatisfaction with the vocal component of music therapy work. Components of vocal misuse and vocal overuse were also explored, with singing in a loud environment, excessive singing, and inadequate preparation emerging as the most commonly reported. Finally, over 90% of respondents reported they felt vocal problems were a somewhat or very important issue for music therapists. Potential implications for the research as well as areas for future research are discussed.

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Table of Contents

List of Tables

Chapter 1. Introduction

This survey study sought to examine the prevalence and perceived symptoms and causes of vocal problems as they occur in North American music therapists. The voice is an important and often-used instrument in music therapy. Various vocal approaches, techniques, and interventions have been designed that require music therapists to use their voices extensively (Aldridge, 2005; Austin, 2008; Baker, 2011; Baker & Uhlig, 2011; Benniger, 2010; Chong, 2011; Dileo, 2011; Edwards, 2011; Kondo, 2011; Loewy, 2011; Nakkach, 2005; Newman, 1998; Oddy, 2011; Ridder, 2011; Shannon, 2006; Shoemark, 2008; Summers, 2011; Tamplin, 2009; Thane, 2011; Uhlig, 2006; Uhlig, 2011; Wise, 2007). Although specific competencies will be further explored in the related literature section, it is important to note here that the Canadian Association for Music Therapy (CAMT) has listed five specific vocal skills as recommended competencies for music therapists (CAMT, n.d.). Likewise, the American Association for Music Therapy (AMTA) has listed five foundational vocal skills as advanced professional competencies, and the Certification Board for Music Therapy (CBMT) has asserted that a competent music therapist must exhibit foundational skills in various instruments including the voice (AMTA, 2013; CAMT, 2010). Both the CAMT (1999) and AMTA (2013) have also listed the practice of self-care strategies as a professional competency for music therapists, and the AMTA (2013) has highlighted the need for therapists to maintain the quality of instruments used in their practice.

Although maintenance and care of the voice appears to be a relevant concern for music therapists, Boyle and Engen (2008) asserted that American music therapy training programs vary greatly, and that many music therapy students receive insufficient vocal training and vocal health education. In professional voice users comparable to music therapists, such as professional singers and teachers, voice training programs have been shown to be effective in increasing awareness of, and reducing the risk of developing vocal problems (Hazlett et al., 2011; Khatcherian, 2014). A vocal problem for the professional voice user (defined as a person who relies on a "consistent and appealing voice" as a primary tool for their occupation (Hazlett et al., 2011, p. 181)) can disrupt job performance, and for the elite vocal performer, even a mild vocal problem can diminish job performance significantly (Koufman & Koufman, 2003). In their paper exploring voice problems in music therapists, Boyle and Engen (2008) argued that a music

therapist may be regarded as an elite vocal performer, depending on how much he or she uses his or her voice in sessions.

Despite the recognition of vocal problems as an occupational risk for professional voice users, the prevalence of voice problems in these professions is still high. A recent survey of the literature estimates that between 20-50% of teachers experienced vocal dysphonia (hoarseness) at some point, and often several times throughout their career (Martins, Pereira, Hidalgo, & Tavares, 2014). A 1997 survey of professional voice users by Titze, Lemke, and Montequin indicated that 11.5% of persons seen in voice clinics were professional singers, which was disproportionate to the percentage of singers who were part of the American workforce at the time. In a review of occupational risks for voice users, Verdolini and Ramig (2001) concluded that between 20-50% of professional singers experience a voice problem at any given time. In a more recent survey of six studies that examined the prevalence of voice problems among university voice students, Khatcherian (2014) concluded that between 29-59% of students reported vocal problems. The prevalence of vocal problems among music therapists, however, does not appear to have been studied.

The symptoms and causes of vocal problems have also scarcely been examined in the music therapy literature. Boyle and Engen (2008) explored the common symptoms and causes of vocal problems in music therapists and recommended that more research be conducted on the phenomenon to ensure that music therapists understand and maintain vocal health. In her 2014 thesis, Hill Murray used a phenomenological approach to examine the experience of music therapists who had had vocal health issues. Her findings depicted the essence of this experience for three music therapists, and revealed such themes as physical sensations leading to emotional experiences, changes in music therapy practices and beliefs, and desire the help others (Hill Murray, 2014). She concluded that her findings supported the need for vocal health education in music therapy training, and the need for more research on the topic (Hill Murray, 2014).

While there is little in the music therapy research literature, this topic was recently addressed in the CAMT magazine *Ensemble*, in which Clements-Cortes (2014) discussed the causes, prevention and treatment of four common vocal disorders, and reviewed vocal disorders as experienced by two music therapists, making a case for greater attention to vocal health in the profession. She concluded that early recognition of a vocal problem is vital for a music therapist

because, if left untreated, vocal problems can lead to permanent vocal damage (Clements-Cortes, 2014). The issue of vocal problems has been casually written about by several music therapy bloggers, including Fulton (2011), Rambach (2011) and Norman (2011) and is a re-occurring theme on music therapy social media platforms such as *Music Therapists Unite!* and the *Self Care Community for Music Therapists* on Facebook.

Although the literature and anecdotal accounts indicate that vocal problems can be an issue for music therapists, there are few research studies that explore this matter, and no studies were found addressing the prevalence of vocal problems within the field. Furthermore, details of the symptoms and causes of vocal problems as experienced by music therapists are not well described. Vocal problems may affect a music therapist's ability to provide treatment interventions for clients, remain at a job, or more significantly, may lead to more serious vocal disorders and psychological problems (Clements-Cortes, 2014; Boyle & Engen, 2008; Khatcherian, 2014; Hill Murray, 2014). The present researcher has personally experienced vocal problems as a result of her work as a music therapy intern and professional, and is therefore interested in understanding the phenomenon as it is experienced by other music therapists.

For the above reasons, this survey study focuses on the prevalence, symptoms, causes, and prevention of vocal problems as they occur in music therapists. If vocal problems are common in music therapists and the symptoms and causes can be clearly recognized, prevention measures (e.g. University courses and continuing education workshops) could be developed and implemented in order to decrease the likelihood that a music therapist develops a vocal problem. This study may also bring greater attention to vocal problems, and music therapists who read this study may become better equipped to recognize and understand the phenomena. Lastly, this study may highlight a need for future research exploring vocal problems as they occur in music therapists. In light of this, the purpose of this study was to investigate the prevalence and perceived symptoms and causes of vocal problems that occur in credentialed North American music therapists.

Assumptions and Delimitations

The researcher assumes that: (a) music therapists frequently use their voice as a featured instrument in music therapy sessions, (b) therapist self-care includes aspects of both physical and psychological health, (c) vocal problems are an issue for a significant number of music

therapists, and (d) vocal problems manifest (including symptoms and etiology) in both similar and varying ways in individual music therapists.

The following delimitations were established in this study: (a) only music therapists credentialed by North American music therapy associations (CAMT and CBMT) were included in this study, (b) the number of questions in the survey questionnaire were limited to make the data more manageable given the limited scope of a master's thesis, (c) the survey did not seek to understand vocal disorders or issues with vocal hygiene, and (d) music therapy students and interns were not included in this study because their client case-load may not have necessarily been equivalent to full time music therapy work.

Research Questions

The following primary research question guided this study: What are North American music therapists' reported experiences of vocal problems? The subsidiary questions were: (a) What is the prevalence of vocal problems as reported by credentialed North American music therapists?; (b) What are the perceived symptoms of vocal problems as reported by credentialed North American music therapists?; and (c) What are the perceived causes of vocal problems as reported by credentialed North American music therapists?

Chapter 2. Literature Review

The Use of the Therapist's Voice in Music Therapy

Scope of practice. A competent music therapist is expected to be proficient in a wide range of instruments including piano, percussion, guitar, and voice. Skilled, flexible, and aesthetic musical abilities are the unique keystones in the treatment that music therapists provide clients. The Canadian Association for Music Therapy (CAMT) has listed the following five specific vocal skills as recommended competencies for a credentialed music therapist: "(i) be able to sing in tune, in a variety of keys, with adequate volume, (ii) be able to sight-sing in a variety of musical styles, (iii) be able to sing a wide range of repertoire with and without music, (iv) be able to harmonize and transpose pieces, and (v) be able to improvise vocally in a variety of musical styles" (CAMT, n.d., p. 1). Likewise, the American Association for Music Therapy (AMTA) has listed functional skills in voice as an advanced professional competency, including singing in a tune, in a pleasing manner, and with adequate volume (AMTA, 2013). The Certification Board for Music Therapists (CBMT) has also asserted that a competent music therapist must exhibit foundational skills in various instruments including the voice (CBMT, 2010).

In addition to the development of strong vocal skills, the CAMT (1999) has cited active self-care in its code of ethics, and the AMTA (2013) identified the practice of self-care strategies as an advanced professional competency related to personal development. Although therapist self-care is not clearly defined by either organization, this competency has the potential to align with the care that a music therapist provides for his or her client. In caring for his or her client, a music therapist nurtures both psychological and physical health (CAMT, 2014). Therefore, a therapist's self-care should include strategies to promote, maintain and restore his or her own physical and psychological health (CAMT, 2014). Furthermore, the AMTA (2013) has indicated that music therapists must "care for and maintain instruments" (4.4), and since the voice is included as a fundamental instrument in music therapy, the maintenance and care of the voice should be of concern for the music therapy professional.

Voicework approaches. Several prominent music therapists have developed music therapy approaches that use the therapist's voice extensively as a therapeutic instrument (Baker

& Uhlig, 2011). These unique approaches are comprised of therapeutic techniques that require the therapist to use their voice in a purposeful and specific way (Baker & Uhlig, 2011). Baker and Uhlig (2011) use the term "voicework" to describe the use of the voice in music therapy. Voicework in this context is defined as:

> …the use of the human voice within the therapeutic approach to achieve health and well-being including improved vocal abilities, health and homeostasis, and human relationships. Voicework involves the use of the breath and rhythm, primal human sounds of expression and communication building a dialogue between a therapist and client/s and using rhythm, intonation, works, and fragments of sentences and offering inter-subjective vocalization. (Baker & Uhlig, 2011, p. 32)

Alfred Wolfsohn was one of the first psychologists to promote the voice as a therapeutic instrument for communication, relationship building, and expression (Uhlig, 2006). Wolfsohn was so haunted by the primal sounds of dying soldiers in World War I that he was moved to explore how singing these sounds himself could affect his declining mental state (Wise, 2007). Wolfsohn found that singing the emotionally-charged sounds that he had heard in the trenches such as screams and groans provided him with catharsis and relieved him of the trauma he had experienced (Uhlig, 2006; Wise, 2007). Through this, Wolfsohn developed a vocal therapeutic approach that he termed "voicework" (Uhlig, 2006).

Paul Newman (1998) also greatly influenced the use of therapeutic voicework in music therapy. Newman believes that the voice expresses personal identity, and feelings, and is a subtle conveyer of thoughts (1998). He developed a unique method of analyzing a client's voice using psychotherapeutic principles, which was later adopted into several music therapy theories and approaches (Newman, 1998).

More recently, Diane Austin (2008) emphasized the use of the therapist's voice in her Vocal Psychotherapy approach. Austin based her vocal model of music therapy on 25 years of clinical experience, through which she concluded that the voice is the most intimate instrument, and singing is the most powerful way to build connections with the self and others (2008). She also understands the voice to be a bridge to the unconscious aspects of the self (2008). In vocal psychotherapy, vocal techniques such as breathe-work, natural vocal sounds (e.g., sighing and

grunting), vocal improvisation, and song form the basis for a musical dialogue between the client and the therapist (Austin, 2008).

Another voicework model that emphasizes the use of the therapist and client's voice is that of Silvia Nakkach's Vox Mundi and the Mystery School of the Voice Project (The Vox Mundi Project, 2014). Founded in 1988, the Vox Mundi Project is one of the world's largest organizations dedicated to the healing powers of the human voice (The Vox Mundi Project, 2014). Nakkach, a credentialed music therapist who specializes in cross-cultural, deems the voice to be a spiritual conduit into the inner self and a powerful tool for both healing and palliative work (Nakkach, 2005a; The Vox Mundi Project, 2014). Nakkach's certificate program "The Yoga of the Voice" integrates the mind-body principles of yoga practice with the ancient healing techniques of chanting, voice development, and sound healing into a unique therapeutic approach (Nakkach, 2005b). The Yoga of the Voice techniques emphasize the voice as a distinctive and complex musical instrument that requires as much intense development as any other fine musical instrument, such as the piano (Nakkach, 2005b). Current training in this method includes a development of breath power, intonation, flexibility and range. There is also a focus on relaxation to allow the voice to become an expressive and dynamic tool for healing (Nakkach, 2005b).

Sylka Uhlig (2006) also asserts that the singing voice is the primary instrument for facilitating communication and building the therapeutic relationship in music therapy. For Uhlig (2006), the voice is the primary mode of human expression because of the vocal relation that forms between infant and caregiver. She argues that a therapist must be responsible in the use of his or her voice in therapy, as clients can be acutely sensitive to the authenticity that is revealed through singing (Uhlig, 2006). Akin to the previously mentioned therapists, Uhlig (2006) employs techniques that engage both the client and therapist in breathing, primal vocal sounds, screaming, vocal improvisation, vocal exercises and singing.

Numerous other music therapists also use voicework as a primary therapeutic tool. Lisa Sokolov based her approach Embodied VoiceWork on her experiences of using the breath for pain management in psychiatric populations (Baker & Uhlig, 2011). Inge Nygaard Pedersen (2002) uses Phenomenological voicework in psychiatric settings to allow clients to move to a higher state of self-awareness. The voice is also used by therapists in medical settings to help

promote rehabilitation and to explore the emotional climate of clients (Aldridge, 2005; Baker, 2011; Benniger, 2010; Loewy, 2011; Tamplin, 2009). Infant-directed singing is often used as a music therapy intervention for fragile infants in the Neonatal Intensive Care Unit, and to promote infant-parent bonding (Edwards, 2011; Shannon, 2006; Shoemark, 2008). Furthermore, voicework is used with children on the Autism Spectrum (Thane, 2011), at-risk children (Uhlig, 2011), people who wish to rediscover their voice (Oddy, 2011), clients who have experienced trauma (Chong, 2011), older adults with dementia and/or neurological disease (Kondo, 2011; Ridder, 2011), and in hospice and palliative care (Dileo, 2011; Summers, 2011).

Vocal techniques in music therapy. As the awareness of voicework as a central component in music therapy increases, so too does the use of the therapist's voice in therapy sessions. Upon careful examination of the aforementioned approaches, the following vocal techniques were found to be used most prominently by music therapists: (a) conscious and purposeful breathing, (b) primal sounds, including grunting, sighing and screaming, (c) vocal exercises and use of vowels, (d) drones and toning, (e) chanting, (f) free or structured vocal improvisation, and (g) the singing of songs. Participation of the therapist may vary in the use of these techniques, including the therapist singing alone for a client, the therapist and client using their voices equally, and the therapist supporting the client as he/she uses his/her voice. Clearly, a music therapist who uses his or her voice as a primary instrument of therapy must be well-versed in the various vocal techniques, have a strong understanding of the power of the human voice, and be able to use his or her own voice in a competent and aesthetic manner (Baker & Uhlig, 2011).

Several other professions rely considerably extensively on a functioning and aesthetic voice as a component of their vocation, and in this way music therapists are in the professional company of both professional singers and classroom teachers. Professional singers and teachers are thus available for compassion when looking at voice problems among professional voice users (Hill Murray, 2014). The following sections will examine how the vocal work of music therapists can be compared to these two vocations.

Vocal Problems in Other Professional Voice Users: Professional Singers and Classroom Teachers

Prevalence. A professional voice user is defined as a person who relies on a "consistent and appealing voice" as a primary tool for their occupation (Hazlett et al., 2011, p.181). Koufman and Koufman (2003) identify four different levels of professional voice users in their article about voice problems, the top two levels being the "professional voice user" and the "elite vocal performer." A vocal problem for the professional voice user can disrupt job performance, and for the elite vocal performer, even a mild vocal problem can diminish job performance significantly (Koufman & Koufman, 2003). Both teachers and singers can be categorized as professional voice users (Koufman & Koufman, 2003).

Voice problems in teachers are a commonly studied phenomenon, and an extensive amount of research has been published on the topic (Martins, Pereira, Hidalgo, & Tavares, 2014). A recent survey of the literature estimates that between 20-50% of classroom teachers experience vocal dysphonia (i.e., hoarseness) at any given time (Martins et al., 2014). The researchers conclude that teaching is a high-risk occupation for the development of voice problems, and that voice problems impact the professional and personal life of many teachers.

An exact figure detailing how many professional singers report a voice problem at any given time has not yet been determined. However, in a 1997 survey of professional voice users, Titze, Lemke, and Montequin note that 11.5% of persons seen in voice clinics were professional singers, and that this is disproportionate in relation to the number of singers within the American workforce. In their 2001 review of occupational risks for voice users, Verdolini and Ramig conclude that between 20-50% of professional singers are experiencing a voice problem at any given time. In a more recent survey of six studies examining the prevalence of voice problems among university voice students, Khatcherian (2014) concludes that roughly between 29-59% of students report vocal problems at any given time.

Symptoms. For both teachers and singers alike, the symptoms of voice problems are complex and varied (Khatcherian, 2014; Martins et al., 2014). The following list, although not exhaustive, is a compilation of the most commonly-reported signs and symptoms of vocal problems, taken from three recent studies (Boone, McFarlane, Von Berg, & Zraick, 2014; Khatcherian, 2014; Martins et al., 2014) that examine vocal health in professional voice users. The most commonly reported symptoms include: hoarseness (dysphonia), frequent throat

clearing and tickling sensation, changes in vocal range, effort voicing, breathiness, loss of voice, shaky/wobbly voice, easy voice fatigue, difficulty projecting, chronic dryness, and chronic soreness. One negative long-term consequence of these symptoms can be the development of a vocal disorder (Boone et al., 2014; Khatcherian, 2014; Martins et al., 2014). Five of the most common vocal disorders that can arise from misuse and overuse of the voice are acid reflux, vocal nodes, contact ulcers, vocal polyps, and laryngitis (Clements-Cortes, 2014; Khatcherian, 2014; Martins et al., 2014). A complete exploration of the etiology, signs and symptoms, and treatment of the various vocal disorders is beyond the scope of this study, and the reader is directed to additional, readily-available sources to learn more.

Etiology. Johnson (1994) lists misuse and overuse as the key components that contribute to the development of voice problems in professional voice users. Misuse of the voice is characterized by loud talking, hard glottal attacks, singing or speaking outside of one's physiological range, excessive throat clearing and coughing, and speaking/singing in a noisy environment (Johnson, 1994). Overuse of the voice is characterized by excessive talking/singing and continued speaking or singing through vocal injury (Johnson, 1994). Benninger and Hill Murray (2008) expand upon vocal overuse and abuse in singers in their book *The Singer's Voice*. The following factors are included in a list of common causes of vocal problems in singers: inadequate preparation and/or singing beyond one's trained ability, insufficient vocal warm-up, insufficient practicing environment, errors in vocal technique, excessive muscle tension in the tongue, neck and/or larynx, and inadequate abdominal support (Benninger & Hill Murray, 2008). Boone et al. (2014) also identify improper hydration, irritants such as smoking and air quality, behaviour patterns such as lack of sleep, improper body posture, and disease (such as a cold or gastroesophageal reflux disease) as possible contributors to vocal health issues.

Psychological aspects. Finally, psychological issues such as low self-esteem, anxiety, stress, and depressive symptoms have been shown to accompany vocal problems (Khatcherian, 2014; Martins et al., 2014; Rosen, Heuer, Sasso, & Sataloff, 1997). Teachers who have vocal health problems report having issues with their job performance and ability to teach (Chen, Chiang, Chung, Hsiao, & Hsiao, 2010) and report experiencing accompanying psychological issues such as anxiety, depression, and issues with sleep patterns (Vanhoudt, Thomas, Wellens, Vertommen, & de Jong, 2008). In a review of the literature, Martins et al. (1997) found that a

voice problem may contribute to work dissatisfaction, financial stress, and a reduction of psychosocial functioning. Professional singers have been shown to experience psychological issues that are comparable to issues found in teachers. Khatcherian (2014) and Rosen et al. (1997) point to the high demands of the professional singer as an emotional stressor that can affect both the quality and health of a singer's voice. Professional singers may be more acutely aware of health issues in the voice due to the performance nature of the job; as a result, smaller issues may lead to bigger problems for singers than for other voice users (Schneider & Sataloff, 2007). Furthermore, vocal problems in professional singers and voice users may exacerbate psychological issues such a low self-esteem related to vocal abilities, which can lead to heightened anxiety (Khatcherian, 2014; Rosen et al., 1997). As a consequence, the problem can become cyclical in nature, with psychological issues intensifying the physiological symptoms of vocal problems, and vise-versa (Khatcherian, 2014; Rosen et al., 1997).

Prevention. In a systematic review of the effects of voice training for professional voice users (including teachers), Hazlett, Duffy, and Moorhead (2011) found that there is no research that supports voice-training programs as being effective at preventing voice disorders (2011). However, it was shown that voice-training programs increased the knowledge and awareness of vocal health among professional voice users, and some studies further showed that preventative programs increased the quality of the voice of these professionals (Hazlett et al., 2011). Characteristics of such preventative programs include increasing a professional voice user's awareness of: correct posture, breathing and the abdomen, releasing of tension in the tongue, larynx, neck and shoulders, resonance space, voice projection, voice parameters (loudness and pitch), use of vowels, and the importance of a proper vocal warm-up and cool-down (Hazlett et al., 2011).

Khatcherian (2014) further expands this list in her vocal health guide for voice teachers. She includes adequate knowledge of vocal hygiene as a leading preventative measure for vocal problems in singers. Her list of vocal hygiene includes: proper hydration, informed intake of caffeine, alcohol, drugs, and prescription medications, and avoidance of dry environments, smoking, and vocally-abusive behaviour such as yelling, screaming, loud speaking, prolonged whispering, and throat clearing. She also asserts that vocal load management is central in preventing vocal problems in singers, and that each singer should understand and respect his or

her own personal limits. Lastly, Khatcherian (2014) emphasizes an awareness and inspection of emotional and psychological health when considering preventative measures for vocal problems.

Analogies to Vocal Problems in Music Therapists

As noted earlier, a professional voice user is defined as a person who relies on a "consistent and appealing voice" as a primary tool for their occupation (Hazlett et al., 2011, p. 181). In their paper exploring voice problems in music therapists, Boyle and Engen (2008) argue that a music therapist may be regarded as an elite vocal performer, which is one level above the professional voice user, depending on how much the therapist uses his or her voice. Furthermore, music therapists use their voice in a unique way, often engaging in both speech and musical vocalizations (singing, grunting, humming, toning, shouting, etc.) for many hours a day (Boyle & Engen, 2008).

Prevalence. At this time, no research has been found that discusses the prevalence of voice problems in music therapists. In their 2008 paper, Boyle & Engen call for more research on the issue of vocal health in music therapists, including prevalence, causes, and education. In the conclusion of her 2014 thesis, Hill Murray calls for further research to "ascertain the prevalence of vocal health issues in music therapists" (pp. 41).

Etiology. Boyle and Engen (2008) make the case that music therapists experience vocal misuse and overuse in similar ways as teachers and singers. Firstly, music therapists spend a large part of their day speaking to colleagues and clients, akin to teachers (Boyle & Engen, 2008; Hill Murray, 2014). Secondly, music therapists are often faced with loud working environments (e.g., hospitals, classrooms, and group homes) that may force them to speak or sing outside of their acceptable physiological range (Boyle & Engen, 2008; Hill Murray, 2014). Thirdly, music therapists may spend a large part of their day singing with or to clients, akin to the work of a professional singer (Boyle & Engen, 2008; Hill Murray, 2014). Fourthly, because voice use is an integral part of music therapy, music therapists are often required to sing and speak through injury, further exasperating the symptoms of a vocal problem (Hill Murray, 2014). Lastly, because of the unique musical histories of individuals, not every music therapist feels completely comfortable with their singing voice. Psychological symptoms such as low self-esteem related to the singing voice and performance anxiety may be evident in both the symptoms and etiology of vocal problems as they occur in music therapists (Boyle & Engen, 2008).

There are also additional unique factors that can affect music therapists' vocal health (Boyle & Engen, 2008; Hill Murray, 2014). First, music therapists may adjust their body posture and compromise breath support and vocal technique to better gain access to a client, who for example, may be in a hospital bed or wheelchair (Boone et al., 2014; Boyle & Engen, 2008). Second, music therapists may choose to sing in a key that is outside their vocal range in order to better accommodate their clients' vocal range, thus causing strain to the vocal chords (Boyle & Engen, 2008). Third, music therapists may be required to sing a culturally-appropriate style with which they are unfamiliar, and some styles have a higher risk for muscle tension (Boone et al., 2014). Fourth, music therapists may neglect proper vocal technique (such as posture) when aiming to focus attention on the needs of the client (Boyle & Engen, 2008; Schneider & Sataloff, 2007). Fifth, the demanding schedule of music therapists may not always allow sufficient time for a proper vocal warm-up or cool down before and after a day of sessions (Boyle & Engen, 2008).

Lastly, music therapists may experience intense emotional landscapes when working with clients (Austin, 2008). It has been shown that emotional strain can have an impact on the vocal health of a professional voice user (Boone et al., 2014). Music therapists strive to empathize with their clients, and during this therapeutic experience they may be emotionally impacted on personal level. Thus, music therapists can be said to be at a heightened risk for this type of experience (Hill Murray, 2014).

Prevention. Individual music therapists vary greatly in their musical background and training. Since the voice may not be a music therapist's primary instrument, some might have limited knowledge on vocal misuse, overuse, hygiene, and prevention. Although maintenance and care of the voice appears to be a relevant concern for music therapists, and professional associations clearly identify vocal use and maintenance as a professional competency, Boyle and Engen (2008) assert that American music therapy training programs vary greatly, and that many music therapy students receive insufficient vocal training and vocal health education.

To summarize, whether one is a teacher, singer, or music therapist, adequate knowledge of vocal health is affirmed to be the most important aspect of preventing voice problems (Boone et al., 2014; Boyle & Engen, 2008; Khatcherian, 2014; Hazlett et al., 2011). The section which follows will explore vocal problems as they occur in music therapists specifically.

Defining Vocal Problems in Music Therapists

As the current literature review shows, the research investigating vocal problems as experienced by other professions is extensive and varied; with little literature specific to music therapy, there are challenges in defining what constitutes a vocal problem as it occurs in a music therapist. The definition of vocal problems that follows incorporates information from a combination of current sources from the fields of music therapy, professional voice users, and vocal health and disorders.

Verdolini and Ramig (2003) conclude that voice problems are multidimensional, and are explicated as a "self-perceived reduction in physical, social, emotional or professional well-being due to voice" (p. 43). In several studies that aimed to identify occupational risks for voice users, a 'voice problem' was defined as a self-perceived issue, related to the voice, of sufficient concern to seek treatment (Verdolini & Ramig, 2003). Boyle and Engen (2008) define vocal problems as complex and unique combinations of vocal overuse and misuse, vocal disorders, and psychological issues such as stress. For the purposes of this study, a vocal problem will be defined as any self-reported issue with the voice, characterized by either physiological or psychological symptoms, or combination thereof, that results in a significant reduction in the ability to use the voice as a therapeutic instrument (Boyle & Engen, 2008; Khatcherian, 2014; Koufman & Koufman, 2003).

Summary

Music therapists who use their voice as a feature instrument in sessions are required to understand and be able to execute a wide array of vocal approaches and techniques. The music therapy literature indicates that vocal problems may be an issue for some music therapists; however, there are few studies that explore this matter in detail. The prevalence of vocal problems among music therapists is relatively unexplored to date. Furthermore, particulars about how music therapists experience and develop vocal problems are not well described. If vocal problems are a potential concern for music therapists, it seems important to assess their prevalence and better understand the conditions under which they occur so that preventative measures can be devised and implemented. In light of this, the purpose of this study is to investigate the prevalence and perceived symptoms and causes of vocal problems as they occur in credentialed North American music therapists.

Chapter 3. Methodology

Participants

Participants in this study were comprised of 735 music therapist respondents of a total of 6,880 who received the survey by email. These were credentialed Canadian and American music therapists who at the time of the data collection were members in good standing of either the CAMT and/or CBMT. Further details concerning the e-mail process for participants are outlined later in the Procedures section of this chapter.

Survey Questionnaire

A quantitative research method was chosen as best suited to address the researcher's intent and to answer the research questions. In particular, an online descriptive questionnaire-based survey was chosen as the method of research for its ability to access a larger participant pool and cover the required geographic area (both Canada and the United States) (Curtis, in press). The online survey was also chosen for its time and cost efficiency in data collection and analysis (Curtis, in press). Lastly, Martin et al. (2014) concluded that the survey questionnaire is the most commonly cited method for researching voice problems in teachers, an occupation of professional voice users akin to music therapists.

The survey questionnaire consisted of 20 closed-ended questions pertaining to music therapists' demographics information, voice use, and experiences with voice problems; it was made available in both the official languages of Canada, English and French (see Appendices A & B). Question 1 provided opportunity for the participant to provide informed consent. Questions 2-7 were multiple choice and gathered relevant demographic information. Question 8 was closed-ended and gathered information about voice use. Question 9, requiring a Yes or No response, asked if the participant had ever experienced any vocal problems. If the participant answered Yes to Question 9, Questions 10-16 gathered information about the characterization of the vocal problem using both Yes/No dichotomous questions and Likert-type scale questions. If the participants answered no to Question 9, Questions 10-16 were skipped, and participants were directed to Likert-type scale Questions 17-20, relating to vocal health education and the importance of vocal problems as an issue for music therapists. Each participant received the

same survey (the same questions in the same order) to ensure that matching information was collected from each participant.

Drafts of the English survey were reviewed by the academic advisor, as well as by 3 other music therapists. Once the English survey was finalized, it was professionally translated into French, and was reviewed by a French speaking music therapist. The survey was revised accordingly.

Procedures

Approval was obtained from the Concordia University Human Research Ethics Committee (UHREC) which issued an Ethics certificate prior to any data collection (see Appendix C). An online survey-design software (SurveyMonkey®) was purchased and used to distribute the survey (SurveyMonkey®, 2015). Specific settings were enabled on SurveyMonkey so that participant information including identities and e-mail addresses were unknown to all (i.e., the researcher, the academic advisor, and SurveyMonkey®). Recruitment occurred with help from the CAMT and CBMT administration once ethics approval was obtained and the Ethics certificate was issued by the Concordia UHREC.

The "Invitation to Participate and Informed Consent E-mail" (see Appendix D) was sent to the CAMT and CBMT Executive Assistant. CAMT e-mailed the invitation directly to 607 MTAs and the researcher (emails provided by the CBMT) e-mailed the invitation directly to 6,273 MT-BCs. This document provided an explanation of the study's intent, criteria for participation, information about informed consent, attachments that provided more detailed information about consent (see Appendices E & F), and instructions on how to access the web survey in both English and French. Informed consent was obtained in Question 1 of the survey.

All information gathered was stored in a secure, password protected location on SurveyMonkey. Between 2-4 weeks after the initial invitation to participate e-mail, participants received a reminder e-mail (see Appendix G) following the same procedures outlined above. The survey was closed 39 days after its initial distribution, and the data was downloaded to the researcher's personal password-protected computer.

Data Analysis

Data was exported into Excel, and the English and French survey responses were combined into one spreadsheet and analyzed using descriptive statistics. Qualitative data gathered from participants' written comments were used to enhance an understanding of the quantitative data. In a post-hoc analysis, data was exported in an SPSS statistics program and analyzed using correlational statistics (Chi Square test of significance and Cramer's V test of association). Differences were considered to be significant when the probability (p) value was equal to or less than .01.

Chapter 4. Results

Response Rate

Of the 6,880 credentialed music therapists contacted through CAMT and CBMT, there were a total of 735 returned surveys for a response rate of 10.7%. Because of the CAMT policy of withholding member email addresses, and possible dual membership of CAMT and CBMT, the total contact number may be smaller and thus the response rate greater, making the reported response rate a conservative estimate. Curtis (in press) notes in her chapter on survey's in music therapy research that although some research has pointed to 30% or greater as a reasonable response rate, there is no consensus on a minimum standard. Furthermore, the American Association for Public Opinion Research notes that there is no current consensus on the factors that link survey quality and response rate (AAPOR, 2016).Therefore, although the current response rate could be considered low, the aforementioned factors, along with the robust number (735), allowed the researcher to continue with the analysis of the results.

Demographic Characteristics

Of the 735 respondents, 731 indicated they were credentialed in either Canada or the United States and thus were eligible to complete the rest of the survey. Three respondents indicated they were not credentialed and consequently were eliminated from the study, and one respondent skipped the rest of the survey. The majority of respondents were American, as well as female. Just over half of respondents were below the age of 35, and almost half of the respondents reported having completed a bachelor's degree as their highest level of education. Table 1 provides an overview of the demographic information collected from the survey.

Table 1

Demographic characteristics

Variable	N	n[1]	Percentage
Nationality	731		
American		650	(88.9%)
Canadian		81	(11.1%)
Gender	731		
Female		653	(89.3%)
Male		75	(10.3%)
Preferred not to indicate		3	(0.4%)
Age	731		
18-24		91	(12.4%)
25-34		296	(40.5%)
35-44		139	(19.0%)
45-54		94	(12.9%)
55-64		93	(12.7%)
65-74		16	(2.2%)
75+		2	(0.3%)
Level of Music Therapy Education	731		
Bachelor's Degree		361	(49.4%)
Degree Equivalency		36	(4.9%)
Graduate Certificate / Diploma		23	(3.1%)
Masters		283	(38.7%)
PhD		28	(3.8%)
Number of Years Working as Music Therapist	731		
0-5		335	(45.8%)
6-10		129	(17.6%)
11-15		79	(10.8%)
16-20		61	(8.3%)
21-25		40	(5.5%)
26-30		38	(5.2%)
31+		49	(6.7%)

Use of the Voice and Vocal Problems

Respondents (N=714) answered two questions related to the use of their voice as a therapeutic instrument, the results of which are shown in Table 2. When asked to declare if they had ever experienced a vocal problem based on the given definition, 53.9% of respondents

[1] n refers to the number of respondents who answered each sub-question in the multiple choice format.

indicated that yes, they had experienced a vocal problem as a result of their work as a music therapist, and 46.1% of respondents indicated no.

Table 2

Use of the voice and vocal problems

Variable	N	N	Percentage
Number of hours a week using voice as therapeutic instrument	714		
0 hours		3	(0.4%)
1-3 hours		52	(7.3%)
4-6 hours		84	(11.8%)
7-9 hours		62	(8.7%)
10-12 hours		124	(17.4%)
13-15 hours		87	(12.2%)
16-18 hours		65	(9.1%)
19-21 hours		89	(12.5%)
22+ hours		148	(20.7%)
Experienced a vocal problem as a result of work as a music therapist	714		
Yes		385	(53.9%)
No		329	(46.1%)

A post hoc evaluation that compared the number of hours respondents reported using their voice as a therapeutic instrument during a typical work week and the self-reported experience of a vocal problem revealed a statistical relationship ($p<.01$) (see Tables 3 and 4). A Cramer's V test was used to measure the association between the variables ($p<.01$) and revealed that total weekly hours of voice use and the likelihood of experiencing a vocal problem were strongly associated. (see Table 5).

Table 3

Hours using voice compared to vocal problem

Variable	N	n Have experienced a vocal problem	Percentage
Hours a week using voice as therapeutic instrument			
Never	3	1	(33.3%)
1-3	52	14	(26.9%)
4-6	84	43	(51.2%)
7-9	62	31	(50.0%)
10-12	124	57	(46.0%)
13-15	87	53	(60.9%)
16-18	65	43	(66.2%)
19-21	89	55	(61.8%)
22+	148	88	(59.5%)

Table 4

Chi Square test of significance: Hours using voice versus vocal problem

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	885.849[a]	18	.000
Likelihood Ratio	780.826	18	.000
N of Valid Cases	851		

a. 3 cells (10.0%) have expected count less than 5. The minimum expected count is .48.

Table 5

Cramer's V Test of Association: hours using voice versus vocal problem

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi	.202			.000
	Cramer's V	.202			.000
Interval by Interval	Pearson's R	.155	.037	4.199	.000[c]
Ordinal by Ordinal	Spearman Correlation	.152	.037	4.107	.000[c]
N of Valid Cases		714			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Vocal Problems

Respondents who answered yes to having experienced a vocal problem as a result of their work as a music therapist continued to answer the following questions about the incidence and significance of said vocal problem(s) (N=383). Table 6 provides an overview of these results. A majority of respondents (69.5%) reported having experienced a vocal problem more than one time, but that it did not appear to be an ongoing issue. Over half of respondents (54.3%) that had experienced a vocal problem rated the problem as somewhat significant in reducing their ability to use their voice as a therapeutic instrument.

Voice Disorder

Respondents were asked if they identified with having a vocal disorder (see Table 6). The majority of respondents (82.8%) answered no, that they did not identify as having a vocal disorder.

Table 6

Self-reported experience of a vocal problem

Variable	N	N	Percentage
Experience of a vocal problem(s)	383		
Experienced a vocal problem one time		25	(6.5%)
Experienced a vocal problem one time, not an ongoing issue		266	(69.5%)
Vocal problems appears to be an ongoing issue		92	(24.0%)
Significance of vocal problem in reducing ability to use voice as therapeutic instrument	383		
Very insignificant		9	(2.3%)
Somewhat insignificant		58	(15.1%)
Neither insignificant or significant		38	(9.9%)
Somewhat significant		208	(54.3%)
Very significant		70	(18.3%)
Voice disorder	378		
Yes, not related to work as a music therapist		10	(2.6%)
Yes, most likely as a result of work as a music therapist		19	(5.0%)
Yes, partially as a result of work as a music therapist		36	(9.5%)
No		313	(82.8%)

Physiological Symptoms, Etiology and Psychological Symptoms

Respondents who had experienced a vocal problem answered Yes/No questions about physiological symptoms of the vocal problem(s), etiology including misuse and overuse, and other symptoms of a vocal problem(s) they had experienced (N=378). These results are shown in Table 7.

Table 7

Symptoms and etiology

Variable	N	n 'Yes'	Percentage
Physiological symptoms	378		
Dysphonia (hoarseness)		328	(86.8%)
Voice tires quickly		282	(74.6%)
Frequent throat clearing / ticking sensation		228	(60.3%)
Difficulty projecting		202	(53.4%)
Uncontrollable changes in vocal range		183	(48.4%)
Chronic dryness		101	(26.7)
Breathiness in sound		95	(25.1%)
Chronic throat soreness		112	(29.6%)
Effortful voicing/shaking/wobbliness in sound		76	(20.1%)
Soreness in neck and/or shoulder muscles		225	(59.5%)
Vocal misuse	378		
Loud talking		241	(63.8%)
Singing outside of physiological vocal range		122	(32.3%)
Singing in a loud environment		297	(78.6%)
Excessive throat clearing/coughing		125	(33.1%)
Vocal overuse	378		
Excessive singing		289	(76.5%)
Inadequate preparation / vocal warm-up		286	(75.7%)
Inadequate vocal cool-down		192	(50.8%)
Errors in vocal technique		236	(62.4%)
Inadequate abdominal support		194	(51.3%)
Excessive muscle tension in tongue, neck, and/or larynx		209	(55.3%)
Psychological symptoms	378		
Low self-esteem related to voice quality and ability		115	(30.4%)
Anxiety and/or stress related to singing		146	(38.6%)
Dissatisfaction with vocal component of music therapy work		180	(47.6%)

Vocal Training

All respondents (whether they answered yes or no to ever having experienced a vocal problem) were asked questions concerning the vocal training in which they had participated (N=698). An overview of these results is shown in Table 8.

The vocal training format with the highest reported number of users was personal learning (75.9%), following closely by private lessons (70.1%). Almost a third of respondents (29.8%) reported being somewhat satisfied with their pre-professional music therapy training (i.e., music therapy education prior to becoming credentialed). Conversely, almost half (49.7%) of respondents reported being neither satisfied nor dissatisfied with the training in voice use and vocal health they received in their post-professional music therapy training (after certification). Almost 100% of respondents rated the issue of vocal problems for credentialed music therapists as being either somewhat or very important.

Table 8

Voice use and vocal health training

Variable	N	n 'Yes'	Percentage
Participation in following educational formats	698		
Specific undergraduate course in vocal work		430	(61.6%)
Vocal unit in undergraduate course		363	(52.0%)
Specific graduate course in vocal work		80	(11.5%)
Vocal unit in graduate course		49	(7.0%)
Vocal workshop		314	(45.0%)
Private instruction		489	(70.1%)
Personal learning		530	(75.9%)
		N	
Satisfaction of training in voice use/health in pre-professional music therapy training	698		
Very dissatisfied		52	(7.4%)
Somewhat dissatisfied		157	(22.5%)
Neither satisfied or dissatisfied		143	(20.5%)
Somewhat satisfied		208	(29.8%)
Very satisfied		138	(19.8%)
Satisfaction of training in voice use/health in post-professional music therapy training	698		
Very dissatisfied		28	(4.0%)
Somewhat dissatisfied		116	(16.6%)
Neither satisfied or dissatisfied		347	(49.7%)
Somewhat satisfied		127	(18.2%)
Very satisfied		80	(11.5%)
Importance of the issue of vocal problems for music therapists	698		
Very unimportant		8	(1.1%)
Somewhat unimportant		7	(1.0%)
Neither unimportant nor important		28	(4.0%)
Somewhat important		227	(32.5%)
Very important		428	(61.3%)

A post hoc evaluation that compared vocal training satisfaction, both in pre-professional and post-professional training, and the reported experience of a vocal problem revealed a statistical relationship in both instances ($p<.01$; see Tables 9, 10 and 11). A Cramer's V test was used to measure the association between the variables ($p<.01$) and revealed that that the more satisfied respondents were with their voice training, the less likely they were to report experiencing a vocal problem and visa-versa, and that this association was strong (see Tables 12 and 13).

Table 9

Voice use and vocal health training compared to vocal problem

Variable	**N**	**N Have experienced a vocal problem**	**Percentage**
Satisfaction with pre-professional training			
Very dissatisfied	52	42	(80.8%)
Somewhat dissatisfied	157	102	(65.0%)
Neither dissatisfied or satisfied	143	71	(49.7%)
Somewhat satisfied	208	112	(53.9%)
Very dissatisfied	138	50	(36.2%)
Satisfaction with post-professional (after certification) training			
Very dissatisfied	28	21	(75.0%)
Somewhat dissatisfied	116	82	(42.9%)
Neither dissatisfied or satisfied	347	166	(25.0%)
Somewhat satisfied	127	67	(39.6%)
Very dissatisfied	80	41	(63.8%)

Table 10

Chi Square Test of significance

Pre-Professional voice use and vocal health training versus vocal problem

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41.236[a]	4	.000
Likelihood Ratio	42.804	4	.000
Linear-by-Linear Association	34.030	1	.000
N of Valid Cases	698		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.91.

Table 11

Chi Square Test of significance

Post-Professional voice use and vocal health training versus vocal problem

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.605[a]	4	.000
Likelihood Ratio	24.384	4	.000
Linear-by-Linear Association	8.440	1	.004
N of Valid Cases	698		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.88.

Table 12

Test of Association: Cramer's V

Pre-professional voice use and vocal health training versus vocal problem

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi	.243			.000
	Cramer's V	.243			.000
Interval by Interval	Pearson's R	-.221	.036	-5.977	.000[c]
Ordinal by Ordinal	Spearman Correlation	-.216	.036	-5.841	.000[c]
N of Valid Cases		698			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Table 13

Test of Association: Cramer's V

Post-Professional voice use and vocal health training versus vocal problem

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Nominal by Nominal	Phi	.184			.000
	Cramer's V	.184			.000
Interval by Interval	Pearson's R	-.110	.037	-2.921	.004[c]
Ordinal by Ordinal	Spearman Correlation	-.113	.037	-3.011	.003[c]
N of Valid Cases		698			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Chapter 5. Discussion

The purpose of this study was to investigate the prevalence and perceived symptoms and causes of vocal problems as they occur in credentialed North American music therapists. A total of 735 Canadian and American music therapists completed an online survey that examined their use of voice, their self-reported experiences with vocal problems, the possible physiological symptoms, etiology, and psychological symptoms associated with the vocal problem, and the types of voice and vocal health educational formats they had experienced. The results showed that approximately half of respondents reported having experienced a vocal problem (53.9%), and that the majority of these respondents reported that they had experienced this vocal problem more than once, but that it did not appear to be an ongoing issue (69.5%). Furthermore, more than half of respondents rated their vocal problem as somewhat significant in reducing their ability to perform their work as a music therapist (54.3%). Respondents also answered questions about the symptoms and etiology that they felt characterized their vocal problem, as well as questions related to voice use and vocal health training they had participated in. The purpose of the present chapter is to further examine these findings, as well as explore the potential implications of these findings for both the profession of music therapy and for future music therapy research. Limitations of this study will also be presented.

Response Rate

Response rate is traditionally considered one of the critical factors when evaluating the quality of a survey research study (Curtis, in press). The response rate of the current study, at 10.7% was lower than the 30% often cited as a reasonable for online survey questionnaires (Curtis, in press). However, in a review of the literature on survey response rate, Curtis found that there is no agreed upon minimal standard nor ideal response rate. Moreover the American Association for Public Opinion Research concluded that the relationship between response rates and survey quality is unclear, and thus a low response rate does not necessarily conclude that a specific survey study is low quality research (2016). These details combined with the reality that a 10.7% response rate is a conservative estimate for the current study due to the double listing of CAMT and CBMT member e-mails, allowed the current researcher to proceed with analysis of the results. However, it should be noted that recent research generally points to 30% or higher as

reasonable for online survey response rates, and thus, the low response rate in the present study may be considered a limitation (Curtis, in press).

Demographic Information

The majority of respondents were American (89.9%), which aligns with the nationality breakdown of possible respondents (91.2% CBMT; 0.9% CAMT). This indicates that both American and Canadian music therapists responded to the survey evenly. Four respondents claimed dual citizenship, with one living in Canada and three living in America. Other citizenships were included as comments including Taiwanese, Israeli, Netherlands, Japanese, Mexican, Pacific Highlander, Russian, Chilean, European, and Ecuadorian.

The majority of respondents were also female (89.3%), which aligns with the gender distribution of CBMT members (87% female; 13% male) (2016). The age group that most readily responded to the survey was between 25 and 34 (40.5%). According to the CBMT (2016), 35% of its members are between the ages of 30-39, and 25% are 29 and under. Unfortunately, CAMT does not collect and distribute members statistics, and therefore these comparisons could not be made.

About 50% of respondents reported having completed a Bachelor's degree in music therapy, which is reasonable considering a bachelors is the minimum degree requirement to obtain credentials as a music therapist. A high number of therapists also reported having completed, or were expecting to complete within the year, a masters in music therapy (38.7%). (CBMT statistics indicate 60% of its members hold a Bachelor's degree, and 36% hold a Master's degree) (2016). Several therapists were currently completing their Master's thesis, and a few were currently completing their PhD. Other levels of education that were reported included courses and degrees through the Association for Music and Imagery (FAMI), in special education and varying exceptionalities, health administration, and music performance. Almost half of respondents (45.8%) reported having worked as music therapist for 5 or less years, and CBMT does not collect statistics on this measure, therefore no comparison could be made.

Use of Voice and Vocal Problems

Number of hours a week using voice. The data indicated that very few credentialed music therapists reported never using their voice as a therapeutic instrument during a typical week. This is understandable since the definition of voice use provided in the survey included both singing and speaking, and it is reasonable to conclude that no voice use (i.e. no speaking or singing on the part of the music therapist) would occur in only special and specific music therapy practices. Interestingly, the greatest number of respondents reported using their voice as a therapeutic instrument for 22 or more hours per week, which in a typical and ideal work week (eight hours per day, five days per week) would breakdown to almost four and a half hours of voice work per day. This illustrates the central importance of the therapist's voice in music therapy practice – both as a music instrument, but also as a means of communication between therapist and clients (Boyle & Engen, 2008; Hill Murray, 2014).

Vocal problems. Over 50% of respondents reported having experienced a vocal problem, which was defined as any self-reported issue with the voice, characterized by either physiological or other symptoms, or combination thereof, that results in a personally defined serious reduction in the ability of a music therapist to use their voice as a therapeutic instrument. In their research exploring voice problems in teachers, Martin's et al. concluded that between 20-50% of teachers are experiencing a vocal problem at any given time (2014). Likewise, Verdolini and Ramig (2003) concluded that between 20-50% of professional singers are experiencing a vocal problem at any given time. Both of these studies concluded that these percentages are too high and that preventative measures should be introduced to lower the risk of occupational voice users experiencing a vocal problem. Although the current study did not look at the prevalence of music therapists experiencing a vocal problem at any given time, the finding that over 50% of the music therapists that responded have experienced a vocal problem during the course of their career is problematic.

The majority of respondents (69.5%) reported that they had experienced a vocal problem one time, and that it was not an ongoing issue. Of course, one limitation of this study is that it did not consider other health factors such as sickness from a cold or other illness as a possible factor in vocal problems. It is difficult to determine if the majority of music therapists who

experienced a vocal problem one time, without it being an ongoing issue, is related to issues vocal misuse and overuse, or other illnesses, or a combination. However, almost a quarter of respondents (24%) who reported having a vocal problem indicated that the problems appeared to be an ongoing issue. Furthermore, over half of respondents who reported having experienced a vocal problem rated their issue as being somewhat significant in reducing their ability to use their voice as a therapeutic instrument. As noted in the literature exploring vocal problems in occupational voice users, experiencing a vocal problem that reduces their ability to perform their job can have severe consequences. First, for music therapists, a vocal problem that seriously reduces their ability to use the voice as therapeutic instrument will limit the ways in which the therapy can be administered, obliging a music therapist to use alternative – and possibly less effective, depending on the situation – means of connecting with a client (Hill Murray, 2014). This could be especially detrimental if the issue is ongoing and affecting a therapist's ability to verbally communicate with clients with whom this means of relationship is integral. Second, because of the nature of the environments in which a music therapist often works (hospitals, long term care settings, etc.), experiencing a voice issue can mean the therapist cannot go into work, and thus the therapist may experience financial stress, and the therapeutic relationship may suffer from a break in routine (Boyle & Engen, 2008; Hill Murray, 2014). Third, as explicitly noted in research on vocal problems in professional singers, experiencing a vocal problem that reduces your ability to use your voice can have a serious impact on one's psychological health and job satisfaction (Boyle & Engen, 2008; Hill Murray, 2014; Khatcherian, 2014). Moreover, singers (including music therapists who consistently sing in their work) may be more acutely aware of issues related to their voice, meaning smaller issues may be experienced as more troubling and detrimental than in other professions (Boyle & Engen, 2008).

The majority of respondents (82.8%) did not identify as having a vocal disorder. However, it is interesting to note that 9.5% of respondents who had experienced a vocal problem self-identified as having a vocal disorder, partially as a result of their work as a music therapist. Several music therapists described acid reflux (GERD) as one of the possible components of vocal misuse and/or overuse that may contribute to their vocal problem. One respondent also reported being diagnosed with Laryngopharyngeal reflux (LPR). Both GERD and LRP are classified as vocal disorders. Several comments from respondents regarding symptoms of vocal

problems included vocal nodules, temporomandibular joint disorder (TMJ), and laryngitis. Further study on the topic of vocal disorders in music therapists may be able to clarify which disorders are most commonly reported, how they have developed, and how they are impacted by voice work in music therapy. For the current study, it is simply interesting to note that 9.5% of respondents who have experienced a vocal problem self-identify as having a vocal disorder partially because of their work as a music therapist.

An interesting post-hoc finding of this study revealed that there is a significant positive relationship between the number of hours music therapist respondents reported using their voices as a therapeutic instrument during a typical work week and self- report of experiencing a vocal problem as a result of their work as a music therapist ($p<0.01$). Furthermore, the association between the two was revealed to be strong ($p<0.01$). Logically, one could assume that the more the voice is used – especially if voice is being misused and/or overused – the greater the chances that one would encounter a vocal problem at one point in their career (Boyle & Engen, 2008). Previous to this study, however, this assumption had not been tested for in music therapists. Future research is needed to clarify and understand the relationship between voice use and vocal problems; nonetheless, the current study reveals a starting point for this conversation.

Symptoms and Etiology

Physiological symptoms. The most commonly reported symptoms in respondents who had experienced vocal problems were dysphonia and a voice that tires quickly (86.8% and 74.6% respectively). The second most commonly reported physiological symptoms were frequent throat clearing and soreness in neck and/or shoulder muscles (60.3% and 59.5% respectively). Thirdly, around 50% of respondents reported experiencing difficulty projecting and uncontrollable changes in vocal range. About a quarter of respondents indicated that they had experienced the remaining symptoms, which included chronic dryness, breathiness in sound, effortful voicing/shaking/wobbliness, and chronic throat soreness.

Interestingly, 19 respondents commented that the development of cold/viruses and laryngitis and the symptoms that accompany these conditions were physiological symptoms they experienced. It is important to note here then, that virus can lead to issues with the voice, and that it has been shown that vocal stress can lead to the contraction or exasperation of a virus,

making the relationship non-linear and difficult to explicate (Boone et al., 2014). However, this study shows that many music therapists categorize having a virus and possible developing laryngitis are symptoms of a vocal problem, and not necessarily a component of vocal misuse or overuse. Several other respondents reported vocal nodules and other vocal disorders, being aphonic, excessive phlegm, vocal fry, running out of breath, voice cracking, and a lump sensation/vocal chords feeling swollen as symptoms of a vocal problem. This further underscores the complicated nature of vocal problems; as examples, is chronic dryness a symptom of a vocal problem, or component of misuse?, is a difficulty in projecting a symptom, or more better explained as misuse and singing in a loud environment?, is chronic soreness a symptom of overuse, or could it be better explained by a vocal disorder? These sorts of questions are beyond the scope of the current study, and most likely more suitable for future individual case studies with individuals who experience severe vocal problems.

Etiology. Vocal misuse is characterized by loud talking, hard glottal attacks, singing or speaking outside of one's physiological range, excessive throat clearing and coughing, and speaking/singing in a noisy environment (Johnson, 1994). The most commonly reported components of vocal misuse were both related to the volume of the voice: loud talking (63.8%), and singing in a loud environment (78.6%). According to the most recent statistics available through CMBT, the most common types of populations served by music therapists include persons with intellectual and developmental disabilities, persons who have dementia and/or Alzheimer's, and both geriatric and medical populations (CBMT, 2016). Therapists who work with these populations in particular may find themselves working with persons who show issues in hearing (more frequently than the general population – especially when working with geriatric clients), and furthermore, may find themselves working in loud environments (such as schools, group homes, nursing homes/assisted living, and hospitals, etc.). In the researcher's personal experience, nursing homes in particular can be noisy environments, and therapists are often providing group therapy sessions for several hearing impaired clients against a high level of background noise.

Less commonly reported components of vocal misuse – although still both reported by more than a quarter of respondents – included singing outside of physiological range and

excessive throat clearing and coughing (32.3% and 33.1% respectively). As explained in greater detail in previous chapters, music therapists often work with clients whose physiological vocal range is not synonymous with their own (for example, preschool aged children and older adults) and thus music therapists must work outside their own range to accommodate these clients. Certainly, it is not recommended that the populations and work settings that music therapists work in should be altered so that music therapists are not ever using their voice at loud volumes – this is impracticable. However, music therapists are encouraged to examine the volume level of their voice and assess the background noise in their working environment.

Excessive throat clearing and coughing is often a way to alleviate discomfort in the voice due to physiological symptoms such as phlegm, dryness, tickling and lump sensations etc., however, research has shown that this tactic should be avoided as it often escalates a vocal problem (Johnson, 1994). Other components of vocal misuse that were reported in the current study included over enunciating, animated/silly singing, singing with allergies and asthma, singing while on certain medications, and issues related to COPD, all of which could be explored more in depth through individual case studies.

Vocal overuse is characterized by excessive talking/singing and continued speaking or singing through vocal injury (Johnson, 1994). In the current study, more than 75% of respondents attributed excessive singing and inadequate preparation /vocal warm up as components of vocal overuse that contributed to the vocal problem they experienced. As previously noted, there is a strong correlation between the number of hours a therapist uses their voice and the reported experience of a vocal problem, and so it is no surprise that excessive singing is perceived as a primary contributor to vocal problems. In the case of inadequate vocal preparation/warm up, it is interesting that respondents highly link this to vocal problems, considering that vocal preparation is solely the responsibly of the therapist themselves. If a therapist is not warming up properly, and is aware that this could be a possible cause of vocal problems that significantly reduce their ability to provide therapeutic services, one would think that preparation would be a top priority. As a trained classical singer, the researcher understands the principles of vocal preparation and warm-up (in a way some other music therapists may not), but often is unmotivated to do so because of time limits, privacy, etc. Inadequate vocal cool

down was reported by more than 50% of respondents, and the principles that might explain this phenomenon could be similar.

A high number of respondents indicated that errors in vocal technique are a component of vocal overuse (62.4%). Relating this to the vocal training and satisfaction levels that therapists reported in both their pre- and post-professional music therapy training does not reveal much about why therapists report such a high level of error in vocal technique. A further inquiry into this issue might illuminate why persons who report relying on their voice as a critical component of their work might report such high levels of errors in vocal technique. For now, the information in interesting to contemplate, and perhaps individual therapists may be motivated to examine their own use of their voice and proper vocal technique as a possible way to prevent vocal problems in the future.

Lastly, inadequate abdominal support and excessive muscle tension in the tongue, neck and/or larynx were both reported as components of vocal overuse by more than 50% of respondents. Again, as previously discussed music therapist often work with clients and in settings that may require them to sit, bend over, and compromise their abdominal support in various ways (Boyle & Engen, 2008; Hill Murray, 2014). For example, playing guitar while singing with a client who is on bed rest in a hospital and may have difficult hearing could greatly compromise the abdominal support of a therapist, as well as increase muscles tension in the shoulders and larynx. It is not reasonable to suggest that music therapists should never make these physical comprises, however, therapists should be aware of these postures in order to make connections between posture and vocal problems, and in this way make corrections to mitigate future problems. There were no unique components of vocal overuse that were commented on by respondents.

Psychological symptoms. Almost half of respondents (47.6%) who reported having a vocal problem also reported that they experienced dissatisfaction with the vocal component of their music therapy work. Moreover, more than a third of respondents indicated they that had experienced low self-esteem related to voice quality and ability (30.4%) and anxiety and/or stress related to singing, which can be detrimental to mental health and well-being (Rosen et al., 1997). Current research that looks at burnout amongst music therapists includes both job satisfaction

and self-esteem as key risk factors for predicting burnout (Kim, 2012). Therefore, job satisfaction, combined with other mental health issues such as self-esteem, stress and anxiety, as they relate to vocal health and vocal components of music therapy work, should be examined in order to better understand the experience of burnout among music therapy professionals.

Voice Use and Vocal Health Training

The most commonly reported formats for vocal health education and voice training were personal learning (75.9%) and private instruction (70.1%). This is somewhat surprising, considering almost 60% of all the respondents reported that they used their voice as a therapeutic instrument for 22 or more hours a week and the high level of education that music therapists report collectively. Interestingly, there is a considerable difference in the percentage of people who reported participation in undergraduate voice work and vocal health education formats (undergraduate course 61.6%; undergraduate unit 52%) versus participation in graduate educational formats (graduate course 11.5%; graduate unit 7%). Other educational formats commented on by respondents included courses and degrees as voice majors/minors in undergraduate school. This seems to suggest that there is a stronger emphasis on learning about voice use and vocal health in music therapy undergraduate work. This appears logical since this is the minimum training for a credentialed music therapist. One could hypothesize that music therapists in graduate school are more experienced, and therefore the educators may assume that the students have an understanding of these concepts. However, the data still pointed to over 50% of respondents experiencing a vocal problem, indicating that there may not be enough emphasis on voice work and vocal health education in music therapy. Numerous respondents commented on receiving voice and speech therapy as additional education formats for voice use and health, as well as seeing Otorhunolaryngologists, and a few mentioned alternative medical treatments such as acupuncture and herbal remedies. Several respondents also mentioned conference presentations and community choirs as formats in which they learned about voice use and health.

Reported satisfaction with voice use/health training in pre-professional music therapy training emerged as fairly even, with no one category of satisfaction emerging as prominent. The highest percentage of respondents (63.8%), however, reported being somewhat satisfied.

Pre-professional training occurs in either undergraduate school, or in a graduate certificate (or degree equivalency). Comparing the amount of training that respondents reported in undergraduate school and the somewhat satisfied rating of pre-professional training indicates that respondents were generally happy with the amount of training they received prior to becoming credentialed. On the other hand, almost 50% of respondents reported that they were neither dissatisfied nor satisfied with the voice use/heath training they have received in post-professional training, which could be regarded as a sign of indifference or simply they felt it was an issue they could not comment on.

In light of the fact that over 50% of respondents reported experiencing a vocal issue that affected their ability to work at some point in their career, the potential benefits of more voice use/health training in post-professional training appears especially evident. What is more, both satisfaction with pre-professional and post-professional voice use/health training and the reported experience of a vocal problem were significantly related ($p<0.01$), indicating that that the more satisfied respondents were with their voice training, the less likely they were to report experiencing a vocal problem and visa-versa. Although causation cannot be inferred from this data, this information may be especially useful for both music therapy educators and credentialed music therapists, who could begin to pay more attention to issues with the voice as a way to increase therapeutic potential of music therapy, and decrease voice related issues that affect the physical and psychological health of music therapists, job satisfaction, and the ability to work.

Importance of Vocal Problems for Music Therapists

Almost 100% of respondents reported that they felt the issue of vocal problems was either somewhat or very important for credentialed music therapists, with over 60% indicating the issue as being very important. This is an illuminating statistic, which indicates that music therapists believe voice issues should be a topic of particular importance. This could include more weight given to the issues in education, clinical practice, and research.

Summary of Limitations

The main limitation of the current research is the low response rate, which also means that the survey population may not be truly representative of the population of North American music therapists. Another limitation of survey research is the possibility of self-selection bias –

meaning that perhaps therapists who had experienced a vocal problem and/or were interested in the topic would be more likely to choose to participate in the study, thereby skewing the data (Curtis, in press). Moreover, survey questionnaires with closed-ended questions often lack depth, and therefore a limitation of the current study is that it provides an overview of the issues rather than a deep understanding of any one issue involving voice problems (Curtis, in press). Another limitation of this survey is that it did not take into consideration other possible causes, or combination of causes, for vocal problems in music therapists, such as colds or other illness and vocal hygiene such as hydration and smoking. Lastly, as with any survey research, the results of this study cannot be taken out of the context from which they were studied.

Implications for the Profession

It is beyond the scope of this research to provide a succinct list of recommendations for music therapists to diagnose, prevent, or cure any vocal problems that they have or will experience as a result of their work. However, the current study highlights the need for music therapists to closely examine the symptoms of vocal problems they may be experiencing, and look to possible links with misuse, overuse, and vocal health and voice training. Furthermore, educators may be enticed to re-evaluate how voice use and vocal health education is currently being taught to music therapy students, and look into ways to help in the prevention of vocal health issues. In all, the current study highlights the need for music therapists to reflect on the voice as a therapeutic instrument, and to possibly highlight vocal health as an area for professional consideration in the future.

Implications for Research

As noted previously, the current research provides a broad overview concerning the prevalence of vocal problems is in North American music therapists, and points to several symptoms, causes, and possible prevention and education formats for voice use and vocal health. Future research could more deeply explore any one or all of these components of vocal problems. For example, research could consider individual case studies as ways to examine the symptoms, etiology, and prevention measures for vocal health problems in music therapists. Research could also look at chronic issues versus one time occurrences, or how vocal disorders and other illness, as well as vocal hygiene may play a role in vocal problems in music therapists.

Research could also look to other related fields to further inform endeavours in developing frameworks for vocal self-care programs for music therapists. Further exploration of diverse issues surrounding vocal health for music therapists and other vocal users alike is recommended, as the potential for future research in this field is almost endless.

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Appendix A

Vocal Problems of Music Therapists in North America: A Survey

Informed Consent

Dear credentialed music therapist,

You are being invited to participate in a research study through an online survey.

Study Title: Vocal Problems of Music Therapists in North America: A Survey

Researcher: Mary Parkinson Researcher's Contact Information: marylynnparkinson@gmail.com

Faculty Supervisor: Sandi Curtis Faculty Supervisor's Contact Information:
Sandi.curtis@concordia.ca (514)848-2424 ext.4679

Source of funding for the study: none

You are being invited to participate in the research study mentioned above. This study has been approved by Concordia's University Human Research Ethics Committee (certificate number 30004825). This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to investigate the prevalence and perceived symptoms and sources of vocal problems as they occur in credentialed Canadian and American music therapists.

B. PROCEDURES

If you participate, you will be asked to complete an online survey through SurveyMonkey.

In total, participating in this study should take approximately 15 minutes.

As a research participant, your responsibility would be to understand the purpose of the research, provide informed consent, and complete the online survey.

C. RISKS AND BENEFITS

There are no foreseeable risks in participating in this research. The time to complete the

survey will be 15 minutes, which may pose a minor inconvenience.

You may or may not personally benefit from participating in this research. Potential benefits include assisting in a study that intends to improve knowledge and understanding about vocal problems in
music therapists, and an opportunity to think about your own music therapy work which may have a positive impact on your practice.

This research is not intended to benefit you personally.

D. CONFIDENTIALITY
The information gathered will be completely anonymous. That means that it will not be possible to make a link between you and the information you provide. This will be possible through use of SurveyMonkey Pro's functionality for anonymous participation.

We will protect the information collected from the survey by purposefully configuring SurveyMonkey's privacy settings, and storing the information on the primary researcher's password-protected computer.

We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

We will destroy the information 5 years after the end of the study.

E. CONDITIONS OF PARTICIPATION
You do not have to participate in this research. It is entirely your decision. If you do participate, you can stop at any time. If you decide that you don't want us to use your information, you must discontinue to survey before you submit your completed survey. If you complete and submit the survey, you will not be able to alter or withdraw your information.

G. PARTICIPANT'S DECLARATION
I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described

Consent

1. I understand that by clicking Yes, I am agreeing to the terms of this research and consenting to participate in this study:
    - ○ Yes, I consent to participate in this research.
    - ○ No, I do not consent to participate in this research.

Demographic Information

2. Are you currently credentialed as a music therapist in either Canada or the United States? (i.e. MTA or MT-BC)

- ○ Yes
- ○ No

3. What is your nationality?

- ○ Canadian
- ○ American
- ○ Other (please specify)

4. What is your gender?

- ○ Female
- ○ Male
- ○ Other
- ○ Prefer not to answer

5. What is your age?

- ○ 18-24
- ○ 25-34
- ○ 35-44
- ○ 45-54
- ○ 55-64
- ○ 65-74
- ○ 75 or older

6. What is the highest level of education you have completed in music therapy, or, expect to complete within the next year.

- ○ Bachelors
- ○ Degree Equivalency
- ○ Graduate Certificate / Diploma
- ○ Master's
- ○ PhD
- ○ Other (please specify)

7. How many years have you been working as a music therapist?

- ○ 0-5

○ 6-10
○ 11-15
○ 16-20
○ 21-25
○ 26-30
○ 31 years or more

Use of the Voice and Vocal Problems

8. During the course of your music therapy practice, in a typical week, approximately how many hours do you use your voice (singing or speaking) in music therapy sessions?

○ Never
○ 1-3
○ 4-6
○ 7-9
○ 10-12
○ 13-15
○ 16-18
○ 19-21
○ 22 or more

9. For the purpose of this study, vocal problems are being defined as: any*self-reported issue with the voice, characterized by either physiological or other symptoms, or combination thereof, that results in a personally defined serious reduction in the ability to use your voice as a therapeutic instrument.* Based on this description, do you feel you have ever experienced a vocal problem as a result of your work as a music therapist?

○ Yes
○ No

Vocal Problems

10. Please indicate if your experience with a vocal problem was a one-time occurrence, or ongoing in nature (i.e. you've experienced a vocal problem more than once and/or the symptoms appear to be ongoing).

○ Experienced a vocal problem one time.
○ Experienced a vocal problem more than one time, but not an ongoing issue.
○ Vocal problem appears to be an ongoing issue.

11. Please rate how significant you feel your vocal problem is / was in reducing your ability to use your voice as a therapeutic instrument?

○ Very insignificant

○ Somewhat insignificant
○ Neither significant / insignificant
○ Somewhat significant
○ Very insignificant

Characterizations of Vocal Problems

The following questions are based on this definition of a vocal problem: any self-reported issue with the voice, characterized by either physiological or other symptoms, or combination thereof, that results in a personally defined serious reduction in the ability to use your voice as a therapeutic instrument.

12. Please indicate if you have ever experienced any of the following *physiological symptoms* of a vocal problem, as a result of your work as a music therapist.

	Yes	No
Dysphonia (hoarseness)	○	○
Voice tires quickly	○	○
Frequent throat clearing / tickling sensation	○	○
Difficulty projecting	○	○
Uncontrollable changes in vocal range (i.e. unable to reach notes normally within your vocal range)	○	○
Chronic dryness	○	○
Breathiness in sound	○	○
Chronic throat soreness	○	○
Effortful voicing / shaking /wobbliness	○	○
Soreness in shoulder and/or neck muscles	○	○
Other (please specify)	○	○

13. Please indicate if you feel any of the following components of *vocal misuse* have contributed to any vocal problem you have experienced.

	Yes	No
Loud talking	○	○
Singing outside of physiological vocal range	○	○
Singing in a loud environment	○	○
Excessive throat clearing / coughing	○	○
Other (please specify)		

14. Please indicate if you feel any of the following components of *vocal overuse* have contributed to any vocal problem you have experienced.

	Yes	No
Excessive singing	○	○
Inadequate preparation / vocal warm-up	○	○
Inadequate vocal cool-down	○	○
Errors in vocal technique	○	○
Inadequate abdominal support	○	○
Excessive muscle tension in the tongue, neck, and/or larynx	○	○
Other (please specify)		

15. Please indicate if you have ever experienced any of the following *other symptoms* related to a vocal problem as a result of your work as a music therapist.

	Yes	No
Low self-esteem related to	○	○

voice and quality ability		
Anxiety and/or stress related to singing	○	○
Dissatisfaction with vocal component of music therapy work	○	○
Other (please specify)		

16. Do you identify as having a vocal disorder?

○ Yes, not related to my work as a music therapist
○ Yes, most likely as a result of my work as a music therapist
○ Yes, partially as a result of my work as a music therapist
○ No

Vocal Training

17. Please indicate if you have ever participated in any of the following vocal health / vocal problem prevention programs/workshops/ etc.

	Yes	No
Specific undergraduate course in vocal work	○	○
A vocal unit in an undergraduate course	○	○
Specific graduate course in vocal work	○	○
A vocal unit in a graduate course	○	○
Vocal workshop	○	○
Private workshop	○	○
Private instruction	○	○
Personal learning	○	○
Other (please specify)		

18. Please rate how satisfied you are with the training in voice use and vocal health you received in your pre-professional music therapy training (music therapy education prior to certification).

○ Very dissatisfied
○ Somewhat dissatisfied
○ Neither dissatisfied or satisfied
○ Somewhat satisfied
○ Very satisfied

19. Please rate how satisfied you are with the voice use and vocal health training you received in your post-professional training (after certification) and/or continuing education as a music therapist.

○ Very dissatisfied
○ Somewhat dissatisfied
○ Neither dissatisfied or satisfied
○ Somewhat satisfied
○ Very satisfied

20. Please rate how important you think the issue of vocal problems is for credentialed music therapists.

○ Very unimportant
○ Somewhat unimportant
○ Neither unimportant or important
○ Somewhat important
○ Very important

Appendix B

Problèmes vocaux chez les musicothérapeutes d'Amérique du Nord : Un sondage

Consentement éclairé

Madame, Monsieur,

En tant que musicothérapeute accrédité, vous êtes invité à participer à une étude en répondant à un sondage en ligne.
Titre de l'étude : Problèmes vocaux chez les musicothérapeutes d'Amérique du Nord : Un sondage
Chercheuse : Mary Parkinson
Coordonnées de la chercheuse :
marylynnparkinson@gmail.com

Professeure superviseure : Sandi Curtis
Coordonnées de la professeure superviseure :
Sandi.curtis@concordia.ca
514-848-2424, poste 4679

Source de financement de l'étude : Aucune

Vous êtes invité à participer à l'étude indiquée ci-dessus. Cette étude a été approuvée par le comité d'éthique de la recherche sur les sujets humains de l'Université Concordia (certificat numéro 30004825).

Le présent formulaire vous indique en quoi consistera votre participation à cette étude. Veuillez le lire attentivement avant de décider d'y prendre part ou non. S'il y a quelque chose que vous ne comprenez pas, ou si vous souhaitez obtenir de plus amples renseignements, veuillez communiquer avec la chercheuse.

A. OBJECTIF
L'objectif de cette étude consiste à enquêter sur la prévalence des problèmes vocaux chez les musicothérapeutes accrédités canadiens et américains, sur les symptômes ressentis par ceux-ci ainsi que sur les sources de ces problèmes.

B. MÉTHODE
Si vous décidez de participer à cette étude, vous serez prié de répondre à un sondage en ligne, par l'intermédiaire de SurveyMonkey.
Cela ne devrait vous prendre que 15 minutes. En tant que participant à l'étude, vous devrez bien comprendre l'objectif de celle-ci, fournir un consentement éclairé, ainsi que de répondre au sondage en ligne.

C. RISQUES ET AVANTAGES

La participation à cette étude ne comporte aucun risque prévisible. Le temps nécessaire pour répondre au sondage n'est que de 15 minutes.

Vous pourriez ou non tirer personnellement profit de votre participation à cette étude. En y participant, vous contribuerez entre autres à la réalisation d'une étude destinée à améliorer la compréhension des problèmes vocaux chez les musicothérapeutes en plus d'avoir l'occasion de réfléchir à votre propre travail en tant que musicothérapeute, ce qui pourrait avoir une incidence positive sur votre pratique. Cela dit, l'étude n'est pas destinée à vous profiter personnellement.

D. CONFIDENTIALITÉ

Les données recueillies seront totalement anonymes. Autrement dit, il ne sera pas possible d'établir un lien entre vous et les données que vous aurez communiquées. L'anonymat de ces données sera assuré par une fonctionnalité de SurveyMonkey Pro, qui permet l'exécution de sondages anonymes. Nous veillerons à protéger les données recueillies dans le cadre du sondage en configurant comme il se doit les paramètres de confidentialité de SurveyMonkey, ainsi qu'en stockant ces données sur l'ordinateur principal de la chercheuse, protégé par mot de passe.

Nous prévoyons publier les résultats de cette étude, mais personne ne sera en mesure d'établir de liens entre ceux-ci et vous. Nous détruirons les données recueillies cinq ans après la fin de l'étude.

E. CONDITIONS DE PARTICIPATION

Vous n'êtes pas tenu de participer à cette étude. Vous êtes entièrement libre de le faire ou non. Si vous décidez d'y participer, vous pourrez changer d'avis à tout moment. Si jamais vous ne souhaitez pas que nous utilisions les données émanant de vous, il vous suffira de ne pas soumettre le sondage que vous aviez commencé à remplir. Toutefois, une fois que vous aurez soumis le sondage, vous ne pourrez plus modifier les données que vous nous avez communiquées ou obtenir leur suppression.

G. DÉCLARATION DU PARTICIPANT

Je certifie avoir lu et compris ce formulaire. J'ai eu la possibilité de poser des questions, et j'ai reçu une réponse à toutes celles que j'ai posées, le cas échéant. Je consens à participer à cette étude, aux conditions indiquées.

1. Je comprends qu'en cliquant sur « Oui », j'accepte les conditions qui régissent cette étude et consens à y participer.

○ Oui, je consens à participer à cette étude.
○ Non, je ne consens pas à participer à cette étude.

Données démographiques

2. Êtes vous actuellement un musicothérapeute accrédité (MTAou MT BC), au Canada ou aux États Unis?

- ○ Oui
- ○ Non

3. Quelle est votre nationalité?

- ○ Canadienne
- ○ Américaine
- ○ Autre (veuillez préciser)

4. Quel est votre sexe ?

- ○ Homme
- ○ Femme
- ○ Autre
- ○ Préfère ne pas répondre

5. Dans quelle tranche d'âge vous situez vous?

- ○ 18 à 24 ans
- ○ 25 à 34 ans
- ○ 35 à 44 ans
- ○ 45 à 54 ans
- ○ 55 à 64 ans
- ○ 64 à 74 ans
- ○ 75 ans et plus

6. Quel diplôme ou certificat d'études en musicothérapie le plus avancé détenez vous ou prévoyez vous obtenir d'ici la fin de l'année qui vient?

- ○ Diplôme de baccalauréat
- ○ Équivalent d'un diplôme
- ○ Certificat ou diplôme d'études supérieures
- ○ Diplôme de maîtrise
- ○ Diplôme de doctorat
- ○ Autre (veuillez préciser)

7. Depuis combien d'années travaillez vous en tant que musicothérapeute?

- ○ 0 à 5
- ○ 6 à 10

○ 11 à 15
○ 16 à 20
○ 21 à 25
○ 26 à 30
○ 31 ou plus

Utilisation de la voix et problèmes vocaux

8. Dans le cadre de votre exercice de la musicothérapie, au cours d'une semaine type, environ combien de fois utilisez-vous votre voix (pour chanter ou parler) dans le cadre de séances de musicothérapie?

○ Jamais
○ 1 à 3
○ 4 à 6
○ 7 à 9
○ 10 à 12
○ 13 à 15
○ 16 à 18
○ 19 à 21
○ 22 ou plus

9. Aux fins de cette étude, la définition des problèmes vocaux est la suivante Tout problème touchant la voix signalé par la personne qui l'éprouve, caractérisé par des symptômes physiologiques ou autres, ou par une combinaison de ceux-ci, et entraînant selon cette personne une réduction sensible de sa capacité à utiliser sa voix comme outil de musicothérapie. En fonction de cette définition, estimez-vous avoir éprouvé un problème vocal consécutif à votre travail en tant que musicothérapeute?

○ Oui
○ Non

Problèmes vocaux

10. Veuillez indiquer si vous n'avez éprouvé un problème vocal qu'une seule fois, avez éprouvé des problèmes vocaux plus d'une fois sans plus en éprouver, ou encore éprouvez constamment des problèmes vocaux?

○ Je n'ai éprouvé un problème vocal qu'une seule fois.
○ J'ai éprouvé des problèmes vocaux plus d'une fois, mais je n'en éprouve plus.
○ J'éprouve constamment des problèmes vocaux.

11. Veuillez préciser à quel point, selon vous, votre problème vocal a réduit, ou réduit, votre capacité à utiliser votre voix en tant qu'outil de musicothérapie.

○ Très peu
○ Assez peu
○ Moyennement
○ Assez considérablement
○ Beaucoup

Caractérisation des problèmes vocaux

Les questions suivantes sont fondées sur la définition suivante d'un problème vocal : Tout problème touchant la voix signalé par la personne qui l'éprouvç caractérisé par des symptômes physiologiques ou autres, ou par une combinaison de ceux-ci, et entraînant selon cette personne une réduction sensible de sa capacité à utiliser sa voix comme outil de musicothérapie.

12. Veuillez indiquer si vous avez déjà éprouvé les symptômes physiologiques suivants liés à un problème vocal consécutif à votre travail en tant que musicothérapeute.

	Oui	Non
Dysphonie (enrouement)	○	○
Fatigue vocale survenant Rapidement	○	○
Envies de vous racler la gorge ou picotements frequents	○	○
Difficulté de projection	○	○
Altérations incontrôlées de la tessiture vocale (incapacité d'atteindre des tonalités normalement à votre portée)	○	○
Sécheresse chronique de la gorge	○	○
Souffle dans la voix	○	○
Irritation chronique de la Gorge	○	○
Expression vocale pénible, tremblements ou variations de la voix	○	○

Douleurs musculaires au niveau des épaules et (ou) du cou	○	○
Autre (veuillez préciser)		

13. Veuillez indiquer si, d'après vous, les mauvais usages de la voix suivants ont contribué aux problèmes vocaux que vous avez éprouvés.

	Oui	Non
Parler fort	○	○
Chanter hors de votre tessitura vocale	○	○
Chanter dans un environnement bruyant	○	○
Tousser ou vous racler la gorge de manière excessive	○	○
Autre (veuillez préciser)		

14. Veuillez indiquer si, d'après vous, les surexploitations de la voix suivantes ont contribué aux problèmes vocaux que vous avez éprouvés.

	Oui	Non
Pratique excessive du chant	○	○
Préparation ou échauffement de la voix inadéquats	○	○
Repos vocal insuffisant	○	○
Technique vocale erronée	○	○
Support abdominal insuffisant	○	○
Tension excessive des muscles de la langue, du cou et (ou) du larynx	○	○
Autre (veuillez préciser)		

15. Veuillez indiquer si vous avez déjà éprouvé les autres symptômes suivants liés à un problème vocal consécutif à votre travail en tant que musicothérapeute.

	Oui	Non
Faible estime de vous même liée à la qualité de votre voix et à vos capacités vocales	○	○
Anxiété et (ou) stress liés au fait de chanter	○	○
Insatisfaction liée au volet vocal de votre travail en tant que musicothérapeute	○	○
Autre (veuillez préciser)		

16. Estimez vous souffrir d'un trouble vocal?

○ Oui mais non lié à mon travail en tant que musicothérapeute.
○ Oui, très probablement consécutif à mon travail en tant que musicothérapeute.
○ Oui, partiellement consécutif à mon travail en tant que musicothérapeute.
○ Non.

Entraînement vocal

17. Veuillez indiquer si vous avez déjà participé aux types d'activités suivantes (programmes, ateliers, etc.) axées sur la santé vocale ou sur la prévention des problèmes vocaux.

	Oui	Non
Cours de premier cycle axé sur le travail vocal	○	○
Volet axé sur la voix dans le cadre d'un cours de premier cycle	○	○
Cours de deuxième ou troisième cycle axé sur le travail vocal	○	○
Volet axé sur la voix dans le cadre d'un cours de	○	○

deuxième ou de troisième cycle		
Atelier vocal	○	○
Cours privé	○	○
Autoapprentissage	○	○
Autre (veuillez préciser)		

18. Veuillez indiquer à quel point vous êtes satisfait de la formation sur l'usage de la voix et sur la santé vocale dont vous avez bénéficié dans le cadre de votre formation professionnelle en musicothérapie (avant l'obtention de votre certification).

○ Très insatisfait
○ Plutôt insatisfait
○ Ni satisfait ni insatisfait
○ Plutôt satisfait
○ Très satisfait

19. Veuillez indiquer à quel point vous êtes satisfait de la formation sur l'usage de la voix et sur la santé vocale dont vous avez bénéficié dans le cadre de votre formation postérieure à l'obtention de votre certification professionnelle et (ou) de votre formation continue en tant que musicothérapeute.

○ Très insatisfait
○ Plutôt insatisfait
○ Ni satisfait ni insatisfait
○ Plutôt satisfait
○ Très satisfait

20. Veuillez indiquer l'importance que revêtent, selon vous, les problèmes vocaux pour les musicothérapeutes accrédités?

○ Très faible importance
○ Importance relative
○ Aucune importance
○ Importance considérable
○ Grande importance

Appendix C

Ethics Certificate obtained from Concordia University Human Research Ethics Committee

CERTIFICATION OF ETHICAL ACCEPTABILITY FOR RESEARCH INVOLVING HUMAN SUBJECTS

Name of Applicant: Mary Parkinson

Department: Faculty of Fine Arts \ Creative Arts Therapies

Agency: N/A

Title of Project: Vocal Problems of Music Therapists in North America: A Survey

Certification Number: 30004825

Valid From: July 13, 2015 to: July 12, 2016

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

Dr. James Pfaus, Chair, University Human Research Ethics Committee

Appendix D

Invitation to Participate E-Mail

Dear credentialed Music Therapist;

You are invited to participate in an online survey: Vocal Problems of Music Therapists in North America.

This is an invitation to participate in a research study being conducted by Mary Parkinson under the supervision of Dr. Sandi Curtis at Concordia University in Montreal, Canada. This research study is being done in partial fulfillment of the requirements for the Master's program at Concordia University, and has received ethics approval from the University Human Research Ethics Committee (Certification #30004825).

Complete detailed information is provided in the attached *Invitation to Participate and Informed Consent* document.

The purpose of the research is to investigate the prevalence and perceived symptoms and sources of vocal problems as they occur in credentialed Canadian and American music therapists. If you choose to participate, you will be required to complete an online survey through Survey Monkey by clicking the links below. The survey should take no more than 15 minutes to complete.

The information gathered will be completely anonymous. That means that it will not be possible to make a link between you and the information you provide. We intend to publish the results of the research. However, it will not be possible to identify you in the published results. We will destroy the information 5 years after the end of the study.

If you chose to participate in this research, please click on the links below to take you to the survey and to complete the informed consent.

LINK:
https://www.surveymonkey.com/r/Q3W2Y3S

Thank you for your time and support of music therapy research in North America.

Mary Parkinson, MTA, MT-BC

Faculty Supervisor:
Sandi Curtis, PhD, MTA, MT-BC
sandi.curtis@concordia.ca
(514)848-2424 ext.4679

Madame, Monsieur,

Vous êtes invité à participer à l'étude indiquée ci-dessus : Problèmes vocaux chez les musicothérapeutes d'Amérique du Nord.

Ceci est une invitation à participer à une étude de recherche menée par Mary Parkinson sous la supervision du Dr. Sandi Curtis à l'Université Concordia à Montréal , Canada. Cette étude a été approuvée par le comité d'éthique de la recherche sur les sujets humains de l'Université Concordia (Certificat numéro 30004825).Cette recherche est réalisée afin de remplir partiellement les prérequis demandés du programme de maîtrise de l'université Concordia.

Des informations complètes et détaillées sont fournies fournies dans les pièces jointes *invitation* et *consentement éclairé.*

L'objectif de cette étude consiste à enquêter sur la prévalence des problèmes vocaux chez les musicothérapeutes accrédités canadiens et américains, sur les symptômes ressentis par ceux-ci ainsi que sur les sources de ces problèmes. Si vous décidez de participer à cette étude, vous serez prié de répondre à un sondage en ligne, par l'intermédiaire de SurveyMonkey. Cela ne devrait vous prendre que 15 minutes.

Les données recueillies seront totalement anonymes. Autrement dit, il ne sera pas possible d'établir un lien entre vous et les données que vous aurez communiquées. Nous prévoyons publier les résultats de cette étude, mais personne ne sera en mesure de vous identifier. Nous détruirons les données recueillies cinq ans après la fin de l'étude.

Si vous choisissez de participer à cette recherche, s'il vous plaît cliquez sur les lien ci-dessous qui vous amèneront à l'enquête et pour terminer le consentement éclairé.

LIEN:
https://fr.surveymonkey.com/r/LS3TVXQ

Merci pour votre temps, ainsi que du soutien apporté à la recherche en musicothérapie au d'Amérique du Nord.

Mary Parkinson, MTA, MT-BC

Superviseur :
Sandi Curtis, PhD, MTA, MT-BC
sandi.curtis@concordia.ca
(514)848-2424 ext.4679

Appendix E

Invitation to Participate and Informed Consent – E-mail Attachment

Dear credentialed music therapist,

You are being invited to participate in a research study through an online survey.

Study Title: Vocal Problems of Music Therapists in North America: A Survey

Researcher: Mary Parkinson
Researcher's Contact Information:
marylynnparkinson@gmail.com

Faculty Supervisor: Sandi Curtis
Faculty Supervisor's Contact Information:
Sandi.curtis@concordia.ca
(514)848-2424 ext.4679

Source of funding for the study: none

You are being invited to participate in the research study mentioned above. This study has been approved by Concordia's University Human Research Ethics Committee (certificate number 30004825). This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE
The purpose of the research is to investigate the prevalence and perceived symptoms and sources of vocal problems as they occur in credentialed Canadian and American music therapists.

B. PROCEDURES
If you participate, you will be asked to complete an online survey through SurveyMonkey.

In total, participating in this study should take approximately 15 minutes.

As a research participant, your responsibility would be to understand the purpose of the research, provide informed consent, and complete the online survey.

C. RISKS AND BENEFITS
There are no foreseeable risks in participating in this research. The time to complete the survey will be 15 minutes, which may pose a minor inconvenience.

You may or may not personally benefit from participating in this research. Potential benefits include assisting in a study that intends to improve knowledge and understanding about vocal problems in music therapists, and an opportunity to think about your own music therapy work which may have a

positive impact on your practice.

This research is not intended to benefit you personally.

D. CONFIDENTIALITY
The information gathered will be completely anonymous. That means that it will not be possible to make a link between you and the information you provide. This will be possible through use of SurveyMonkey Pro's functionality for anonymous participation.

We will protect the information collected from the survey by purposefully configuring SurveyMonkey's privacy settings, and storing the information on the primary researcher's password-protected computer.

We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

We will destroy the information 5 years after the end of the study.

E. CONDITIONS OF PARTICIPATION
You do not have to participate in this research. It is entirely your decision. If you do participate, you can stop at any time. If you decide that you don't want us to use your information, you must discontinue to survey before you submit your completed survey. If you complete and submit the survey, you will not be able to alter or withdraw your information.

G. PARTICIPANT'S DECLARATION
I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

Appendix F

Invitation et Consentement éclairé – E-mail Attachement

Madame, Monsieur,

En tant que musicothérapeute accrédité, vous êtes invité à participer à une étude en répondant à un sondage en ligne.
Titre de l'étude : Problèmes vocaux chez les musicothérapeutes d'Amérique du Nord : Un sondage
Chercheuse : Mary Parkinson
Coordonnées de la chercheuse :
marylynnparkinson@gmail.com

Professeure superviseure : Sandi Curtis
Coordonnées de la professeure superviseure :
Sandi.curtis@concordia.ca
514-848-2424, poste 4679

Source de financement de l'étude : Aucune

Vous êtes invité à participer à l'étude indiquée ci-dessus. Cette étude a été approuvée par le comité d'éthique de la recherche sur les sujets humains de l'Université Concordia (certificat numéro 30004825).

Le présent formulaire vous indique en quoi consistera votre participation à cette étude. Veuillez le lire attentivement avant de décider d'y prendre part ou non. S'il y a quelque chose que vous ne comprenez pas, ou si vous souhaitez obtenir de plus amples renseignements, veuillez communiquer avec la chercheuse.

A. OBJECTIF
L'objectif de cette étude consiste à enquêter sur la prévalence des problèmes vocaux chez les musicothérapeutes accrédités canadiens et américains, sur les symptômes ressentis par ceux-ci ainsi que sur les sources de ces problèmes.

B. MÉTHODE
Si vous décidez de participer à cette étude, vous serez prié de répondre à un sondage en ligne, par l'intermédiaire de SurveyMonkey.
Cela ne devrait vous prendre que 15 minutes. En tant que participant à l'étude, vous devrez bien comprendre l'objectif de celle-ci, fournir un consentement éclairé, ainsi que de répondre au sondage en ligne.

C. RISQUES ET AVANTAGES
La participation à cette étude ne comporte aucun risque prévisible. Le temps nécessaire pour répondre au sondage n'est que de 15 minutes.
Vous pourriez ou non tirer personnellement profit de votre participation à cette étude. En y participant, vous contribuerez entre autres à la réalisation d'une étude destinée à améliorer la compréhension des problèmes vocaux chez les musicothérapeutes en plus d'avoir l'occasion de réfléchir à votre propre

travail en tant que musicothérapeute, ce qui pourrait avoir une incidence positive sur votre pratique. Cela dit, l'étude n'est pas destinée à vous profiter personnellement.

D. CONFIDENTIALITÉ

Les données recueillies seront totalement anonymes. Autrement dit, il ne sera pas possible d'établir un lien entre vous et les données que vous aurez communiquées. L'anonymat de ces données sera assuré par une fonctionnalité de SurveyMonkey Pro, qui permet l'exécution de sondages anonymes. Nous veillerons à protéger les données recueillies dans le cadre du sondage en configurant comme il se doit les paramètres de confidentialité de SurveyMonkey, ainsi qu'en stockant ces données sur l'ordinateur principal de la chercheuse, protégé par mot de passe.

Nous prévoyons publier les résultats de cette étude, mais personne ne sera en mesure d'établir de liens entre ceux-ci et vous. Nous détruirons les données recueillies cinq ans après la fin de l'étude.

E. CONDITIONS DE PARTICIPATION

Vous n'êtes pas tenu de participer à cette étude. Vous êtes entièrement libre de le faire ou non. Si vous décidez d'y participer, vous pourrez changer d'avis à tout moment. Si jamais vous ne souhaitez pas que nous utilisions les données émanant de vous, il vous suffira de ne pas soumettre le sondage que vous aviez commencé à remplir. Toutefois, une fois que vous aurez soumis le sondage, vous ne pourrez plus modifier les données que vous nous avez communiquées ou obtenir leur suppression.

G. DÉCLARATION DU PARTICIPANT

Je certifie avoir lu et compris ce formulaire. J'ai eu la possibilité de poser des questions, et j'ai reçu une réponse à toutes celles que j'ai posées, le cas échéant. Je consens à participer à cette étude, aux conditions indiquées.

Appendix G

Reminder E-mail: Invitation to Participate

Reminder Survey will close October 31, 2015 at 11:59pm

Dear credentialed Music Therapist;

You are reminded to participate in an online survey: Vocal Problems of Music Therapists in North America.

If you have already completed the survey, thank you and please disregard!

(un message en Francais suivra)

This is an invitation to participate in a research study being conducted by Mary Parkinson under the supervision of Dr. Sandi Curtis at Concordia University in Montreal, Canada. This research study is being done in partial fulfillment of the requirements for the Master's program at Concordia University, and has received ethics approval from the University Human Research Ethics Committee (Certification #30004825).

Complete detailed information is provided in the attached *Invitation to Participate and Informed Consent* document.

The purpose of the research is to investigate the prevalence and perceived symptoms and sources of vocal problems as they occur in credentialed Canadian and American music therapists. If you choose to participate, you will be required to complete an online survey through Survey Monkey by clicking the links below. The survey should take no more than 15 minutes to complete.

The information gathered will be completely anonymous. That means that it will not be possible to make a link between you and the information you provide. We intend to publish the results of the research. However, it will not be possible to identify you in the published results. We will destroy the information 5 years after the end of the study.

If you chose to participate in this research, please click on the links below to take you to the survey and to complete the informed consent.

LINK:
https://www.surveymonkey.com/r/Q3W2Y3S

Thank you for your time and support of music therapy research in North America.

Mary Parkinson, MTA, MT-BC

Faculty Supervisor:

Sandi Curtis, PhD, MTA, MT-BC
sandi.curtis@concordia.ca
(514)848-2424 ext.4679

* Rappel * Enquête va fermer 31 Octobre, 2015 au 23:59

Madame, Monsieur,

Vous êtes rappelé à participer à l'étude indiquée ci-dessus : Problèmes vocaux chez les musicothérapeutes d'Amérique du Nord.

Si vous avez déjà rempli le questionnaire , merci et s'il vous plaît ne pas tenir compte du message suivant !

Ceci est une invitation à participer à une étude de recherche menée par Mary Parkinson sous la supervision du Dr. Sandi Curtis à l'Université Concordia à Montréal , Canada. Cette étude a été approuvée par le comité d'éthique de la recherche sur les sujets humains de l'Université Concordia (Certificat numéro 30004825).Cette recherche est réalisée afin de remplir partiellement les prérequis demandés du programme de maîtrise de l'université Concordia.

Des informations complètes et détaillées sont fournies fournies dans les pièces jointes *invitation* et *consentement éclairé.*

L'objectif de cette étude consiste à enquêter sur la prévalence des problèmes vocaux chez les musicothérapeutes accrédités canadiens et américains, sur les symptômes ressentis par ceux-ci ainsi que sur les sources de ces problèmes. Si vous décidez de participer à cette étude, vous serez prié de répondre à un sondage en ligne, par l'intermédiaire de SurveyMonkey. Cela ne devrait vous prendre que 15 minutes.

Les données recueillies seront totalement anonymes. Autrement dit, il ne sera pas possible d'établir un lien entre vous et les données que vous aurez communiquées. Nous prévoyons publier les résultats de cette étude, mais personne ne sera en mesure de vous identifier. Nous détruirons les données recueillies cinq ans après la fin de l'étude.

Si vous choisissez de participer à cette recherche, s'il vous plaît cliquez sur les lien ci-dessous qui vous amèneront à l'enquête et pour terminer le consentement éclairé.

LIEN:
https://fr.surveymonkey.com/r/LS3TVXQ

Merci pour votre temps, ainsi que du soutien apporté à la recherche en musicothérapie au d'Amérique du Nord.

Mary Parkinson, MTA, MT-BC

Superviseur :
Sandi Curtis, PhD, MTA, MT-BC
sandi.curtis@concordia.ca
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