

LIBERTY UNIVERSITY

SCHOOL OF MUSIC

**Aging Voices in the American Church Choir:
A Study in Ethnomusicology and Ethnodoxology**

A Thesis Submitted to

The Faculty of the School of Music

In Candidacy for the Degree of

Doctor of Worship Studies: Ethnomusicology

by

Shirley Claudeen Ehler

Lynchburg, Virginia

April 7, 2022

Copyright © Shirely Claudeen Ehler

SCHOOL OF MUSIC

**Aging Voices in the American Church Choir:
A Study in Ethnomusicology and Ethnodoxology**

A Thesis Submitted to
The Faculty of the School of Music
In Candidacy for the Degree of
Doctor of Worship Studies: Ethnomusicology

by

Shirley Claudeen Ehler

Lynchburg, Virginia

April 7, 2022

APPROVED BY:

W. Douglas Crawley, DMA, Committee Chair

James Siddons, Ph.D., Committee Member

ACKNOWLEDGEMENTS

Thank you, Paul, for waiting.

Thank you, God, for taking care of Paul while he waited.

“My heart is steadfast, O God; I will sing and make music with all my being”

(Psalm 108:1, BSB).

Contents

List of Abbreviations	viii
List of Tables	vii
Abstract.....	ix
CHAPTER ONE: INTRODUCTION.....	1
Background.....	1
Statement of the Problem.....	2
Statement of the Purpose	3
Significance of the Study	4
Research Questions.....	5
Hypotheses.....	5
Core Concepts.....	6
Definition of Terms.....	18
Chapter Summary	20
CHAPTER TWO: REVIEW OF THE LITERATURE	21
Introduction.....	21
The American Church Choir.....	21
The Aging Voice.....	25
Biological.....	25
Chronological.....	26
Remedial Care.....	30
Ethnomusicology/Ethnodoxology.....	40
Interdisciplinary Possibilities.....	42
Sacred Dance	43
Sacred Drama.....	44
Sacred Repertoire Library.....	45
CHAPTER THREE: METHODS.....	46
Introduction.....	46
Design	46
Research Question and Hypotheses	47
Methods	48
Procedures	48
Instrumentation	49
Setting	49

CHAPTER FOUR: RESEARCH FINDINGS	50
Data Analysis	50
Survey Information	51
Table 1	52
Table 2	53
Table 3	54
Initial Bias	55
Discovered Themes and Trends	55
CHAPTER FIVE: CONCLUSIONS	57
Summary of the Study	57
Summary of the Purpose	58
Summary of Prior Research	59
Summary of Procedures	60
Summary of Findings	61
Limitations	62
Recommendations for Future Study	62
Thesis Summary	63
Bibliography	65
IRB Letter	70
Appendices	71

LIST OF TABLES

Table 1: Aggregate Generational Weekly Attendance	51
Table 2: Percent of Congregants in a Choir Post-Covid-19	52
Table 3: Senior Percentage of Choir Post-COVID-19	53

LIST OF ABBREVIATIONS

AARP	American Association of Retired People
COVID-19	Coronavirus Disease 2019
GEN	Global Ethnodoxology Network
IMB	International Mission Board of the Southern Baptist Convention
IRB	Institutional Review Board of Liberty University
SATB	Choral music part voicings: Soprano, Alto, Tenor, Bass
SOVT	Semi-occluded Vocal Tract

HOLY BIBLE VERSIONS

ESV	English Standard Version
NASB	New American Standard Bible
NKJV	New King James Version
NLT	New Living Translation
KJV	King James Version

ABSTRACT

Despite American church choirs being a distinct culture across all denominations and independent church entities, this traditional worship community of singers is a minority culture in the United States. Furthermore, existing journal literature frequently features young voices, e.g., children's, middle school, teen, and university choirs and choruses. Aging-voice research literature began to appear in the 1990s for individual voices or voices in community choirs. Aging voices are a unique ethnicity found in every race within the church choir culture. Researched literature on the aging voice in the American church choir is conspicuous by its absence, pushing American church choir aging voices into a marginalized, minority culture. Interviews and surveys with directors of church choirs from coast-to-coast help inform a qualitative, ethnomusicological, and ethnodoxological study. The study considers both documented and unexplored possibilities of singers over a certain age effecting spiritual, cultural, and musical change in the American intergenerational church choir. Post-COVID-19, adult voices may have a unique opportunity to demonstrate physical and spiritual stamina in returning from isolation and quarantine to socialization and participation in face-to-face, life-long corporate worship. Since humanity longs to be understood, this work is needed to recover the disappearing culture of the American church choir and the aging-voice ethnicity within that same choir-culture community. The study could encourage research in sacred dance, drama, and education programs similar to those currently developing in medical ethnomusicology.

Key Words: Singing, Church, Choir, Aging, Culture, American, Voice

CHAPTER ONE: INTRODUCTION

Background

This study investigates the place of aging voices in the American church choir through the lens of ethnomusicology. A qualitative approach, such as one outlined by Creswell and Creswell,¹ is an appropriate method for evaluating data relative to the aging voices of American church choir singers. The examined data come from a systematic investigation of the Bible, texts, handbooks, journals, magazines, and dissertations. In addition, best practices data from a brief interview/survey with church choir directors from coast to coast inform comparisons. Finally, the study design is ethnomusicological because the subject and the data are evaluated relative to Nettl's working definitions of ethnomusicology. "Ethnomusicology is the study of music in its cultural context."² Further, Schrag³ and Krabill⁴ write on ethnodoxology's making a difference in local communities. In 2 Chronicles 5:11-14, the church choir is an approximately three-thousand-year-old, God-approved tradition of doxology.⁵

Nevertheless, church choirs have taken different forms across the centuries and worldwide for different reasons. Moreover, some researched articles on choir⁶ demonstrate that the church

¹ John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, Fifth Edition (Los Angeles: Sage, 2018), 179.

² Bruno Nettl, *The Study of Ethnomusicology: Thirty-three Discussions* (Chicago: University of Illinois Press, 2015), 406.

³ Brian Schrag, *Creating Local Arts Together: A Manual to Help Communities Reach Their Kingdom Goals*, (Pasadena, CA: William Carey Library, 2013), ix.

⁴ James R. Krabill, *Worship and Mission for the Global Church: An Ethnodoxology Handbook* (Pasadena, CA: William Carey Library, 2013), xxiv.

⁵ Unless specified otherwise, all Scripture is from *the New Revised Standard Version of the Holy Bible*, (New York: Oxford University Press, 1991).

⁶ Jeremy N. Manternach, Matthew Schloneger, and Lynn Maxfield, *Journal of Research in Music Education* 2019, Vol. 66(4) 465-480 sagepub.com/journals-permissions doi: 10.177/00224294188099760jme.sagepub.com.

choir is a distinctly unique social culture, as seen by Grossman,⁷ Titze,⁸ Hoch,⁹ and Manaternach, Schloneger, and Maxfield.¹⁰ Consequently, since "Ethnomusicology is the study of music in its cultural context," Nettl explains: "We are the field that looks after the neglected, the music of minorities, studying the way a society divides itself into categories of race, class, gender, and age, each of which has its "own" music."¹¹

Problem Statement

Aging voices worldwide (representing the people of any chronology whose voices show signs of wear) are a distinct ethnic group. The church choir is a minority culture nationwide—regardless of denominational affiliation or non-affiliation. In addition, there is a considerable gap in researched information relative to the American adult church choir, and almost none if that church is intergenerational.¹²

⁷ Cathy L. Grossman, "Many church choirs are dying. Here's why" *Religious News Service*, September 17, 2014, <https://religionnews.com/2014/09/17/many-church-choirs-dying-heres/>.

⁸ Ingo R. Titze, "Choir Size and Choral Dynamics," *Choral Journal*, ed. Duane Cottrell, May 2020, Vol 60 No 10, 55-61.

⁹ Matthew Hoch, "Part II: Vocal Technique in Choral Singing," *American Organist Magazine*, February 22019, 28-31.

¹⁰ Manaternach, Jeremy N., Matthew Schloneger, and Lynn Maxfield. Effects of Straw Phonation and Neutral Vowel Protocols on the Choral Sound of Two Matched Women's Choirs," *Journal of Research in Music Education* 2019, Vol. 66(4) 465-480 c National Association for Music Education 2018sagepub.com'journals-permissions DOI: 10.1177/0022429418809976 jrme.sagepub.com.

¹¹ Nettl, *The Study of Ethnomusicology*, 406.

¹² Victoria Meredith, "Passing the Torch," *Choral Journal* 57, No. 7 (February 2017): 7.

According to AARP, aging voices are anyone over fifty years of age.¹³ Most other sources set the age closer to sixty or sixty-five.¹⁴ Following the definitions and reasoning on the site, *Diffen*:

An ethnic group or ethnicity is a population group whose members identify with each other based on common nationality or shared cultural traditions. [It also] shares linguistic or religious traits, OR a common group history but not a common language or religion. Ethnicity is also related to the ability to self-identify—contrary to race, which is assigned or inherited.¹⁵

Thus, aging voices are a minority within the American church choir cultural context. Their reduced number could extend to being labeled as a marginalized ethnicity within a minority culture.¹⁶

Purpose Statement

This study aims to identify researched and published information relative to community choruses, voice pedagogy, physical and psychological data, and then appropriate that information for use in an American church choir of aging singers. Information about adult participation in music is widely available in the research journals of several disciplines and articles in professional periodicals such as the *Choral Journal* and the *Music Educators Journal*.¹⁷ However, Avery cites Baroody and Smith's claim, "choral participation by aging singers is a

¹³ AARP (<https://www.AARP.org>) sources US Census Bureau 2012. Accessed June 5, 2021.

¹⁴ US Census Bureau June 2019, published in *Statista 2021*, <https://statista.com/statistics/share-of-old-age-population-in-the-total-us-population/> accessed June 6, 2021. Compares favorably with "Music Participation for older people: Five choirs in Victoria, Australia" DOI: 10.1177/1321103X18773096.

¹⁵ "Ethnicity vs. Race, *Diffen.com*, *Diffen LLC*, n.d. Web 1 June 2021. https://www.diffen.com/difference/Ethnicity_vs_Race.

¹⁶ *Marginalized*: somebody put in a position in which they have no power; *minority*: less than half, *Oxford Learner's Dictionary* <https://www.oxfordlearnersdictionaries.com/us/definition/english/marginalization?q=marginalization>.

¹⁷ Susan Avery, "Adult Community Choruses: A Lifespan Perspective," in *The Oxford Handbook of Choral Pedagogy*, edited by Frank Abrahams and Paul D. Head, 345-359. (New York: Oxford University Press, 2017), 348.

relatively new phenomenon, and conductors are not yet able to rely on a plethora of research and articles to assist them in working with the adult voice."¹⁸ Meredith adds, "At a time when the fastest-growing segment of the population consists of retired people, this is a gap that needs to be addressed for conductors working with that age group."¹⁹ This study addresses that gap, particularly as it applies to American adult or intergenerational church choirs.

Significance of the Study

Even though the church choir is historically and ethnodoxologically significant (2 Chron. 5:11-14), during the 20th Century, worship choirs, performance choirs, and praise teams focused on younger, more energetic singers.²⁰ Remedial care recommended for younger voices suffering from stress also reclaims senior voices and strengthens the entire body of Christ (1 Cor. 12:12). Page and Gray describe the phenomena as balancing passion and energy with wisdom and influence.²¹ Viewing the entire process through the lens of ethnomusicology, and by extension ethnodoxology, helps establish the research questions.²²

¹⁸ Avery., 358, citing Baroody and Smith (2013, p. 95). "Tav-Dora Trail from Wooton Park to Tremain Street." MENA Report, Albawaba (London) Ltd., Oct. 2020.

¹⁹ Victoria Meredith, "Passing the Torch," *Choral Journal* 57, No. 7 (February 2017): 6-16. <https://ezproxy.liberty.edu/login?url+https://search.ebcohost.com/login.aspx?Direct=true&db=asn&AN=120586136&site=ehost-live&scope=site>. Meredith, Victoria. "Passing The Torch: Igniting Senior Voices In Multigenerational Choirs." *The Choral Journal*, vol. 57, No. 7, American Choral Directors Association, Feb. 2017, p. 6.

²⁰ Frank Page and Lavon Gray, *Hungry for Worship: Challenges and Solutions for Today's Church*, Birmingham, AL: New Hope Publishers, 2014), 143.

²¹ *Ibid*, 147.

²² ServiceNow ITSM Platform for Integrated Enterprise . . . <https://servicemanagement.solugenix.com/blog/servicenow-itsm-platform-for-integrated-enterprise-business-process-transformation>.

Research Questions

This study answers the following research questions:

RQ1: How might this study connect the American church choir singer with an aging voice to ethnomusicology, and by extension, to ethnodoxology?

RQ2: How might the ethnicity and culture of the American church choirs' aging vocalists promote remedial care?

RQ3: What other worship disciplines might be encouraged due to remedial care for the aging vocalists in American church choirs?

The findings from each research question will assist the directors of American church choirs in determining the best way forward in holistic, remedial care for the voices employed in the ministries of corporate praise. Although the dominant trend is toward younger worship leaders, there is room for both energy and influential wisdom in ministry.²³ Shifting focus from performance back to worship-leading is foundational.²⁴

Hypotheses

Answers to the research questions suggest these working hypotheses:

H1: The aging voice in the American church choir demonstrates a connection to ethnomusicology in terms of a distinct ethnic group, a distinct minority culture, and a distinct mission of ethnodoxology.

²³ Page and Gray, *Hungry for Worship*, 147.

²⁴ *Ibid.*, 112.

H2: The ethnicity and culture of aging voices in American church choirs may lead to remedial care for physical symptoms, cognitive stimulation, and spiritual renewal.

H3: Other worship disciplines encouraged by remedial care of the aging voices in American church choirs could include dance, drama, and the sacred repertoire library.

Ethnomusicology sees the music of a minority as "all of the music that the group knows, [or it may be] only that part of the total musical experience the group regards as uniquely its own and with which it identifies itself."²⁵ Schrag elaborates, "Singing in a church choir is an artistic event concerning that part of the total musical experience the group regards as uniquely its own and with which it identifies itself."²⁶ According to Geisler and Johansson, "A choir defines three different phenomena, each associated with the others, namely, (1) a group of people singing, (2) the music performed by the group, and (3) the place in which the group performed the music."²⁷ Boyce-Tillman posits that a holistic approach to singing sees it as a physical, mental, and spiritual activity."²⁸

Core Concepts

The foundational church-choir principle is from the three-thousand-year-old Scripture establishing the Israelites' worship choir (2 Chron. 5:11-14). Ethnodoxology, the activity of a

²⁵ Nettl, *The Study of Ethnomusicology*, 410.

²⁶ Brian Schrag, *Creating Local Arts Together: A Manual to Help Communities Reach Their Kingdom Goals* (Pasadena, CA: William Carey Library, 2013), xviii.

²⁷ Ursula Geisler and Karin Johansson, "Contemporary Concepts and Practices of Choral Singing," in *The Oxford Handbook of Singing*, ed. Graham F. Welch, David M. Howard, John Nix, 935-961 (New York: Oxford University Press, 2019), 777.

²⁸ June Boyce-Tillman, "Unchained Melody: The Rise of Orality and Therapeutic Singing," in *The Oxford Handbook of Singing*, ed. Graham F. Welch, David M. Howard, John Nix, 935-961 (New York: Oxford University Press, 2019), 940.

culture whose function is to praise God,²⁹ began in the Garden of Eden (Genesis 2). It is related to ethnomusicology which studies music in its cultural context. Remedial care for adult voices was unnecessary until sin entered the world (Genesis 3), and the human body began deteriorating.

In the process of fast-forwarding from Eden to the twenty-first century, the origin of Western multipart singing (other than folk polyphony) was in organum (singing in parallel fourths or fifths) and, later, the polyphonic motets and English anthems. Choirs took over all church singing by the twelfth century except for the Sanctus, which remained a people's chant.³⁰

During the Middle Ages and Renaissance, women were not allowed to sing in the Roman Catholic Church, except in convents, nor to appear in public in theatrical productions. Thus, all the singers in these groups were men, with boys singing the higher parts that women singers eventually assumed. However, from 1562 until 1903, the higher parts were sung by castratos (castrated men) as a cost-saving factor in the papal chapel.³¹

By the nineteenth century, SATB (Soprano, Alto, Tenor, Bass) choirs with male and female singers constituted a vast portion of music-making in Europe and America. Both church and community/school choirs varied from simple four-part hymns to elaborate offerings suitable for cathedral choirs and priests to sing while the congregation listened.³² Siddons commented:

By the latter half of the 20th Century, the population generally was corporeally larger, and the median age and lifespan increased. Choir singers who weigh over 200 pounds and are over 65 years of age are ordinary, an unimaginable circumstance in 1750 (the Baroque

²⁹ Global Ethnodoxology Network <http://www.worldofworship.org/what-is-ethnodoxology>.

³⁰ Paul Westermeyer, *Te Deum: The Church and Music*, (Minneapolis, MN: Fortress Press, 1998), 109.

³¹ Craig Wright, *Listening to Music* Fifth Edition (Yale University: Thomson Schirmer, 2008), 100.

³² Westermeyer, 174.

age of Bach and Handel). Most hymn tunes and anthems are still published in vocal ranges standardized over a century ago.³³

Continuing the fast-forward to the twenty-first century, musical, scientific, and psychological experts publish their findings about voices, hearing, and mental health in books, newspapers, magazines, and peer-reviewed journals to be validated or repudiated by doctors, professors, and choir directors in general worldwide.³⁴ Professional and volunteer directors of American church choirs ministering to people with aging voices reap the benefit of these data by transferring applications from community choruses to a church choir, as noted by Titze,³⁵ Webb,³⁶ Galinha, et al.,³⁷ and Meredith.³⁸ A series of researched articles appeared in 2017 promoting the intergenerational choir and the multi-generational choir, which may or may not include mature-age singers, as Beynon,³⁹ Meredith,⁴⁰ Smith and Sataloff,⁴¹ and Whittaker⁴² noted. From the intergenerational side of the question, Beynon and Whittaker each advocate for clarity, distinction, and consistency about the difference in the meanings of the two words "intergenerational" and "multi-generational." Multi-generational means that multiple generations

³³ Personal communication from Dr. James Siddons.

³⁴ Sheila Stager, et al., "The Role of Choral Singing in Speaking Voice Preservation of Aging Adults," *Journal of Speech, Language, and Hearing Research*, v63 n7 p2099-2114 Jul 2020. [https://doi-org.ezproxy.liberty.edu/10.1044/2020_JSLHR-19-00347](https://doi.org.ezproxy.liberty.edu/10.1044/2020_JSLHR-19-00347) ISSN 1092-4388 Accessed June 2021.

³⁵ Titze, "Choir Size and Dynamics," 61.

³⁶ Webb, "Promoting Vocal Health," 26.

³⁷ Iolanda Costa Galinha, Manuel Farinha, Maria Luisa Lima, and Antonion Labisa Palmeira, "Sing4Health: protocol of a randomized controlled trial of the effects of a singing group intervention on the well-being cognitive function and health of older adults," *BMV Geriatrics*, (2020): 20-354. <https://doi.org/10.1186/s12877-020-01686-6>.

³⁸ Meredith, "Passing the Torch," 7.

³⁹ Carol Beynon, "Never too Old," *Choral Journal*, Feb 2017. Vol 57, no. 7: 18-29. ISSN: 0009-528 accession no. 120586137.

⁴⁰ Meredith, "Passing the Torch," 7.

⁴¹ Brenda Smith and Robert T. Sataloff, "Singing for a Lifetime: Perpetuating Intergenerational Choirs," *Choral Journal* Volume 53 No. 10: 18 May 2013. PDF full text, EBSCO Connect.

⁴² Will Whittaker, "Multi-generational or Intergenerational?" 1.

are at the same place at the same time. Intergenerational means that at least two distinct generations work together and learn from each other—vitaly enabling every ensemble member to participate as fully as possible.⁴³ For this study, the term "intergenerational" may include multiple generations. However, all participants actively learn together, "pouring into one another's lives," worshiping and praising the Lord.⁴⁴ "One generation shall commend your works to another and shall declare your mighty acts" (Ps. 145:4, ESV). That is ethnomusicology and ethnodoxology in practice.⁴⁵

Ethnodoxology enters the picture as a nationwide, distinct activity of a culture whose function is to praise God, lead in praise to God, and secondly, "assist a local community's efforts at integrating arts with the values and purposes of God's kingdom."⁴⁶ The GEN Network Board says, "Ethnodoxology is the interdisciplinary study of how Christians in every culture engage with God and the world through their [sic] own artistic expressions."⁴⁷

All voices are aging—some faster than others. "Singing travels with us on life's journey. It is an activity without an expiration date. However, to sing for a lifetime, we must adjust our expectations and maintain a dynamic sense of readiness for vocal changes from year to year."⁴⁸ Webb counsels readers, "Create a habit of singing," and he promotes vocal health in his choir

⁴³ Beynon, "Never Too Old," 28.

⁴⁴ W. Douglas Crawley, personal communication email message dated June 13, 2021.

⁴⁵ Schrag, *Creating Local Arts*, 268.

⁴⁶ James R. Krabill, *Worship and Mission for the Global Church: An Ethnodoxology Handbook*, (Pasadena, CA: William Carey Library, 2013), xxvi.

⁴⁷ Global Ethnodoxology Network. <https://www.worldofworship.org/what-is-ethnodoxology/> Accessed June 1, 2021.

⁴⁸ Brenda Smith and Robert T. Sataloff, "Singing for a Lifetime: Perpetuating Intergenerational Choirs," *Choral Journal*. May 2013, Vol. 53 Issue 10: 17.

rehearsals.⁴⁹ Meredith says that "senior adult singers bring a lifetime of experience to the choir. What they might have lost in strength or stamina is made up for in long-term musical understanding, experience, expression, and love of singing."⁵⁰

According to Smith and Sataloff, "No one can avoid getting older, but everyone can prevent premature vocal aging by maintaining vocal and physical conditioning. By establishing good singing habits, remaining physically fit, setting reasonable goals, and attending to vocal health, all choral singers can 'stay in the game' for many decades."⁵¹ Unfortunately, say Smith and Sataloff, "seniors have few role models. However, alert conductors can help the singers to understand some of the challenges of the aging process that respond well to hydration and exercises. In addition, choral singing can be particularly beneficial for preserving vocal skills and then delaying the inevitable loss of range, control, and agility."⁵²

A plethora of suggestions for remedial care in the researched sources include: "Senior adults need good ventilation and light in a safe, secure property."⁵³ Avery cites Yinger, who concurs with brightened rehearsal site lighting and suggests enlarged conducting gestures to compensate for visual decline. Additionally, she suggests optional sitting or standing, nonverbal cues, and slow, clear speech to help those suffering from hearing decline.⁵⁴

⁴⁹ Jeffrey L. Webb, "Promoting Vocal Health in the Choral Rehearsal," *Music Educators' Journal*, I May 2007. Vol 93, No. 5, 26-31. Doi:10.1177/0027432110709300513.

⁵⁰ Meredith, "Passing the Torch," 16.

⁵¹ Smith and Sataloff, "Singing for a Lifetime," 25.

⁵² *Ibid.*

⁵³ Avery, "Adult Community Choruses," 356.

⁵⁴ *Ibid.*

Duke Health speech pathologists Caroline Banka and Cristen Paige explain five things to do to keep the voice in shape. First, be aware. Knowledge is power, and knowing the signs of voice problems will help “nip” them in the bud. Watch for changes that include breathiness, hoarseness, increased effort speaking, and feeling short of breath when speaking. Second, maintain good overall health. Be alert to asthma, allergies, and chronic obstructive pulmonary disorder (COPD). The voice includes the breathing apparatus as well as the vocal folds. Regular exercise helps increase overall stamina, builds muscle tone, and improves posture—all of which contribute to a healthier voice. Third, practice good vocal hygiene. The larynx should stay moist and flexible with six to eight glasses of water a day, limited alcohol and caffeine, a humidifier at home, and no smoking. Fourth, “use it or lose it.” The voice becomes stronger with use. Join a choir, sing in the shower, or read aloud. Quiet isolation is the worst thing to do. Fifth, professional voice therapy begins with a comprehensive voice evaluation to rule out other issues, such as tumors or lesions.⁵⁵

According to the Sean Parker Institute for the Voice, "Age-related voice change is one of the most intriguing topics in voice medicine, and a great deal of research remains to be conducted before this phenomenon is fully understood."⁵⁶ In addition, "The aging process is being researched extensively because of the importance of aging on the heart, brain, and all other body organs."⁵⁷ Over the last decade, scientists increasingly address issues of music and

⁵⁵ Morgan deBlecourt, *Duke Health Blog*, July 10, 2019, Duke University Hospital <https://www.dukehealth.org>.

⁵⁶ “Aging Voice,” Sean Parker Institute for the Voice, New York: Weill Cornell Medical College <https://voice.weill.cornell.edu/voice-disorders/aging-voice>.

⁵⁷ Robert T. Sataloff and Karen M. Kost, “The Effects of Age on the Voice, Part 3” in *Journal of Singing*, January/February 2021 Volume 77, No. 3. P. 369, copyright 2021 National Association of Teachers of Singing.

cognition, memory, and dementia.⁵⁸ Changes related to age vary significantly from person to person, both in severity and time of onset. Some people retain a resonant voice well into their eighties, while others begin to sound "old" as early as their fifties.⁵⁹

Dr. Roy Ernst at the Eastman School of Music in Rochester, NY, said that seniors in a music group improve their quality of life and give their brains a great workout (Ernst, personal communication to Avery, August 2014). Sataloff and Kost explain:

Most singers find the body/mind/spirit connections of singing exhilarating. Singing can make people happier and more content with life. Developing vocal skills and learning new musical masterpieces can create a psychological boost. For choir members who maintain interest in acting and public speaking, singing can be a means of maintaining vocal strength and stamina. A good choir rehearsal is a stress reliever, a life lesson, a musical feast. For all singers in a choir, the rhythm and discipline of music learning may sharpen mental acumen and memory, focus on an act of recreation, prevent loneliness and anxiety, make life worth living. Vocal pedagogy is evolving to accommodate the realities of aging. Psychologically, all singers lengthen their vision to see singing as a broad arc from infancy to old age.⁶⁰

A study by Stager et al. reports that the proportion of the population aged 65 years and older is expected to increase (approximately one-fifth of the U.S. population by 2030). In addition, social isolation reportedly increases Medicare spending due to hospitalizations and more significant mortality. Thus, preserving a strong and clear voice is a priority.⁶¹ One possible intervention is singing, considered by Johnson as an athletic use of the larynx, which may provide endurance training for respiratory and laryngeal muscles.⁶²

⁵⁸ Theresa A. Allison, "The Nursing Home as Village: Lessons from Ethnomusicology," *Journal of Aging, Humanities, and the Arts* 4:276-291, 2010. Copyright Taylor & Francis Group, LLC ISSN: 1932-5614 print/1932-5622 online DOI: 10.1080/193225614.2010.529395. 276.

⁵⁹ Sean Parker Institute for the Voice, 1/6.

⁶⁰ Sataloff and Kost, 369.

⁶¹ Stager, et al., "Role of Choral Singing," 2099.

⁶² A. M. Johnson, "Exercising the aging voice," *SIG 3 Voice and Voice Disorders*, 3(3), 12-18. <https://doi.org/10.1044/persp3.SIG3.12>.

The Sing4health protocol reported that group singing activity stimulates cognitive processes by focusing attention on the music, the teacher's orientation, interaction with the other singers, memorizing lyrics, pitch, and rhythm—factors known to stimulate executive, verbal learning, and memory functions.⁶³ Sing4health's observations resemble those Dawn Joseph and Jane Southcott reported in a study of five choirs in Victoria, Australia. In their report, they include the observation that older people in the five choirs "enjoy non-musical benefits such as enhanced emotional, physical and social well-being, . . . maintaining, and often rebuilding, social and support networks otherwise lost through factors such as aging families and the cessation of work-based alliances."⁶⁴ They observed that singing in a community choir contributed to participants' understanding of aging and well-being, finding a "personal voice" and the confidence to share music-making with others. The participants reported hope to demonstrate the myriad benefits of shared music-making across the lifespan.⁶⁵

Theoretical models proposed to explain the psychological functions fulfilled by singing include Deci and Ryan. In 2000 and 2002, they proposed that these psychological needs come under the umbrella of *competence, relatedness, and autonomy*.⁶⁶ Our behavior depends on strong connections to form a foundation for transmitting knowledge as highly social beings.⁶⁷ Lifelong emotion-communication is at the heart of singing performances. Therefore, cognitive stimulation

⁶³ Iolanda Costa Galinha, Manuel Farinha, Maria Luisa Lima, and Antonion Labisa Palmeira, "Sing4Health: protocol of a randomized controlled trial of the effects of a singing group intervention on the well-being cognitive function and health of older adults, *BMC Geriatrics*, (2020) 20:354 <https://doi.org/10.1186/s12877-020-01686-6>.

⁶⁴ Dawn Joseph and Jane Southcott, "Music participation for older people: Five choirs in Victoria, Australia," *Research Studies in Music Education* 2018, vol 40(2) 176-190, Sagepub.com/journals-permission.

⁶⁵ Joseph and Southcott, 190.

⁶⁶ Jane W. Davidson and Sandra Garrido, "Singing and Psychological Needs," in *The Oxford Handbook of Singing* (New York: Oxford University Press, 2019), 903.

⁶⁷ *Ibid.*, discussing Evans et al 2013.

and the evocation of collective experience connect with strong emotional affect for the well-being of older people who participate in singing groups.⁶⁸ Davidson and Garrido cite research demonstrating that music is one of the most effective ways for improving one's mood. Even when language skills have deteriorated, dementia patients may still be capable of singing, and the challenge of new skills helps people feel able and valued. Pride in achievement increases feelings of self-worth, renews hope, reinvigorates interest in life, and values relationships with others.⁶⁹

Fellowship-trained geriatrician and ethnomusicologist, Theresa Allison, published a study in which she seeks to understand how creativity fits into late-life learning and why it is essential.⁷⁰ Allison's construct of a nursing home as a village could conceivably fit the American church choir—for some of the same reasons. "It suggests a small community, geographically delineated, in which community members know one another."⁷¹ Additionally, it is an intentionally constructed community, a place into which no one is ever born. Each community has its own idiosyncratic culture representing a cohesive social unit.⁷² Each individual in each community has a limited number of days on earth to invest in lifelong learning.

In addition to cognitive and relational stimulation, choir members may require spiritual renewal.⁷³ Robert J. Morgan writes about mastering a practical life with lifelong rhythms for

⁶⁸ Davidson and Garrido, 904.

⁶⁹ *Ibid.*, 910-911.

⁷⁰ Theresa A. Allison, "The Nursing Home as Village: Lessons from Ethnomusicology," *Journal of Aging, Humanities, and the Arts*, 4:276-291, 2010, copyright Taylor & Francis Group, LLC ISSN: 1932-5614 print/1932-5622 online Doi: 10.1080/19325614.2010.529395.

⁷¹ Allison, 282.

⁷² *Ibid.*

⁷³ Boyce-Tillman, 940.

lifetime usefulness woven unapologetically from the strands of Scripture embedded in the Bible, like veins of gold.⁷⁴ "Envision God's enveloping presence."⁷⁵ Diligent, daily feasting in the Scripture and prayer enable the spiritual enrichment of the choir and the director by delving into four principles of worship: "The wonder of God, the work of God, the wisdom of God, and the wishes of God demand our worship of Him."⁷⁶ Loving God, believing, practicing, and modeling that love to others is foundational to worship—an eternal occupation.⁷⁷ Spiritual renewal for the American church choir member with an aging voice may begin with Scriptures teaching that experience is good (Leviticus 19:32; Titus 2:2; 1 Timothy 5:1; Proverbs 20:29). When veteran American church choir singers display these referenced characteristics: levelheadedness, worthiness of respect, sensibility, and soundness in faith, love, and endurance, their value to the vision and mission of the choir is incredible.⁷⁸

Couple this astonishing mission with scriptural meditation—a lost art. J. I. Packer quotes C. S. Lewis that "biblical meditation is the activity of calling to mind, and thinking over, and dwelling on, and applying to oneself, the various things that one knows about the works and ways and purposes and promises of God. It is an activity of holy thought, consciously performed in the presence of God, under the eye of God, by the help of God, as a means of communion with

⁷⁴ Robert J. Morgan, *Mastering Life Before It's Too Late: 10 Biblical Strategies for a Lifetime of Purpose*, (New York: Howard Books, 2015), 1.

⁷⁵ Robert J. Morgan, *The Red Sea Rules: 10 God-given Strategies for Difficult Times*, (Nashville, TN: W Publishing Group, 2001, 2014), 79.

⁷⁶ Vernon M. Whaley, *Called to Worship: From the Dawn of Creation to the Final Amen*, (Nashville, TN: Thomas Nelson, 2009), 13-14.

⁷⁷ Bob Kauflin, *Worship Matters: Leading Others to Encounter the Greatness of God*, (Wheaton IL: Crossway, 2008), 48.

⁷⁸ Frank S. Page and L. Lavon Gray, *Hungry for Worship: Challenges and Solutions for Today's Church* (Birmingham, AL: New Hope Publishers, 2014), 147.

God."⁷⁹ Morgan continues the thought with, "Meditation is not new, and it is not new age. God, not the gurus, devised it based on the Bible."⁸⁰ God will always make a way for His trusting children. So, "stay calm and confident, and give God time to work." "My people, hear my teaching; listen to the words of my mouth. . . . We will tell the next generation the praiseworthy deeds of the LORD'" (Ps. 78:1, 4).⁸¹

Whaley characterizes ultimate spiritual-renewal demonstration with Deuteronomy 6:5 (NKJV), "Love the LORD your God with all your heart, with all your soul, and with all your strength."⁸² Jesus repeated this command three times in the New Testament (Matt. 22:37, Mark 12:30, Luke 10:27) "because it is what we were made for—to love God. Furthermore, if we love Him, we will naturally want to worship Him (*shachah*). He's [sic] done so much for you and me that it only seems right to fall down before Him (*caged*), to throw up our hands in surrender (*yadah*), to sing His praises (*zamar*)—to *worship* Him."⁸³

Staying upright in the sea of life and emotionally buoyant requires that "we learn to float in the waters of God's joy, supported by His everlasting arms. We are unsinkable because of the

⁷⁹ J. I. Packer, *Knowing God* (Downers Grove, IL: InterVarsity Press, 1973), 18-19.

⁸⁰ Robert J. Morgan, *Reclaiming the Lost Art of Biblical Meditation: Find True Peace in Jesus* (Nashville, TN: Thomas Nelson, 2017), vii.

⁸¹ Tell the Next Generation the Praiseworthy Deeds of the . . . <https://divinepeace.com/sermons/tell-the-next-generation-the-praiseworthy-deeds-of-the-lord/>.

⁸² Vernon M. Whaley, *Called to Worship: From the Dawn of Creation to the Final Amen* (Nashville, TN: Thomas Nelson, 2009), xix.

⁸³ *Ibid.*

composition of His joy.”⁸⁴ Happiness has much to do with the constitution of the soul. It has little to do with a person’s circumstances.⁸⁵

This renewed call to ethnodoxology may reflect and influence the culture and ethnicity of the people who are the aging voices in the American church choir culture—the neglected music of a minority.⁸⁶ Maintaining spirituality and musicality is the essence of ethnodoxology.⁸⁷ Spiritual renewal is the third leg of the holistic tripod of physical, mental, and spiritual activity.⁸⁸

Non-music disciplines are developing intersections with ethnomusicology, i.e., medical ethnomusicology.⁸⁹ Some worship disciplines that might be encouraged due to—or in collaboration with—remedial care of the aging voices in American church choirs could include sacred dance, sacred drama, and education in the sacred repertoire library. Some limitations must apply regarding these disciplines.

The Sacred Dance Guild defines several types of sacred dance as “a means of spiritual growth and integration of mind, body, and spirit.” This study is interested exclusively in liturgical dance done in a religious worship service, also known as worship dance or praise dance. A liturgical dance group, also called a movement choir, exists in many faiths, including Christianity, and it enhances religious stories, meanings, and symbols with gestures and

⁸⁴ Robert J Morgan, *Mastering Life Before It's Too Late: 10 Biblical Strategies for a Lifetime of Purpose*, (New York: Howard Books, 2015), 188-189.

⁸⁵ *Ibid.*, 213.

⁸⁶ Nettl, 406.

⁸⁷ Schrag, xix.

⁸⁸ Boyce-Tillman, 940.

⁸⁹ Allison, 277-278.

movement.⁹⁰ Likewise, sacred drama is an outgrowth of the Bible—not Sacred Theatre, whose homepage declares that it enables people to fulfill their sacred task to claim their rightful place and star in their own lives.⁹¹

Managing a sacred repertoire library requires both patience and accuracy. Mark Lucas researched getting men to sing and collated a repertoire catalog, especially for men.⁹² In this study, the tips for choral conductors on selecting solo repertory come from Amy Blosser.⁹³ June Countryman researched a selection of choral repertoire sorted by publishers based on choral reading sessions.⁹⁴

Definition of Terms

Aging Voices: anyone over fifty, according to AARP. Most other sources begin at 65+.

Culture: a social phenomenon that explains the characteristics of a particular society.

Ethnicity: a state of belonging to a social group that has a common national or cultural tradition.

Ethnodoxology: the interdisciplinary study of how Christians in every culture engage with God and the world through their artistic expressions.

Ethnomusicology: all issues in the world’s conversation about music in and as culture.

Intergenerational: Two or more generations at the same time in the same place interacting with and learning from each other.

Multi-generational: More than one generation at the same time in the same place.

⁹⁰ Sacred Dance Guild <https://sacreddanceguild.org> accessed June 25, 2021. Also, About Sacred Dance – Sacred Dance Guild. <https://sacreddanceguild.org/about/about-sacred-dance/>.

⁹¹ Sacred Theatre <https://peggyrubin.com/what-is-sacred-theatre>.

⁹² Mark Lucas, “Real Men Sing,” *Choral Journal*, Vol 52, No. 9: 42-48, 2012.

⁹³ Amy Blosser, “The Choral Director as Voice Teacher: Tips for Selecting Solo Repertoire for Singers,” *Choral Journal*, Vol 50 No 11 Jun/Jul2010 p 37-39. ISSN 0009-5028.

⁹⁴ June Countryman, “Choosing Choral Repertoire,” *Canadian Music Educator / Musicien Educateur au Canada* Summer2008, Vol 49, Issue 4, p 40-41. ISSN 0008-4549.

Sacred dance: the use of dance in religious ceremonies and rituals, Its acceptability in Christianity varies widely.

Sacred Drama: limited to readings and dramatizations based on the Bible or Christian ministry.

Chapter Summary

Looking at the aging voice in American church choir through the lens of ethnomusicology reveals a marginalized, distinct ethnicity within a national minority culture that has a distinct mission of ethnodoxology. The ethnicity and culture of aging voices in American church choirs may reveal a need for remedial care for physical symptoms, cognitive stimulation, and spiritual renewal. The holistic nature of the remedial interventions may include body health, cognitive stimulation, and spiritual renewal.⁹⁵ Although published research dates back to the 1990s regarding the physical challenges of aging voices, there is an acknowledged gap in sources to guide directors of choirs containing older voices.⁹⁶ Some non-musical disciplines intersect with ethnomusicology, e.g., medical ethnomusicology. Other worship disciplines that might be encouraged due to or in collaboration with remedial care of the aging vocalists in American church choirs could include sacred dance, sacred drama, and education in the sacred repertoire library.

After a thorough review of existing literature and data from the proposed interview survey through a qualitative study according to Creswell's design,⁹⁷ recommendations will correlate findings specifically to remedial action for the aging voices of singers in the American church choir. Finally, the findings will be available to each participating director to facilitate Psalm 150, "Let everything that breathes praise the Lord! Praise the Lord!"

⁹⁵ Boyce-Tillman, 940.

⁹⁶ Meredith, 7.

⁹⁷ Creswell and Creswell, *Research Design*, 64.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

This chapter reviews literature addressing various issues related to the aging voices within the American church choir. The first section summarizes the history of the American church choir. The second reviews literature that considers the biological and chronological aging of the voices within the American church choir. The third section reviews literature showing the need for remedial care of singers with aging voices related to physical symptoms, cognitive stimulation, and spiritual renewal. The fourth section demonstrates a connection to ethnomusicology as a distinct ethnic group, a distinct minority culture, and a distinct mission of ethnodoxology. The fifth section reviews literature about other worship disciplines that might be encouraged due to—or in collaboration with—remedial care of the aging vocalists in American church choirs, e.g., sacred dance, sacred drama, and sacred repertoire libraries.

The American Church Choir

As established by King Solomon at the dedication of Israel's first temple over three thousand years ago, the concept of a church choir is the subject of 2 Chronicles 5:11-14. It was a vast choir, accompanied by 120 trumpets, psalteries, harps, and cymbals. Together, they had a united sound praising the LORD (v. 13).⁹⁸ The Levite singers' experience was uniquely their own (2 Chron 5:13, 14), as was the 120 priests playing trumpets. Nettl says that is ethnomusicology—"all of the music that a group knows or only that part of the total musical experience the group regards as uniquely its own and with which it identifies itself."⁹⁹

⁹⁸ *The Holy Bible*, King James Version.

⁹⁹ Nettl, *The Study of Ethnomusicology*, 410.

Therefore, because the music praised God, it was original ethnodoxology—the activity of a culture whose function is to praise God.¹⁰⁰

Gradually, Western multipart singing developed into choirs, which Geisler and Johansson see as defining three associated phenomena: “(1) a group of people singing, (2) the music performed by the group, and (3) the place in which the group performed the music.”¹⁰¹ Since the Enlightenment, self-organized choirs joined student choirs, male choirs, men’s choruses, mixed choirs, women’s choirs, children’s choirs, and other specialized choirs from the nineteenth century forward.¹⁰² American church choirs “owe their origin to the Jews regarding both men, women, and boys, and possibly share it with the Greeks.”¹⁰³

“The first choir in the Hebrew Scriptures . . . was a mixed one, ‘Moses and the children of Israel;’¹⁰⁴ the next was of women only—Miriam (the first vocal soloist whose name we know) and her maidens;¹⁰⁵ the third was also of women, who ‘came out of all cities of Israel, singing . . . to meet Saul;’¹⁰⁶ the fourth was of men only (apparently) but was the nucleus of a choir which ultimately included boys—that of the tabernacle at Jerusalem” (1 Chron. 16:4).¹⁰⁷

¹⁰⁰ Schrag, *Creating Local Arts Together*, xviii.

¹⁰¹ Ursula Geisler and Karin Johansson, “Contemporary Concepts and Practices of Choral Singing,” 777.

¹⁰² *Ibid.*, 780.

¹⁰³ Clement A. Harris, “Church Choirs in History,” *Music and Letters* Vol. 17, No. 3 (Jul., 1936), pp. 210-217 (8 pages) published by Oxford University Press <https://www.jstor.org/stable/727380>.

¹⁰⁴ Exodus 15:1, “Then **Moses** and **the** Israelites sang this **song** to **the** LORD: “I will sing to **the** LORD, . . . for he is highly . . . Both horse and driver he has hurled into **the** sea” . . . <https://biblehub.com/exodus/15-1.htm>.

¹⁰⁵ Exodus 15:20 Then **Miriam** the prophetess, Aaron’s sister, took a tambourine in **her** hand, **and** all . . . Then **Miriam** the prophet, Aaron’s sister, took a timbrel . . . **her** hand, **and** all the women followed **her**, with timbrels . . . <https://biblehub.com/exodus/15-20.htm>.

¹⁰⁶ 1 Samuel 18:6 As **the** troops were returning home after David had killed **the** Philistine, **the** women came out from **all the** . . . of Israel to meet King Saul with **singing** and dancing, with . . . songs and with timbrels and lyres. https://biblehub.com/1_samuel/18-6.htm.

¹⁰⁷ Harris, 210.

A distinguished retired professor from Colorado State University at Fort Collins, James McCray, says, “American choral music evolved.”¹⁰⁸ Unlike political history, American choral music did not burst into existence—even though it was part of the Colonial period—until the twentieth century. Nevertheless, sacred choral music had a functional purpose. Together with secular music created for artistic purposes, they form the two fundamental principles of American choral music.¹⁰⁹ The seeds are in the religious traditions carried to America by immigrant Europeans seeking religious freedom. Despite Puritan austerity in musical expression, their church music could be sung in unison, *a cappella*. Puritans imported the Psalm-singing traditions of the Reformation along with folk music.¹¹⁰

Eighteenth-century American composers created a new, culturally representative musical personality. One of the best-known is William Billings, who operated singing schools to help people learn to sing “in tune.” It would seem that eighteenth-century choir directors faced some of the same problems as today’s choir directors.¹¹¹ The most prominent choral musician in the nineteenth century was Lowell Mason. His primary compositions were hymns and singing books different from camp meeting songs. He developed and advanced music education with his tools while the church provided the backbone for choral music to flourish.¹¹²

The function of the church choir, under debate for at least two centuries, generally follows one of two philosophies. Some believe that the choir is to assist congregational singing.

¹⁰⁸ James McCray, “The Evolution of American Choral Music: Roots, Trends, and Composers before the 20th Century” *The Diapason*, webDiap0511p26-29.pdf
<https://www.thediapason.com/sites/the/diapason/files/webDiap0511p26-20.pdf>.

¹⁰⁹ Ibid., Prologue.

¹¹⁰ Ibid.

¹¹¹ Ibid., Overview: the 18th century.

¹¹² McCray, Overview: the 19th century.

Others see the group with its own identity and quality displayed in singing anthems—an English derivative of the Latin motet and more complicated than hymns.¹¹³

Regardless of their intended function, church choirs that have been successful serve in both capacities, and, for most people, the blending of these functions has been beneficial. The rise of choral music in America owes much to congregational singing. On the other hand, group singing in worship has been a vital part of choral music development, especially in America, where the first printed book was the *1640 Bay Psalm Book*.¹¹⁴

The most significant factor in the evolution of American choral music is the church's influence. Choral music began primarily because of its need in religious ceremonies. However, the liturgical words expanded into the secular arena, which grew exponentially in the twentieth century. The church was the overriding force in the development of choral singing but is somewhat less influential today, “even though a vast majority of quality choral works are based on sacred texts.”¹¹⁵ Singing schools formed to help people learn religious music singing. “The strongest stimulus for church choirs came in the twentieth century with two choral conductors, John Finley Williamson (1887-1964) and F. Melius Christiansen (1871-1955), with quite different approaches to choral singing.”¹¹⁶ Founder of Westminster Choir College, Williamson developed a choir system for all age groups focusing on a big dark choral sound. Christiansen organized St. Olaf College Choir in 1912 with minimized vibrato, common color, and flexible movement.¹¹⁷ Although some school systems or administrations began preventing the performance of music with religious texts in the mid-twentieth century, the church remains an essential advocate for choral music.

¹¹³ McCray, Church repertoire.

¹¹⁴ Ibid.

¹¹⁵ Ibid., Summary.

¹¹⁶ Westermeyer, *Te Deum*, 296.

¹¹⁷ Westermeyer, 296.

The Aging Voice

Biological and Chronological

“The aging process is being researched extensively because of the importance of aging on the heart, brain, and all other body organs.”¹¹⁸ Learning about the aging voice “combines general knowledge about the aging process with specific knowledge about laryngeal aging.”¹¹⁹ In addition to chronology, aging is a “complex conglomeration of biological events that change the structure and function of various parts of the body. Our perceptions of voices over the years help to explain why some ‘old’ voices can be made ‘young’ again.”¹²⁰

As a body’s structure changes, so does its performance. “Aging is associated with deteriorating body functions: accuracy, speed, endurance, stability, strength, coordination, breathing capacity, nerve conduction velocity, heart output, and kidney function. In addition, tissues and ligaments atrophy and cartilages turn to bone, including those in the larynx.”¹²¹ Nevertheless, the notion is open to the challenge that these changes occur gradually and progressively. “It appears possible that many of these functions can be maintained at a better level than expected until very near the end of life and may allow a high-quality singing or acting career to extend into or beyond the seventh decade.”¹²²

¹¹⁸ Robert T. Sataloff and Karen M. Kost, “The Effects of Age on the Voice, Part 3,” *Journal of Singing*, January/February 2021, volume 77 No. 3, p. 369.

¹¹⁹ Ibid.

¹¹⁷ Ibid.

¹²¹ Satalof and Kost, 370.

¹²² Sataloft and Kost, 370.

How old is “old?” According to AARP, aging voices are anyone over fifty years of age.¹²³ Most other sources set the age closer to sixty or sixty-five.¹²⁴ Nevertheless, people cannot be categorized solely based on their chronological age. Instead, biological age is a more useful measure of the condition and function of each person’s body. “The desired result is to slow biological aging while chronological age advances inexorably. There is a pronounced difference among individuals in the rate and extent of bodily change. Although many people are retired in their seventies, John Glenn was returning to space.”¹²⁵ More study is needed, but physicians and voice teachers already have some intervention tools to slow the effects of aging on the voice.¹²⁶

The 2020 U.S. Census reports, “the nation’s adult population increased faster than the under-age-18 population and the U.S. population as a whole in the last decade. This growth [sic] is partly fueled by the aging of the baby boomers born between 1946 and 1964, aged fifty-seven to seventy-five in 2021.”¹²⁷ “The total U.S. population aged 65+ in 2020 is 16.9 percent, up from 1950 when only eight percent of the population was 65 or over.”¹²⁸

“The population aged sixty-five years and older may increase to approximately one-third of the U.S. population by 2030, as is the percentage of those staying on in the workforce. Even

¹²³ AARP (<https://www.AARP.org>) sources US Census Bureau 2012.

¹²⁴ US Census Bureau June 2019, published in *Statista 2021*, <https://statista.com/statistics/share-of-old-age-population-in-the-total-us-population/> accessed June 6, 2021. Compares favorably with “Music Participation for Older People: Five Choirs in Victoria, Australia” DOI: 10.1177/1321103X18773096.

¹²⁵ Ibid.

¹²⁶ US Census Bureau, 2020.

¹²⁷ Stella U. Ogunwole, Megan, A Rabe, Andrew W. Roberts, and Zoe Caplan, “US Adult Population Grew Faster Than Nation’s Total Population from 2010 to 2020,” <https://www.census.gov/library/stories/2021/08/united-states-adult-population-grew-faster-than-nations-total-population-from-2010-to-2020.html> Source: U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 97-171) Summary File; 2010 Census Redistricting Data (Public Law 94-171) Summary File; 2020 Census Redistricting Data (Public Law 94-171) Summary File.

¹²⁸ Hadly.ward@statista.com Source: US Census Bureau, release date June 2020.

if older individuals leave the workforce, having voice symptoms affects the quality of life and can lead to social isolation.”¹²⁹ “Globally, the population is rapidly aging. Between 2000 and 2050, the proportion of the world’s population over 60 years will double from about 11 percent to 22 percent.”¹³⁰ Stager et al. found evidence in their pilot study that “regular singing in senior chorales may assist in preserving older adults’ speaking voices.”¹³¹ In their research, Stager et al. quote A. M. Johnson who wrote, “Singing has been considered an athletic use of the larynx, and may provide endurance training for respiratory and laryngeal muscles.”¹³² Evidence of singing’s impact on the speaking voice emerges in studies of measurements of vocal function and perception comparing aging professional singers to aging nonsingers.”¹³³ “Regular vocal technical training can eliminate tremolo and improve agility, accuracy, and endurance in the older speaker or singer just as it can in the beginner.”¹³⁴

Geriatric voice disorders traditionally receive less attention than they deserve. Nevertheless, with optimal physical and vocal conditioning, proper medical supervision of cardiac and respiratory function and appropriate medication, weight control, nutrition, and surgery in selected cases, many singers, actors, and others may enjoy extra years or decades of improved performance, gratifying to them and their audiences.¹³⁵

¹²⁹ Sheila V. Stager, Andrew D. Sparks, Steven A. Bielamowicz, and Julia D. Edgar, “The Role of Choral Singing in Speaking Voice Preservation of Aging Adults,” *Journal of Speech, Language, and Hearing Research*, Vol 63, 2099-2114, July 2020, 2099.

¹³⁰ Dawn Joseph and Jane Southcott, “Music Participation for older people: Five choirs in Victoria, Australia,” in *Research Studies in Music Education*, 2018, Vol. 40(2) 176-190 citing World Health Organization, 2015.

¹³¹ *Ibid.*, 2099.

¹³² A. M. Johnson (2018), “Exercising the aging voice, *SIG 3 Voice and Voice Disorders*, 3(3), 12-18. <https://doi.org/10.1044/persp3.SIG3.12>.

¹³³ Stager, Sparks, Bielammowicz, and Edgar, 2100.

¹³⁴ Sataloff and Kost, 371.

¹³⁵ *Ibid.*, 376.

Anecdotal reports from participants in Stager’s study “suggested that they believed that many of the benefits of singing with the group came from the warmups as well as the rehearsal time.”¹³⁶

Joseph and Southcott report that “in Australia and across the globe, music participation by older people active in the community has the potential to enhance quality of life.”¹³⁷ “Clear evidence of benefits on older people from active music-making participation include social, physical, and psychological.”¹³⁸ “Three overarching themes emerged in the research: a sense of well-being, social connection, and musical engagement.¹³⁹ The observations resemble those of the Stager study. “Older people singing in community choirs found opportunities for social cohesion, positive [sic] ageing, and music learning that provided a sense of personal and group fulfillment, community engagement, and resilience.”¹⁴⁰

“Singing in a choir helps people to establish, develop and maintain social connections. The choir can be both a space and a place for the formation of friendships and sharing a common enjoyable [sic] endeavour” (Skingley & Bungay, 2020).¹⁴¹ “Shared music-making can provide older people with opportunities to remember and reconnect with their youth and their cultural heritage” (Southcott & Joseph, 2013).¹⁴² “Older people who regularly take part in choirs ‘enjoy non-musical benefits such as enhanced emotional, physical, and social well-being

¹³⁶ Stager et al., 2112.

¹³⁷ Joseph and Southcott, 176.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Ibid., 177.

¹⁴¹ Joseph and Southcott, 178.

¹⁴² Ibid.

. . . maintaining, and often rebuilding, social and support networks otherwise lost through factors such as [sic] ageing families and the cessation of work-based alliances” (Sattler, 2013, 12).¹⁴³

“Singing with others is more beneficial than singing alone and ‘requires interacting with others to meet the common goal of making music.’ ”¹⁴⁴ “Social connection recognizes cultural identity, combats social isolation, and develops a sense of belonging.”¹⁴⁵ “The sense of well-being touches on physical and cognitive well-being but focuses on emotional well-being as a positive and transformative experience.”¹⁴⁶ “Musical engagement encompasses prior music experiences, increases confidence and music teaching and learning.”¹⁴⁷ “Regardless of ethnicity or cultural background, all participants stated that being part of a group with shared histories and understandings assisted with overcoming feelings of isolation and loneliness, both of which are genuine issues for older people.¹⁴⁸ “Choir members have a profound sense of community with positive, transformative experiences both personally and musically.”¹⁴⁹ “Singing in the town square and singing in church choirs formed a foundation for lifelong engagement in music.”¹⁵⁰ “Singing in a community choir contributed to participants’ understanding of [sic]

¹⁴³ Joseph and Southcott, 178.

¹⁴⁴ Ibid., 179 quoting Jacob et al., 2009, p. 187.

¹⁴⁵ Ibid., 182.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid., 183-184.

¹⁵⁰ Ibid., 184.

ageing and well-being.¹⁵¹ “By singing in the choir, members found a ‘personal voice’ and the confidence to share their music-making with others.”¹⁵²

“For music educators, the implications are that music teaching and learning is ongoing and not restricted to formal education. In addition, the benefits of music engagement extend to all facets of health and well-being.”¹⁵³ “Culturally and linguistically diverse choirs provide opportunities through performance to maintain and transmit heritage to family, friends, and the wider community. For older people, singing in community choirs offers opportunities for social cohesion, positive [sic] ageing, and music learning while enhancing the quality of life.”¹⁵⁴

Remedial Care

Jeffrey L. Webb, assistant professor of music and director of choral activities at the University of Pittsburgh in Johnstown, Pennsylvania, wrote about “Promoting Vocal Health in the Choral Rehearsal.”¹⁵⁵ Webb “focuses on the importance of vocal health for singers, choral conductors, and choir directors in choral rehearsal.”¹⁵⁶ He says that “promoting vocal health benefits both singers and conductor while removing risk factors for vocal fatigue in a two-hour

¹⁵¹ Joseph and Southcott, 185.

¹⁵² Ibid., 186.

¹⁵³ Ibid.

¹⁵⁴ Ibid., 187.

¹⁵⁵ Jeffrey L. Webb, “Promoting Vocal Health in the Choral Rehearsal,” *Music Educators Journal*. May 2007, Vol. 93 Issue 5, p26-31. 6p. 1 Black and White Photograph, 2 Diagrams. ISSN: 0027-4321 doi: 10.1177/002743210709300513 Accession number 24928249.

¹⁵⁶ Ibid.

rehearsal.”¹⁵⁷ Furthermore, he instructs the director to promote “vocal health before even standing in front of the choir and offers suggestions to improve vocal health.”¹⁵⁸

Webb likens an instrumentalist’s taking care of his or her instrument to a vocalist’s taking care of the voice. One of the first cautions is against yelling with enthusiasm at a sporting event—possibly leading to permanent vocal damage.¹⁵⁹ He further maintains that choral conductors must teach the music and healthy ways of singing it.¹⁶⁰ Prerehearsal prerequisites include learning vocal science and evaluating rehearsal space—especially humidity and ambient noise. Choose repertoire to fit tessituras available to sing it.¹⁶¹ In addition, rehearsal considerations include physical and mental check-ups to reduce vocal and emotional stress. Warmups encompass physical, mental, and repertoire-related activities to “create a habit of singing with healthy vocal techniques.”¹⁶² Strategies include lesson plans, rehearsing music in chunks, speaking sections for rhythm practice, singing high passages down the octave, sectionals, and cooldowns.¹⁶³ A high larynx, protruding neck veins, and pained expressions are signs of strained singing. The sound will be thin and tight with a shout-like quality that wears out the voice.¹⁶⁴

Be alert to personal vocal fatigue. Vary the pitches while addressing the choir. Singing at the choir while they are singing incorrectly is counterproductive. The choir cannot hear, and the

¹⁵⁷ Webb, 25.

¹⁵⁸ Ibid.

¹⁵⁹ Webb, 26.

¹⁶⁰ Ibid.

¹⁶¹ Ibid., 27.

¹⁶² Ibid., 28.

¹⁶³ Ibid., 29.

¹⁶⁴ Ibid., 30.

conductor's voice wears down. Singers react to how the conductor sounds. If the conductor sounds fatigued, the choir sound will suffer.¹⁶⁵

Vocal fatigue occasioned a study on the therapeutic effects of straw phonation for its “vocal warm-up effects on healthy populations and therapeutic effects on voice patients.”¹⁶⁶ Jiang et al. discovered that although vocal rest is beneficial, more significant improvements followed straw phonation.¹⁶⁷ “The study was the first to validate the potential effectiveness of straw phonation in treating vocal fatigue” and “could have a wide clinical application to occupational voice users.”¹⁶⁸

A similar study done in 2013 demonstrated that “straw exercises can have an immediate therapeutic acoustic effect in dysphonic voices.”¹⁶⁹ Dysphonia is any disturbance of normal vocal function.¹⁷⁰ Guzman et al. used resonance tubes in two ways: “leaving the distal end open to air or submerging the distal end in water to act as an artificial extension of the vocal tract.”¹⁷¹ They quote Titze, “Two types of straws can be used: very narrow ‘stirring’ or coffee straws, or the wider ‘drinking’ straw.”¹⁷² “With narrow straws, the control of subglottal pressure becomes

¹⁶⁵ Lloyd Pfautsch, “The Choral Conductor and the Rehearsal,” *Choral Conducting. A Symposium*, 2d ed., ed. Harold A Deckler and Julius Herford, 69-111 (Upper Saddle River, NJ: Prentice Hall, 1988), 100.

¹⁶⁶ Jing Kang, MD, PhD; Jack J. Jiang, MD, PhD; Chao Xue, MD, PhD; Zhewei Lou, MD; Austin Scholp, MS; Yi Zhang, MD, «The Therapeutic Effects of Straw Phonation on Vocal Fatigue,” in *Laryngoscope* 00:2020, The American Laryngological Rhinological and Otological Society, Inc. DOI: 10.1002/lary.28498.

¹⁶⁷ Ibid., 1.

¹⁶⁸ Ibid., 5.

¹⁶⁹ Marco Guzman, Diego Higuera, Catherine Fincheira, Daniel Munoz, Carlos Guajardo & Jayme Dowdall, “Immediate acoustic effects of straw phonation exercises in subjects with dysphonic voices,” in *Logopedics Phoniatrics Vocology*, 2013; 38:35-45. ISSN 1401-5439 print/ISSN 1651-2022 online c 2013 Informa UK, Ltd. DOI: 10.3109/14015439.2012.731079.

¹⁷⁰ [Dysphonia Definition & Meaning | Dictionary.com.](#)

¹⁷¹ Guzman., 35.

¹⁷² Ibid.

less crucial and easier to manage for less trained voice users.”¹⁷³ The study showed “that the exercise sequence we used can produce a short-term effect in voices that are slightly dysphonic.”¹⁷⁴

The previous studies used groups of individuals. Manternach, Schloneger, and Maxfield applied the principles to two women’s choirs. Using semi-occluded vocal tract (SOVT) exercises (e.g., lip trills, straw phonation), choirs have maintained or increased spectral energy after straw phonation.¹⁷⁵ “Choral teacher-conductors and music teacher educators may wish to use straw phonation exercises to increase choral output and reduce vocal effort.”¹⁷⁶ For the study, researchers used a stirring straw 12.75 cm long with an opening diameter of 2.5 mm because the measurements create the highest levels of vocal tract impedance among exercises. Impedance is “ the ratio of the pressure to the volume displacement at a given surface in a sound-transmitting medium.”¹⁷⁷ As a result, “choristers may have been able to use less voicing effort while producing more energy in the conglomerate, choral sound.”¹⁷⁸ Conductors and educators may wish to include SOVT exercises in voice-building and warmup activities using the glides and “accents” from this study. Teacher-conductors may wish to develop other protocols or use respective parts of excerpted literature.¹⁷⁹ “The increases in vocal economy and possible acoustic

¹⁷³ Guzman, et al., 36.

¹⁷⁴ Ibid., 43.

¹⁷⁵ Jeremy Manternach, Matthew Schloneger, and Lynn Maxfield, “Effects of Straw Phonation and Neutral Vowel Protocols on the Choral Sound of Two Matched Women’s Choirs,” *Journal of Research in Music Education* 2019, Vol. 66(4) 465-480 c National Association for Music Education 2018 sagepub.com/journals-permissions DOI: 10.1177/0022429418809976.

¹⁷⁶ Ibid., 465.

¹⁷⁷ Impedance Definition & Meaning - Merriam-Webster.

¹⁷⁸ Manternach, Schloneger, and Maxfield, 476.

¹⁷⁹ Ibid, 476, 477.

benefits may be a time-efficient technique to evoke and train efficient singing in both the classroom and the concert hall.”¹⁸⁰

Some common challenges and practical solutions of integrating vocal technique into the weekly church choir rehearsal addressed by Matthew Hoch include the difference between choral and solo singing techniques.¹⁸¹ Solo singing emphasizes legato, vibrato, tuned vowels, individual “ring,” operatic repertoire, size of voice, and theatrical ability. Choral singing is non-legato, has significantly less vibrato, matched vowels for blend, sectional one-voice, differing *Fach* (German = vocal specialization), and emphasizes sight-reading and musicianship. Although some professional church choirs exist, most ensembles are volunteers from various backgrounds and abilities.¹⁸² Therefore, the fundamental singing technique accommodates both solo and choral singing styles, even though “not all singers have equal aptitude for all types of singing.”¹⁸³

Volunteers singing a variety of styles in a healthy way evidences a choir director who is also a voice teacher.¹⁸⁴ Moreover, amateur singers function best in sectional formations.¹⁸⁵ Soprano section solidification is one of the most challenging tasks. At G5 (783.99 hertz) and above, their vowels all should transition to /a/ in head voice¹⁸⁶ Empirically, more challenging is

¹⁸⁰ Maternach, Schloneger, and Maxfield, 477.

¹⁸¹ Matthew Hoch, “Integrating Vocal Gechnique into the Weekly Church Choir Rehearsal: Common Challenges and Practical Solutions, Part II: Vocal Technique in Choral Singing,” *The American Organist Magazine*, February 2019:28-31.

¹⁸² *Ibid.*, 28.

¹⁸³ *Ibid.*

¹⁸⁴ Hoch, p. 29.

¹⁸⁵ *Ibid.*, 30.

¹⁸⁶ *Ibid.*

soprano reliability so that the same people who practice are the same ones who show up to sing in service or concert.¹⁸⁷

Altos are often the best sight-readers in the choir but struggle to sound like one voice due to the “registration dance” moving from chest voice to head voice and back. Keep the sound “tall” with classical quality. Adding male countertenors encourages beautiful sound because of their pure head voice.

“Tenors are men. There is no such thing as a female tenor.”¹⁸⁸ Female voices stick out instead of blending, and women singing tenor potentially harm their own voices.¹⁸⁹ Men singing the part in falsetto is preferable. A choir short on tenors should use SAB music.¹⁹⁰

“Basses tend to be the weakest musicians in the choir;”¹⁹¹ however, they are foundational for good choral singing, especially for *a cappella* singing. In addition, basses are the most likely section to drag the tempo and profit from sectional practice.¹⁹²

Group intervention on the psychosocial, mental, and physical health of one hundred forty older adults (> 60 years) is the subject of a study by Galinha et al.¹⁹³ Singing in a group is the multimodal activity chosen for this study as a cost-effective activity to promote active and

¹⁸⁷ Hoch, 30.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

¹⁹⁰ Ibid., 31.

¹⁹¹ Ibid.

¹⁹² Ibid.

¹⁹³ Iolanda Costa Galinha, Manuel Farinha, Maria Luisa Lima, and Antonio Labisa Palmeira, “Sing4Health: protocol of a randomized controlled trial of the effects of a singing group intervention on the well-being, cognitive function and health of older adults,” *BMC Geriatrics* (2020) 20-354, <https://doi.org/10.1186/s12877-020-01686-6>.

healthy aging. They used randomized, controlled trials with follow-up measurements six months following the trials.¹⁹⁴

Group singing has an essential impact on psychoemotional variables, stimulating emotional expression, pleasure, fun, relaxation, and imagination.¹⁹⁵ Group singing also fosters a sense of a meaningful life that includes improved self-esteem and self-awareness together with reduced anxiety and depression.¹⁹⁶ Unfortunately, a shortened one-month program's benefits did not sustain until the eight-week follow-up. A third study by Mohammadi, Tanaze, and Moradi in 2011 that added a singing music-therapy intervention for the elderly observed a significant decrease in anxiety, stress, and depression levels.¹⁹⁷ This author has requested access to the final data sets from iolandag@yahoo.com to see if they match the early data and predictions.

Heather MacLaughlin notes that as life spans get longer, more active adults sing for more extended periods in retirement communities, community choirs, and church choirs.¹⁹⁸ This PDF was the first researched item to specifically mention church choirs relative to the aging voice. Garbes notes that people have extreme individual variation in physical changes in their singing mechanisms. She ties these variations to lifestyle and longevity with healthy nutrition and exercise, promoting good oral health while recognizing a “natural decline in muscle mass and

¹⁹⁴ Galinha, et al, 1 of 16.

¹⁹⁵ J. Potter, J. Sorrell, *A History of Singing*, (New York: Cambridge University Press, 2012) as cited by Iolanda Costa Glinha, Manuel Farinha, Maria Luisa Lima, and Antonio Labisa Palmeira, “Sing4Health: protocol of a randomized controlled trial of the effects of a singing group intervention on the well-being, cognitive function and health of older adults,” *BMC Geriatrics* (2020) 20-354, <https://doi.org/10.1186/s12877-020-01686-6>.

¹⁹⁶ Galinha et al., 2 of 16.

¹⁹⁷ Ibid.

¹⁹⁸ Heather MacLaughlin Garbes, DMA, “The Aging Voice: Physiological Changes and singing Considerations,” *Agingvoiceprint*, May 19, 2021, a pdf e-publication at www.heathermaclaughlin.com page 1 of 10.

aerobic capacity.”¹⁹⁹ She credits Sataloff with the diagrams of the voice mechanism and provides considerations for exercise and repertoire.²⁰⁰

As noted in Boyce-Tillman, for a holistic approach to the aging voice in the American church choir, the spiritual considerations are equally important to the physical and psychological/psychosocial remedies.²⁰¹ These spiritual considerations recorded years ago were at the dedication of the first temple in Israel, where all of the singers were men and boys:

¹¹And it came to pass, when the priests were come out of the holy *place*: (for all the priests *that were* present were sanctified, *and did not then wait by course*: ¹²*Also the Levites which were the singers, all of them of Asaph, of Heman, of Jeduthun, with their sons and their brethren, being arrayed in white linen, having cymbals and psalteries and harps, stood at the east end of the altar, and with them an hundred and twenty priests sounding with trumpets:*) ¹³It came even to pass, as the trumpeters and singers *were* as one, to make one sound to be heard in praising and thanking the LORD; and when they lifted up *their* voice with the trumpets and cymbals and instruments of musick, and praised the LORD, *saying*, For *he is* good; for his mercy *endureth* for ever: that *then* the house was filled with a cloud, *even* the house of the LORD; ¹⁴So that the priests could not stand to minister by reason of the cloud: for the glory of the LORD had filled the house of God.²⁰²

According to Whaley, the four spiritual principles of worship are “The wonder of God, the work of God, the wisdom of God, and the wishes of God.”²⁰³ These principles promote an eternal, foundational occupation of loving God, believing God, practicing love, and modeling that love to others.²⁰⁴ Spiritual renewal for all singers in the American church choir (including

¹⁹⁹ MacLaughlin Garbes, 1 of 10.

²⁰⁰ *Ibid.*, 7-10 of 10.

²⁰¹ June Boyce-Tillman, “Unchained Melody: The Rise of Orality and Therapeutic Singing,” in *The Oxford Handbook of Singing*, ed. Graham F. Welch, David M. Howard, John Nix, 935-961 (New York: Oxford University Press, 2019), 940.

²⁰² 2 Chronicles 5:11-14 in *The Holy Bible*, King James Version. Italics mine in verse 12.

²⁰³ Vernon M. Whaley, *Called to Worship: From the Dawn of Creation to the Final Amen* (Nashville, TN: Thomas Nelson, 2009), 13-14.

²⁰⁴ Bob Kauflin, *Worship Matters: Leading Others to Encounter the Greatness of God* (Wheaton, IL: Crossway, 2008), 48.

aging voices) could begin with Scriptures teaching that experience is good. For example, “You shall stand up in the presence of the gray-headed and honor elders, and you shall fear your God; I am the LORD” (Lev. 19:32, NASB).²⁰⁵ “Older men are to be sober-minded, dignified, self-controlled, sound in faith, in love, and in steadfastness” (Titus 2:2, ESV).²⁰⁶ “Never speak harshly to an older man, but appeal to him respectfully as you would to your own father. Talk to younger men as you would to your own brothers” (1 Tim. 5:1, NLT).²⁰⁷ “The glory of young men *is* their strength: and the beauty of old men *is* the gray head” (Prov. 20:29, KJV).²⁰⁸ When veteran American church choir singers display these referenced characteristics: levelheaded, worthy of respect, sensible, and sound in faith, love, and endurance, their value to the vision and mission of the choir is extraordinary.²⁰⁹

Spiritual renewal involves biblical meditation. “Meditation is not new, and it is not new age. God, not the gurus, devised it based on the Bible.”²¹⁰ Morgan continues, “God will always make a way for His trusting children. So stay calm and confident, and give God time to work.”²¹¹

J. I. Packer quotes C. S. Lewis:

Biblical meditation is the activity of calling to mind and thinking over, and dwelling on, and applying to oneself, the various things that one knows about the works and ways and purposes and promises of God. It is an activity of holy thought, consciously performed in

²⁰⁵ *The Holy Bible*, New American Standard Bible.

²⁰⁶ *The Holy Bible*, English Standard Version.

²⁰⁷ *The Holy Bible*, New Living Translation.

²⁰⁸ *The Holy Bible*, King James Version.

²⁰⁹ Frank S Page and L. Lavon Gray, *Hungry for Worship: Challenges and Solutions for Today's Church* (Birmingham, AL: New Hoe Publishers, 2014), 147.

²¹⁰ Robert J. Morgan, *Reclaiming the Lost Art of Biblical Meditation: Find True Peace in Jesus* (Nashville, TN: Thomas Nelson, 2017), vii.

²¹¹ Morgan, *Reclaiming the Lost Art*, vii.

the presence of God, under the eye of God, by the help of God, as a means of communion with God.²¹²

“My people, hear my teaching; listen to the words of my mouth. . . . We will tell the next generation the praiseworthy deeds of the LORD” (Ps. 78:1, 4).²¹³

Whaley characterizes the ultimate demonstration of spiritual renewal, “Love the LORD your God with all your heart, with all your soul, and with all your strength” (Deut. 6:5, NKJV). Jesus repeated this command three times in the New Testament because we were made to love God. First, “Jesus said to him, ‘You shall love the LORD your God with all your heart, with all your soul, and with all your mind.’ ” (Matt. 22:37, NKJV). Then, “And you shall love the LORD your God with all your heart, with all your soul, with all your mind, and with all your strength.’ This *is* the first commandment” (Mk. 12:30, NKJV). Finally, “And he answering said, ‘Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy strength, and with all thy mind; and thy neighbor as thyself’ (Lk. 10:27, KJV). Whaley reasons further, “If we are in love with Him, we will naturally want to worship Him (*shachah*). He’s [sic] done so much for you and me that it only seems right to fall down before him (*caged*), to throw up our hands in surrender (*yadah*), to sing His praises (*zamar*)—to *worship* Him.”²¹⁴

Morgan encourages daily Scripture reading and prayer for spiritual renewal and mastering a practical life with lifelong rhythms for lifetime usefulness woven unapologetically from the strands of Scripture embedded in the Bible like veins of gold.²¹⁵ “Envision God’s

²¹² J. I. Packer, *Knowing God* (Downers Grove, IL: InterVarsity Press, 1973), 18-19.

²¹³ Tell the Next Generation the Praiseworthy Deeds . . . <https://divinepeace.com/sermons/tell-the-next-generation-the-praiseworthy-deeds-of-the-lord/>.

²¹⁴ Whaley, *Called to Worship*, xix.

²¹⁵ Morgan, *Mastering Life*, 1.

enveloping presence.”²¹⁶ Staying upright in life’s sea, emotionally buoyant, requires floating “in the waters of God’s joy, supported by His everlasting arms.”²¹⁷ The composition of His joy makes us unsinkable.²¹⁸ “Happiness has much to do with the constitution of the soul. It has little to do with a person’s circumstances.”²¹⁹ It is a by-product of spiritual renewal, a tripartite need for holistic remedial care.²²⁰

Ethnomusicology/Ethnodoxology

Since ethnomusicology is “the study of music in its cultural context—around the world or in our own backyard,” the study of the American church choir is ethnomusicology in our backyard.²²¹ Nettl’s book, *The Study of Ethnomusicology*, supports the classification of the American Church choir as a minority culture nationwide and the marginalization of elders here in the United States. “We are the field that looks after the neglected, the music of minorities, studying how a society divides itself into categories of race, class, gender, age, each of which has its ‘own’ music.”²²² The American church choir is a discrete community of singers—a neighborhood disappearing within the larger community of the American church. The church’s interest in styles has seen a rapid shift during the past few decades, reducing the quality and amount of choral singing. Although the church continues to be a significant factor in developing choral music in the twenty-first century, the swing away from significant sacred choral music

²¹⁶ Morgan, *The Red Sea Rules*, 79.

²¹⁷ Morgan, *Mastering Life*, 188.

²¹⁸ *Ibid.*, 189.

²¹⁹ *Ibid.*, 213.

²²⁰ Boyce-Tillman, 940.

²²¹ Nettl, 6.

²²² Nettl, 406.

probably will increase just as it did in the twentieth century.²²³ Thus, the elders in the already diminishing choir communities become a discrete minority and merit the support of ethnomusicology.²²⁴

“Ethnomusicologists specialize in the study of music in its cultural setting.”²²⁵

Ethnomusicology in academia flows into missional ethnodoxology, defined by John Witviliet as being “called by God to learn from and encourage faithful artistic expression done in the name of Jesus Christ across the entire span of global cultures.”²²⁶ Eliza Thomas, a writer for IMB, says, “*Doxology* means praise, and *ethno* means people, culture, or nation. Put them together, and you get *ethnodoxology*, which means the worship of people groups or nations.”²²⁷ Maintaining spirituality and musicality is the essence of ethnodoxology.²²⁸

Roberta King offers these definitions:

Ethnodoxology: The study of the worship of God in the world’s cultures; the theological and practical study of how and why people of other cultures praise and glorify the true and living God.

Ethnomusicology: An academic discipline committed to active analysis, documentation, and participant-observation of the ever-burgeoning musics of the world’s cultures. It is interdisciplinary, drawing from the fields of anthropology, linguistics, and musicology.

Ethno-worship: A near-synonym of ethnodoxology. Frequently used in reference to worship through song in diverse cultures.²²⁹

²²³ McCray, Summary.

²²⁴ Nettl, 406.

²²⁵ Carol V. McKinney, *Globe-Trotting in Sandals: A Field Guide to Cultural Research*, (Dallas, TX: SIL International, 2000), 263.

²²⁶ John D. Witviliet in the “Forward,” of *Worship and Mission for the Global Church: An Ethnodoxology Handbook*, James R. Krabill, gen. ed. (Pasadena, CA: William Carey Library, 2012), xxii.

²²⁷ Eliza Thomas, “Ethnodoxology: What it Means and Why it’s Essential for Church Planting,” interview with Sue Whittaker, September 7, 2016, <https://www.imb.org/2016/09/07/ethnodoxology-means-essential-church-plantin/>.

²²⁸ Schrag, xix.

²²⁹ Adapted from “Ethnomusicology,” R. King in the *Evangelical Dictionary of World Missions*, Scott Moreau, Ed., (Grand Rapids, MI: Baker Books, 2000), 327.

In summary, the academically-discrete choir community with minority voices has a discrete ministry of praise to God (Ps. 150).

Interdisciplinary Possibilities

“Other worship disciplines that might be encouraged due to, or in collaboration with, remedial care of the aging vocalists in American church choirs through ethnomusicology and/or ethnodoxology might be sacred dance, sacred drama, and sacred repertoire libraries.”²³⁰

Theresa A. Allison advocates ethnomusicology extended into the medical community.²³¹ “Medical ethnomusicology has been defined as that subsection of ethnomusicology that examines music in healing or medical contexts.”²³² For example, music offers a powerful context in which nursing home residents can transcend an institutional environment to establish a neighborhood or “village community.”²³³ “Research on aging and music represents a variety of intersections between music, the humanities, social sciences, clinical nursing, and the biological sciences.”²³⁴ The village is a small community, geographically delineated, where community members know each other. It is a place where no one is ever born and consists entirely of immigrants who frequently move in unwillingly and cannot escape.²³⁵

²³⁰ Shirley C. Ehler, “Chapter Two Introduction,” in *Aging Voices in the American Church Choir: A Study in Ethnomusicology and Ethnodoxology*, WRSP889 in progress, (Lynchburg VA: Liberty University, 2022), 20.

²³¹ Allison, 277.

²³² Ibid., 278.

²³³ Ibid., 288.

²³⁴ Ibid., 278.

²³⁵ Allison, 282.

“In the context of dementia, the ability to learn new songs stands in glaring contrast to the inability to learn other tasks or to remember events and people.”²³⁶ Music offers one powerful way for elders to engage in neighborhood production within the nursing home context. By better understanding the realities of institutional lives, we can better learn how to improve the quality of life for elders in long-term custodial care.²³⁷

Sacred Dance

The Sacred Dance Guild defines several types of sacred dance as “a means of spiritual growth and integration of mind, body, and spirit. This study’s interest is exclusively in liturgical dance in a religious worship service, worship, or praise dance. A liturgical dance group, also called a movement choir, exists in many faiths, including Christianity, and it enhances religious stories, meanings, and symbols with gestures and movement.”²³⁸

Two articles in the online *Sacred Dance Guild Journal* are significant in the context of this study. The first is “Revel in the Light” and “Dance in the Shadow” by Susan Beayni. Her thirty-three-year-old daughter, Rebecca, cannot speak but is an active communicator; cannot move without assistance but is a recognized dancer, paints with lasers, and is an inspirational presenter in the education field. A goal is to connect with the Divine through dance, and one of the dances used in the article is the Shaker tune, “Lord of the Dance.”²³⁹

²³⁶ Ibid., 286.

²³⁷ Ibid.

²³⁸ Sacred Dance Guild <https://sacreddanceguild.org> accessed June 25, 2021. Also, About Sacred Dance—Sacred Dance Guild. <https://sacreddanceguild.org/about/about-sacred-dance/>.

²³⁹ Susan Beayni, “Revel in the Light” and “Dance in the Shadow,” posted on September 8, 2016, by Sacred Dance Guild Journal. <https://sdghjournal.wordpress.com/2016/09/08/revel-in-the-light-and-dance-in-the-shadow-by-susan-beayni/>.

The other article includes background information and detailed instructions for choreographing “Silent Night,” as presented on the two-hundredth anniversary of the carol’s writing. The described and illustrated choreography could be very meaningful in a liturgical setting. In addition, these types of dances could be encouraged by sharing ethnomusicological goals from church choir ministry.

Sacred Drama

Sacred Drama is an outgrowth of the Bible—not Sacred Theatre. “Sacred Theatre provides a way of looking at your life as a holy play, a wondrous work of performance art in progress, dedicated to forces beyond our imagination. These forces may be called gods; or ideals like Peace or Truth; or concatenations (a group of things linked together or occurring together in a way that produces a particular result or effect) of energy, like Love or Beauty.”²⁴⁰

Quoting Aristotle, “Drama is an imitation of life.”²⁴¹ “We experience a sign of recognition, acknowledging that the play may have been about someone else, but it is also about us.”²⁴² A sacred drama deals with spiritual principles fundamental to the Eucharist: humanity’s sin paid for by Jesus Christ’s death on the cross, burial, and resurrection. Human life’s fundamental, great action is reenacted, and individual lives are also expressed.²⁴³ Wilson-Kastner’s book is mainly about the drama of the Christian liturgy in all its forms. However, a

²⁴⁰ Peggy Rubin, “Sacred Theatre,” <https://peggyrubin.com/what-is-sacred-theatre>.

²⁴¹ Patricia Wilson-Kastner, *Sacred Drama: A Spirituality of Christian Liturgy*, (Minneapolis, MN: Fortress Press, 1999), 12.

²⁴² Ibid.

²⁴³ Wilson-Kastner, 13.

few pages explicate drama in its more well-known scripted form. This topic could benefit from further study.

Sacred Repertoire Library

Managing a sacred repertoire library requires patience and organizational skills, as demonstrated in “Real Men Sing.”²⁴⁴ More extensive repertoire suggestions come from Amy Blosser for choral conductors selecting solo repertoire for singers.²⁴⁵ She stresses the importance of voice specialists expanding their familiarity with solo repertoire through attendance at masterclasses, workshops, and conferences. This reinforcement will help select literature emphasizing specific concepts and skills for advancement.²⁴⁶ Finally, the third article offers guidelines on selecting choral repertoire by choral teachers or directors with a strong recommendation for attending festivals and concerts to gauge repertoire effectiveness or appropriateness in programming. Recommendations for publishers’ and composers’ websites are part of the article.²⁴⁷ Because of the limited published research, this vital topic may need visiting at a future date.

²⁴⁴ Mark Lucas, “Real Men Sing . . . Choral Repertoire,” *Choral Journal* Volume 52, No. 9, 2012: 42-48.

²⁴⁵ Amy Blosser, “The Choral Director as Voice Teacher: Suggestions for Selecting Solo Repertoire for Singers” in *Choral Journal*, Jun/Jul2010, Vol. 50 No. 11: 37-39.

²⁴⁶ *Ibid.*, 37.

²⁴⁷ June Countryman, “Choosing Choral Repertoire,” *Canadian Music Educator / Musicien Educateur au Canada*, Summer2008, Vol. 49, Issue 4: 40-41.

CHAPTER THREE: METHODS

Introduction

After the IRB's (Institutional Research Board) classification of this study as a project, the next step was a demographic assessment of a variety of American Church Choirs through surveying their directors. The following chapter details the design, research plan, research questions and hypotheses, and procedures used.

Design

The qualitative design of this study²⁴⁸ is a rapid assessment²⁴⁹ reported ethnographically²⁵⁰ using inductive reasoning. The demographic data constitutes a small but important quantitative asset to the overall qualitative rapid assessment. Since the IRB classified this study as a project, rapid assessment suits the time frame for the study, does not involve one or more specific field methods, and permits an outlook enabling the researcher to produce useable data within a set period to meet a deadline using common sense and imagination.²⁵¹ Learning historically and currently available demographic information from key individuals via simple surveys and informal interviews is appropriate for this project.²⁵² There is a gap in the scholarly literature about the aging voice in American church choirs that this study aims to help close by responding to the research questions and hypotheses found in chapter one and recapped here.

²⁴⁸ Creswell & Creswell, 179.

²⁴⁹ McKinney, 282.

²⁵⁰ *Merriam-Webster.com Dictionary*, s.v. "ethnography," accessed February 4, 2022, <https://www.merriam-webster.com/dictionary/ethnography>.

²⁵¹ McKinney, 282.

²⁵² *Ibid.*, 283.

Research Questions and Hypotheses

The first research question asked: How might this study connect the American church choir singer with an aging voice to ethnomusicology, and by extension, to ethnodoxology? The second research question asked: How might the ethnicity and culture of American church choirs' aging vocalists promote remedial care? Finally, the third research question asked: What other worship disciplines might be encouraged due to remedial care for the aging vocalists in American church choirs?

Since ethnomusicology is “the study of music in its cultural context—around the world or in our own backyard,” the study of the American church choir is ethnomusicology in our backyard.²⁵³ This observation leads to the first hypothesis: The aging voice in the American church choir demonstrates a connection to ethnomusicology in terms of a distinct ethnic group, a distinct minority culture, and a distinct mission of ethnodoxology. Chapter one's research, supported by Chapter two's literature review, established that. The second hypothesis expands on the first: The ethnicity and culture of aging voices in American church choirs may lead to remedial care for physical symptoms, cognitive stimulation, and spiritual renewal. It has been established in earlier chapters that the remedial care for American church choirs needs to be holistic—addressing all three areas as part of the whole singer. Finally, the third hypothesis states: Other worship disciplines encouraged by remedial care of the aging voices in American church choirs could include dance, drama, and the sacred repertoire library.

²⁵³ Nettl, 6 and page 39 of this paper.

Methods

Surveys sent to thirty colleagues resulted from visiting various church websites, extensive reading in the Bible, books, and peer-reviewed journals about singing, vocal health, and holistic interconnectedness of the physical, mental, and spiritual attributes of singing. Those surveys yielded fourteen responses from eleven states: Arizona, California, Florida, Georgia, New Mexico, New Jersey, New York, North Carolina, Ohio, Tennessee, and Texas. Some of the surveys required informal follow-up emails for clarification. Response codes follow the order in which completed surveys were received. Aggregated and disaggregated data consider choir participation by age groups in addition to pre-COVID-19 and post-COVID-19 information supplied by respondents. Also, some directors responded to queries for clarification of their submitted data.

Procedures

Initially, this researcher queried a large number of choir-director colleagues about their willingness to participate in this study about aging voices in American church choirs. After obtaining IRB permission, surveys went to the thirty people interested in participating. A copy of the survey is in Appendix I. Fourteen surveys returned within six weeks—some with explanatory verbiage after the fact, some with altered parameters on the survey. Response codes correspond to the survey return dates, and Excel spreadsheets found in Appendix II hold the aggregated data according to the eight topics on the survey form.

Instrumentation

The survey, texts, a video call, and emails were the exclusive instruments for data gathering for the demographic portion of this project. Aggregated data fill Excel spreadsheets in Appendix II.

Setting

Responding choir directors minister in various churches: African Methodist Episcopal, both denominational and independent Baptist churches, Church of God in Christ, Christian & Missionary Alliance, Lutheran, Methodist, Roman Catholic, and United Methodist. Some choirs rehearse in a designated choir room, and some rehearse in their church's sanctuary, in a loft or other designated seating.

CHAPTER FOUR: RESEARCH FINDINGS

Data Analysis

The ministries surveyed vary in weekly attendance from thirty people to three thousand people. This variety fits on both sides of the Barna research “consistent with other national data that indicate less than 100 congregants attend the average U. S. Church.”²⁵⁴ In addition, the number of people singing in the surveyed choirs varies from five to one hundred eight. Ironically, the church with the second-largest attendance has the smallest reported choir size.

Curiosity prompted visits to some websites of churches currently relying on virtual ministry. At this writing, Alfred Street Baptist Church is still in virtual mode. “Until further notice, all in-person worship services, activities, and events are suspended.”²⁵⁵ Peakland United Methodist Church in Lynchburg, Virginia, is a large church still meeting virtually on February 27, 2022.²⁵⁶ Masked, with a quartet, piano, and pipe organ, St. Cecilia Parish in Boston is meeting in person.²⁵⁷ Antioch Missionary Baptist Church in San Antonio, Texas, is—at the time of this writing—still meeting virtually.²⁵⁸ Bishop T. D. Jakes’ service on March 6, 2022, shows most people in masks and about half of the seating empty.²⁵⁹ One of the churches surveyed has not returned to in-person meetings. Another surveyed church meets in person but has not resumed its choir. St. Andrew Lutheran Church in Phoenix, Arizona, resumed limited meeting-

²⁵⁴ Barna Group, *Trends in the Black Church: Celebrating its legacy and investing in a hopeful future*, (Barna Group, 2021), 39.

²⁵⁵ <https://youtu.be/u67DrVE4UIM>.

²⁵⁶ https://youtu.be/z5Y7Ay16_L8.

²⁵⁷ <https://youtu.be/n8rIhynCwo>.

²⁵⁸ <https://youtu.be/RYrxLKsZ88A>.

²⁵⁹ <https://youtu.be/H36F32q-7B0>.

in-person on February 6, 2022, but the choir has not yet resumed.²⁶⁰ A concurrent anecdotal observation of churches in Virginia by Joy Siddons, wife of Dr. James Siddons, confirms that some churches or their choirs have not yet resumed in-person activity following the pandemic.²⁶¹

Survey Information

The “Aging Voices in American Church Choirs Survey” collected data relative to the choirs in churches served by directors known to this writer. A sample form may be found in Appendix I. The fourteen responses comprise data from churches under one hundred congregants, between one hundred and a thousand congregants, and those serving over one thousand. The data is as reported by the directors. The numbers do not always add up for either pre-COVID-19 or post-COVID-19. The response code numbers are in the order in which this person received them. The tables are in the order of the questions on the survey. By aggregating the data, themes and trends are more evident. Please find the complete tables in Appendix II.

²⁶⁰ Personal communication from Pastor K. Williamson and member, Joy McCormick on February 13, 2022.

²⁶¹ James Siddons, in personal correspondence dated March 1, 2022.

Table 1: Aggregate Generational Weekly Attendance

Age Group	0 – 17	18-29	30-49	50-64	65+	Pre-COVID-19	Post-COVID-19	% Change	Director Code
	5	2	2	6	20	95	55	0.5789	1
		150	150	100	80	700	500	0.7143	2
	200	500	300	300	200	1500	1000	0.6667	3
	5	2	6	15	45	120	65	0.5417	4
		30					30		5
	22	23	3	35	48	200	160	0.8	6
	20	25	20	30	15		110		7
	35	32	35	60	20	120	182	1.5167	8
				5	22	250	172	0.688	9
	7	5	2	10	18	40	42	1.05	10
	8	12	30	59	71	140	185	1.3214	11
	35	17	18	70	210	350	0	*	12
						3000	1600	0.5333	13
	4	1	4	21	117	300	275	0.92	14
Total	341	799	597	706	844	6815	4376	0.6421	

Source: Aggregated data from “Aging Voices in American Church Choirs Survey.”²⁶²

*Church #12 was still meeting virtually.

Pre-COVID-19 aggregate attendance for the respondent director’s churches was 6,815 people ranging from infants to over age 65. Post-COVID-19 attendance is 4,248 people in the same age range. Post-COVID-19 attendance is 62 percent of pre-COVID-19, and reported numbers are intergenerational. This figure exceeds the Barna study, which charts the weekly church attendance for all U. S. adults as 43 percent in 2001 and falling to 27 percent in 2021. Surveyed churches serve a wide variety of congregants. The post-COVID-19 numbers reported are the most consistent.

²⁶² Shirley Ehler, “Aging Voices in American Church Choirs Survey.” See Appendix II.

An important information item on the survey asked how many regularly-attending people also participate in singing in a choir. A church of a particular size has a particular number of members in its choir(s). Those singers constitute a percentage of the congregants in attendance.

Table 2: Percent of Congregants in a Choir Post-COVID-19

Survey #	Attendance	Choir size	Choir % of attendance
1	55	0	0
2	500	45	9
3	1,000	5	0.5
4	65	17	26
5	30	23	77
6	160	49	31
7	110	21	19
8	182	39	21
9	172	28	16
10	42	12	29
11	185	14	8
12	0	27	*
13	1,600	108	7
14	147	17	12
Total	4,376	405	9.25%

Source: Aggregated data from “Aging Voices in American Church Choirs Survey.”²⁶³

Church #1 has not resumed choir since the pandemic.

Church #3 has different personnel for each service.

Church #12 has a choir but only a virtual congregation until February 20, 2022.

The aggregate numbers of choir members reported by directors are 427 pre-COVID-19 representing age groups from the teens to more than sixty-five years of age. The number of choir members post-COVID-19 was 405 people in the same age groups. Intergenerationally, choir retention was 92.5 percent.

²⁶³ Shirley Ehler, “Aging Voices in American Church Choirs Survey.” See Appendix II.

Although the survey asked, “How many adults are in choir?” the question should be, “How many seniors >50 are in choir?” The numbers in the table are discoverable on the adults-in-choir page of Appendix II.

Table 3: Senior Percentage of Choir Post-COVID-19

Survey Number	Attendance	Choir Size	Seniors >50	% Senior
1	55	0	0	0
2	500	45	35	78
3	1,000	5	3	60
4	65	17	14	82
5	30	23	0	0
6	160	49	15	31
7	110	21	16	76
8	182	39	24	62
9	172	28	27	96
10	42	12	7	58
11	185	14	14	100
12	0	27	27	100
13	1,600	108	63	58
14	147	17	17	100
Total	4,376	405	262	65%

Source: Aggregated data from “Aging Voices in American Church Choirs Survey.”²⁶⁴

Church #1 has not resumed choir post-pandemic.

Church #3 has a different combination for every service.

Church #5 has no singers over the age of fifty.

Church #12 is still meeting virtually.

Choir adults pre-COVID-19 numbered 427, with only nine directors reporting pre-COVID-19 numbers. Post-COVID-19, the category reduced to 405, with all fourteen directors responding. That is a retention of 92.5 percent of pre-COVID-19 adult singers. Sixty-five percent of the retained choir members are age fifty or older.

Information about gender distribution, voicings, skill level, and accompanists show that females outnumber males by 2:1 (225 women to 103 men). Reported voicings are 149 sopranos,

²⁶⁴ Shirley Ehler, “Aging Voices in American Church Choirs Survey.” See Appendix II.

82 altos, 52 tenors, and 47 basses. Of these singers, 9 are professionals, 60 are skilled volunteers, 84 are casual singers, and the balance are unskilled singers. All directors reported that there is no mandatory retirement age for their choir members, and three directors also reported no mandatory retirement age for the accompanists.

Regarding accompanists, one choir uses the piano exclusively. Two choirs use praise bands exclusively, while six reporting directors *never* use praise bands. Orchestras accompany two choirs. Six choirs sing *a cappella*, and a bell choir sometimes accompanies one choir.

Initial Bias

Based on the initial research about the make-up of choirs in general, and church choirs in particular, the senior choir population was in the marginal minority category. Shrinking, younger populations are more current information from the U. S. Census Bureau and the Barna Group. At the same time, the extended life expectancy of seniors makes them the fastest-growing segment of the U. S. population that will likely be in the majority within another generation. This information sheds an entirely different light on original assumptions. This researcher also expected that the ratio of choir members to church attendees should be consistent. That bias also proved to be incorrect.

Discovered Themes and Trends

Pre-COVID-19 pandemic church attendance has decreased for at least two decades.²⁶⁵ When social distancing pushed services online, Barna researchers identified three types of churchgoers: (1) Christians streaming their pre-COVID church services; (2) Christians streaming a different church online (digital church-hopping); (3) Christians who stopped “attending”

²⁶⁵ Barna, “State of the Church,” July 8, 2020.

church altogether.²⁶⁶ A minority of congregations continued to meet physically throughout the pandemic. Masking, social distancing, and isolating to avoid contact with other people contribute to mental and emotional distress. A passage in Hebrews may have a different primary interpretation; however, the passage could also apply to the mental health issue, “²⁴And let us consider how to spur one another on to love and good deeds. ²⁵Let us not neglect meeting together, as some have made a habit, but let us encourage one another, and all the more as you see the Day approaching” (Heb. 10:24-25, ESV).

“Elders and Boomers together make up over half of the practicing Christian population in the U.S. (56%). Of Christian Millennials, 50 percent have not attended church in the past four weeks either in person or digitally. The trend involves uncertainty. There is no going back to pre-COVID-19 in attitudes or worship trends. A blend of in-person and digital services is the ‘new normal.’”²⁶⁷ One year out, . . . trauma of the past and uncertainties of the future adapt to digital and hybrid ministry.²⁶⁸

The survey's trend of post-pandemic church choirs indicates a decided increase in the percentage of aging voices in churches with choirs. A more extensive survey pool may or may not concur; however, it is in line with the predictions by the U.S. Census Bureau.²⁶⁹

²⁶⁶ Barna, “State of the Church,” July 2020.

²⁶⁷ Ibid.

²⁶⁸ Barna, “A Year Out,” March 18, 2021.

²⁶⁹ US Census Bureau, 2020.

CHAPTER FIVE: CONCLUSIONS

This chapter summarizes the research, findings, and suggestions for remedial care for aging voices in American church choirs. The study's limitations call to mind the lack of digitally accessible data relative to the church choirs, the profound and, in many cases, surprising effects of the health emergencies created by the pandemic, and the recommended program restructuring in church choir rehearsals. Recommendations for future research supporting remedial care for American church choir singers include making available specific, best-practice activities to a larger cohort of conductors, directors, and voice teachers. Implications for the practice of actively engaging a more extensive cohort include consistent, vocal fundamentals for enhancing remedial voice care at any age.

Summary of the Study

The American church choir is a distinct culture across all denominations and independent churches. It is, however, a minority culture in the United States where (1)) some years ago, many churches replaced their choirs with praise bands or teams;²⁷⁰ and (2) total, regular church attendance is declining.²⁷¹ Many of the choirs that remain have singers with abused voices or voices over the age of fifty that benefit from some simple but profound holistic remedial attention to extend the longevity of their singing mechanisms while enhancing mental and spiritual health.

²⁷⁰ Nettl, 406.

²⁷¹ Barna, "State of the Church," July 8, 2020.

It is no secret that the isolation promoted by the pandemic panic created or exacerbated mental health issues for many people of any age living alone. However, those people within the church choir culture who actively sought ways to keep singing with each other seem to have fared better than those who remained isolated,²⁷² according to the Sing4Health protocol and affirmed by geriatrician Theresa A. Allison.²⁷³ Physically, the “straw phonation” procedures recommended by Kang et al., referenced on page 31, and demonstrated with variations on YouTube by Ingo Titze is an easy, non-invasive remediation for vocal stress resulting in improved tone. The third leg of the tripod is the three-thousand-year-old scriptural, foundational church-choir principle of 2 Chronicles 5:11-14 and elaborated on by Morgan.²⁷⁴ This principle cannot operate in isolation.

In the twenty-first century, within the minority culture of church choirs, the ethnicity of aging singers over fifty is beginning to shift from a small minority to about half of the post-COVID-19 church choir. Based on the U.S. Census figures and the Barna studies, aging voices may become the choral majority within the next generation.²⁷⁵

Summary of the Purpose

Data from this study partially fills an existing gap in the literature available to define the church choir's culture and acknowledge the ethnodoxological ethnicity of aging voices in church choirs. Although information about adult participation in choral music is widely available, published data about choral participation by the senior adult voice are a relatively new

²⁷² Sing4Health Protocol, 354.

²⁷³ Allison, “The Nursing Home as Village,” 282.

²⁷⁴ Morgan, *Red Sea Rules*, 123.

²⁷⁵ Barna, “State of the Church,” July 8, 2020, [www.barna.com › research › state-of-the-church-2020](http://www.barna.com/research/state-of-the-church-2020).

phenomenon,²⁷⁶ and relative to church choirs, they are virtually non-existent. When the fastest-growing population segment is at or beyond retirement age, this study may benefit conductors working with that age group.²⁷⁷

Summary of the Prior Research

Primary themes in the scholarly literature included connecting the senior American church chorister to ethnomusicology as a distinct ethnic group, minority culture, and mission of ethnodoxology. Further, the literature illuminated possibilities for holistic remedial care for the singers' physical symptoms, cognitive stimulation, and spiritual renewal. Finally, academic ethnomusicology sees the music of a minority—overseas or in our back yard—as the part of the total musical experience the identified group regards as uniquely its own.²⁷⁸

The core concept melded ethnomusicology (which has become an almost exclusively academic subject) with ethnodoxology (a service-based concept) originating as a worship choir three thousand years ago in the Holy Bible in 2 Chronicles 5:11-14. Ethnodoxology began in Genesis with humans fellowshiping with God in the cool of the day in the Garden of Eden, where remedial care was unnecessary. Fast-forward from Eden to the twenty-first century, where much literature defines the damaged voice and recommends various remedies.

Chronological age is less important than biological age. Although no one can avoid getting older, everyone can take steps to avoid or reverse premature aging of the vocal apparatus—including the breathing system and overall health—while practicing good vocal

²⁷⁶ Avery, *Adult Community Choruses*, 348.

²⁷⁷ Meredith, "Passing the Torch," 6.

²⁷⁸ Schrag, *Creating Local Arts Together*, xviii.

hygiene.²⁷⁹ Singing with others is more beneficial than singing alone because it requires interacting with a group to achieve the group's common goal.²⁸⁰ At the same time, the consulted literature contained many suggestions for choral health, the information specific to adults over the age of 50 presumed community choir activity. Only six authors specifically addressed church choirs. Recommended holistic remedial care includes measures for physical health, cognitive/emotional health, and spiritual health. As life spans increase, more active adults extend their singing participation in retirement communities, community choirs, and church choirs.²⁸¹

The American church choir is ethnomusicology in our backyard and a minority culture nationwide.²⁸² It is also a discrete community of singers disappearing within the larger culture of the American church, which is swinging away from significant choral music.²⁸³ The function of the church choir is ethnodoxology—how people of any culture praise and glorify the true and living God.²⁸⁴

Summary of the Procedure

A survey sent to the directors was a demographic assessment of a variety of American church choirs. As a rapid assessment, one or more field methods though not required makes possible learning historically and currently available information from strategic individuals via surveys and informal interviews appropriate. The objective of the survey was to discover the commonality of data identifying the choirs. A copy of the survey is available in Appendix I.

²⁷⁹ Webb, "Promoting Vocal Health," 26.

²⁸⁰ Joseph and Southcott, 178.

²⁸¹ Heather MacLaughlin Garbes, "The Aging Voice," 1.

²⁸² Nettl, 406.

²⁸³ McCray, Summary.

²⁸⁴ Roberta King, *Ethnomusicology*, 327.

Summary of Findings

The directors surveyed minister in various churches with weekly attendance varying from thirty to three thousand people. Using the aggregated data provided by the surveyed directors, post-COVID-19 church attendance from infants to seniors over 65 averaged 62 percent of pre-COVID-19s. From an attendance of 4,376, choir participants number 405 post-pandemic, which is 9.25 percent of the congregants. Of the 405 choir members, 262 were age 50 or more, showing that 65 percent of the aggregate choirs are considered “senior” by the U. S. Census Bureau.

Although one church had a choir, they had only a virtual congregation. Another church had an in-person congregation but had not resumed choir. Interestingly, the smallest choir belongs to the second-largest congregation. These findings align with a noticeable reluctance to return to entirely in-person worship, complete with full-service choirs. Nevertheless, research supports the first hypothesis: The aging voice in the American church choir demonstrates a connection to ethnomusicology in terms of a distinct ethnic group, a distinct minority culture, and a distinct mission of ethnodoxology. Although not specific to church choirs, research data supports the second hypothesis, which expands on the first: The ethnicity and culture of aging voices in American church choirs may lead to remedial care for physical symptoms, cognitive stimulation, and spiritual renewal. Finally, the third hypothesis identifying other worship disciplines that would be encouraged by remedial care of aging voices in American church choirs received less time and space than initially planned and will appear in Recommendations for Future Study.

Limitations

Due to the strength of the pandemic in spring of 2020 through the present, face-to-face instruction halted, or it was restructured to online, hybrid, or face-to-face fully masked and socially distanced. Therefore, both pre- and post-COVID-19 information was requested, and the post-COVID-19 information was most consistent in the directors' responses to the survey. A more extensive survey pool may have yielded different numbers in aggregate responses; however, the existing data pool aligns with projections and findings by the Barna Group and the U. S. Census Bureau.

An additional limitation was the time available for research. The third Research Question and Hypothesis have limited data readily available for research and study on incorporating additional disciplines with or in addition to the remedial possibilities for the American church choir. Therefore, the interdisciplinary possibilities will appear in recommendations for future study.

Recommendations for Future Study

Future research on this topic should focus on Interdisciplinary Possibilities as outlined in Hypothesis number three: "Other worship disciplines that might be encouraged due to, or in collaboration with, remedial care of the aging vocalists in American church choirs through ethnomusicology and (or) ethnodoxology might be sacred dance, sacred drama, and sacred repertoire libraries."²⁸⁵

Allison advocates medical ethnomusicology to improve the quality of life for elders in long-term custodial care and lists some resources that might be helpful.²⁸⁶ As a liturgical dance

²⁸⁵ Shirley C, Ehler, *Aging Voices*, 20.

²⁸⁶ Allison, 286.

group, sacred dance appears to have even less peer-reviewed information than aging voices in American church choirs. Susan Beayni has two articles in the online *Sacred Dance Guild Journal* that would be a good starting place.²⁸⁷

Sacred drama is an outgrowth of the Bible—not Sacred Theatre—and deals with spiritual principles fundamental to the Eucharist: humanity’s sin paid for by Jesus Christ’s death on the cross, burial, and resurrection.²⁸⁸ The small amount of reference data on this topic suggests that the research may be similar to researching the American church choir with aging voices. Furthermore, data relative to community theater may be more plentiful, and principles can be cross-applied.

Managing a sacred repertoire library requires organizational skills and much patience. Mark Lucas, Amy Blosser, and June Countryman authored journal articles that, among other things, highlight this skill. In addition, their articles have recommendations for publishers’ and composers’ websites. Finally, limited published data warrants further research on this vital topic.

Thesis Summary

The American church choir is a unique culture. Moreover, the aging voices in that culture constitute a discrete ethnic group that brings ethnomusicology from academia “somewhere” among the nations to our own backyards. Those same voices are active in ethnodoxology because their primary function is to learn about and praise the true living God as one of their acts of corporate worship. Because all voices age—some faster than others—holistic, remedial care will extend the serviceable life of the singing voice.

²⁸⁷ Beayni, <https://sacreddanceguild.org> accessed June 25, 2021.

²⁸⁸ Wilson-Kastner, 13.

The study proved that any choral conductor with a researched plan could provide holistic assistance to the choir in his or her care while being alert to conditions that may require attention by a professional ear, nose, and throat specialist. On the other hand, the study also revealed a lack of uniform training regarding holistic remediation among choral conductors and worship ministers. Holistic care involves each singer's physical, cognitive/emotional, and spiritual parts. Like a three-legged stool, the balance is nonexistent when one part is missing. Wholeness ensures extended singing.

Bibliography

- AARP (<https://www.AARP.org>) sources U.S. Census Bureau 2012.
- Abrahams, Frank, and Paul D. Head, eds. *The Oxford Handbook of Choral Pedagogy*. New York: The Oxford University Press, 2017.
- Aging Voice*. Sean Parker Institute for the Voice. New York: Weill Cornell Medical College <https://voice.weill.cornell.edu/voice-disorders/aging-voice>.
- Allison, Theresa A. "The Nursing Home as Village: Lessons from Ethnomusicology," *Journal of Aging, Humanities, and the Arts* 4:276-291, 2010. Copyright Taylor & Francis Group, LLC ISSN: 1932-5614 print/1932-5622 online DOI: 10.1080/193225614.2010.529395.
- Avery, Susan. "Adult Community Choruses: A Lifespan Perspective," in *The Oxford Handbook of Choral Pedagogy*, edited by Frank Abrahams and Paul D. Head, 345-359. New York: Oxford University Press, 2017.
- Barna: State of the Church. July 8, 2020.
- Barna Group: A Year Out: How COVID-19 Has Impacted Practicing Christians. March 18, 2021. <https://www.barna.com/research/a-year-out/>.
- Barna Group. *Trends in the Black Church: Celebrating its legacy and investing in a hopeful future*. Barna Group, 2021.
- Beayni, Susan. "Revel in the Light" and "Dance in the Shadow," posted on September 8, 2016, by Sacred Dance Guild Journal. <https://sdghournal.wordpress.com/2016/09/08/revel-in-the-light-and-dance-in-the-shadow-by-susan-beayni/>.
- Beynon, Carol. "Never Too Old," in *Choral Journal*, Feb 2017. Vol 57, no. 7: 18-29. ISSN: 0009-528 accession no 120586137.
- Blecourt, Morgan de. *Duke Health Blog*. July 20, 2019. Duke University Hospital <https://www.dukehealth.org>.
- Boyce-Tillman, June. "Unchained Melody: The Rise of Orality and Therapeutic Singing." *The Oxford Handbook of Singing*, edited by Graham F. Welch, David M. Howard, John Nix. 935-961. New York: Oxford University Press, 2019.
- Countryman, June. "Choosing Choral Repertoire." *Canadian Music Educator / Musicien Educateur au Canada*. Summer2008, Vol. 49, Issue 4: 40-41.

- Creswell, John W. and J. David Creswell. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Los Angeles, CA: SAGE Publications, Inc., 2018.
- Davidson, Jane W. and Sandra Garrido. "Singing and Psychological Needs." In *The Oxford Handbook of Singing*, edited by Graham F. Welch, David M. Howard, John Nix. 903-917. New York: The Oxford University Press, 2019.
- "Ethnicity vs. Race, *Diffen.com*, *Diffen LLC*, n.d. Web June 1, 2021.
- Galinha, Iolanda Costa, Manuel Farinha, Maria Luisa Lima, and Antonion Labisa Palmeira. "Sing4Health: protocol of a randomized controlled trial of the effects of a singing group intervention on the well-being cognitive function and health of older adults." *BMC Geriatrics*, (2020):20-354. <https://doi.org/10.1186/s12877-020-01686-6>.
- Geisler, Ursula, and Karin Johansson. "Contemporary Concepts and Practices of Choral Singing." In *The Oxford Handbook of Singing*, edited by Graham F. Welch, David M. Howard, John Nix. 775-789. New York: The Oxford University Press, 2019.
- Global Ethnodoxology Network. <https://www.worldofworship.org/what-is-ethnodoxology/> Accessed June 1, 2021.
- Grossman, Cathy L. "Many church choirs are dying. Here's why." *Religious News Service*, September 17, 2014, <https://religionnews.com/2014/09/17/many-church-choirs-dying-heres/> accessed June 5, 2021.
- Guzman, Maarco, Diego Higuera, Catherine Fincheira, Daniel Munoz, Carlos Guajardo & Jayme Dowdall. *Logopedics Phoniatrics Vocology*, 2013; 38:35-45 ISSN1401-5439 print/ISSN 1651-2022 online c 2013 Informa UK, Ltd. DOI: 10.3109/14015439.2012.731079.
- Harris, Clement A. "Church Choirs in History," *Music and Letters* Vol. 17, No. 3 (Jul. 1936), P.P. 210-217 (8 pages) published by Oxford University Press <https://www.jstor.org/stable/727380>.
- Hoch, Matthew. "Part II: Vocal Technique in Choral Singing," *American Organist Magazine* February 2019. 28-31.
- Joseph, Dawn and Jane Southcott. "Music participation for older people: Five choirs in Victoria, Australia," *Research Studies in Music Education* 2018, Vol. 40(2) 176-190. Sagepub.com/journals-permissions DOI: 10.1177/1321103X18773096 journals.sagepub.com/home/rsm.
- Kang, Jing, MD, PhD; Chao Xue, MD, PhD; Zhewei Lou, MD, PhD; Austin Scholp, MS; Yi Zhang, MD; Jack J. Jiang, MD, PhD. "The Therapeutic Effects of Straw Phonation on Vocal Fatigue." *The Laryngoscope*. 00:2020. The American Laryngological, Rhinological and Otological Society, Inc. DOI: 10.1002/lary.28498.

- King, Roberta. "Ethnomusicology," in the *Evangelical Dictionary of World Missions*. Scott Moreau, editor. Grand Rapids, MI: Baker Books, 2000.
- Krabill, James R. *Worship and Mission for the Global Church: An Ethnodoxology Handbook*. Pasadena, CA: William Carey Library, 2013.
- Manternach, Jeremy N., Matthew Schloneger, and Lynn Maxfield. Effects of Straw Phonation and Neutral Vowel Protocols on the Choral Sound of Two Matched Women's Choirs," *Journal of Research in Music Education* 2019, Vol. 66(4) 465-480 c National Association for Music Education 2018 sagepub.com'journals-permissions DOI: 10.1177/0022429418809976 jrme.sagepub.com.
- McCray, James. "The Evolution of American Choral Music: Roots, Trends, and Composers before the 20th Century" *The Diapason*, webDiap0511p26-29.pdf <https://www.thediapason.com/sites/the/diapason/files/webDiap0511p26-20.pdf>.
- McKinney, Carol V. *Globe-Trotting in Sandals: A Field Guide to Cultural Research*. Dallas, TX: SIL, International, 2000.
- Meredith, Victoria. "Passing the Torch: Igniting Senior Voices in multi-generational choirs." *Choral Journal* Vol. 57 no. 7 (7-16), February 2017.
- Morgan, Robert J. *Mastering Life Before It's Too Late: 10 Biblical Strategies for a Lifetime of Purpose*. New York: Howard Books, 2015.
- _____. *Reclaiming the Lost Art of Biblical Meditation: Find True Peace in Jesus*. Nashville, TN: Thomas Nelson, 2017.
- _____. *The Red Sea Rules: Take the Journey from Panic to Praise*. Nashville, TN: Thomas Nelson, 2001, 2014.
- Nettl, Bruno. *The Study of Ethnomusicology: Thirty-three Discussions*. Chicago: University of Illinois Press, 2015.
- Ogunwole, Stella U, Megan A Rabe Andrew WRoberts, and Zoe Caplan. "U.S. Adult Population Grew Faster Than Nation's Total Population from 2010 to 2020," <https://www.census.gov/library/stories/2021/08/united-states-adult-populatio-grew-faster-than-nations-total-population-from-2010-to-2020.html> Source: U.S. Census Bureau, Census 2000 Redistricting Data (Public Law 97-171) Summary File; 2010 Census Redistricting Data (Public Law 94-171) Summary File; 2020 Census Redistricting Data (Public Law 94-171) Summary File.
- Packer, J. I., *Knowing God*. Downers Grove, IL: InterVarsity Press, 1973.

- Page, Frank and L. Lavon Gray. *Hungry for Worship: Challenges and Solutions for Today's Church*. Birmingham, AL: New Hope Publishers, 2014.
- Pfautsch, Lloyd. "The Choral Conductor and the Rehearsal," *Choral Conducting. A Symposium*, 2d ed., ed. Harold A Deckler and Julius Herford, 69-111. Upper Saddle River, NJ: Prentice-Hall, 1988.
- Potter, J., N. Sorrell. *A History of Singing*. New York: Cambridge University Press, 2012.
- Sataloff, Robert T. and Karen M. Kost. "The Effects of Age on the Voice, Part 3" in *Journal of Singing*, January/February 2021 Volume 77, No. 3. P. 369, copyright 2021 National Association of Teachers of Singing.
- Schrag, Brian. *Creating Local Arts Together: A Manual to Help Communities Reach Their Kingdom Goals*. Pasadena, CA: William Carey Library, 2013.
- Smith, Brenda and Robert T. Sataloff. "Singing for a Lifetime: Perpetuating Intergenerational Choirs." *Choral Journal*. May 2013, Vol. 53 Issue 10:17.
- Stager, Sheila, Andrew D Sparks, Steven A. Bielamowicz, and Julia D Edgar. "The Role of Choral Singing in Speaking Voice Preservation of Aging Adults," *Journal of Speech, Language, and Hearing Research*, v63 n7 p2099-2114 Jul 2020. https://doi-org.ezproxy.liberty.edu/10.1044/2020_JSLHR-19-00347 ISSN 1092-4388 Accessed June 2021.
- Thomas, Eliza. "Ethnodoxology: What it Means and Why it's Essential for Church Planting," interview with Sue Whittaker. September 7, 2016. <https://www.imb.org/2016/09/07/ethnodoxology-means-essential-church-plantin/>.
- Titze, Ingo R. "Choir Size and Choral Dynamics," *Choral Journal*, edited by Duane Cottrell. May 2020, Volume 60 Number10, 55-61.
- U. S. seniors as a percentage of the population 1950-2050. U.S. Census Bureau: Statista2021. <https://www.statista.com/statistics/457822/share-of-old-age-population-in-the-total-us-population/>.
- Webb, Jeffrey L. "Promoting Vocal Health in the Choral Rehearsal." *Music Educators' Journal*. May 2007 Vol 93, no. 5, 26-31. Doi:10.11770027432110709300513.

Whaley, Vernon M. *Called to Worship: From the Dawn of Creation to the Final Amen*. Nashville, TN: Thomas Nelson.

Whittaker, Will. "Multi-generational or Intergenerational? They DO NOT mean the same thing." Intergenerational worship.com <https://intergenerationalworship.com/2018/09/18/multi-generational-or-intergenerationalthey-do-not-mean-the-same-thing/> accessed May 19, 2021.

Wilson-Kastner, Patricia. *Sacred Drama: A Spirituality of Christian Liturgy*. Minneapolis, MN: Fortress Press, 1999.

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

November 10, 2021

Shirley Ehler
William Crawley

Re: IRB Application - IRB-FY21-22-289 Aging Voices in the American Church Choir: A Study in Ethnomusicology and Ethnodoxology

Dear Shirley Ehler and William Crawley,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your project with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your study is not considered human subjects research for the following reason:

(1) It will not involve the collection of identifiable, private information from or about living individuals (45 CFR 46.102).

Please note that this decision only applies to your current application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

Also, although you are welcome to use our recruitment and consent templates, you are not required to do so. If you choose to use our documents, please replace the word *research* with the word *project* throughout both documents.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

APPENDIX II

Tables Aggregated from the Aging Voices in the American Church Choir Survey

Table 1: Aggregate Weekly Attendance

Age	0-17	18-29	30-49	50-64	65+	pre-COVID	Post-COVID	%	code	
	5	2	2	6	20	95	55	0.5789	1	age groups total 35. precovid=+60. postcovid =+20
		150	150	100	80	700	500	0.7143	2	age groups total 480. postcovid ? Rounded up?
	200	500	300	300	200	1500	1000	0.6667	3	age groups = precovid
	5	2	6	15	45	120	65	0.5417	4	age groups = 73
		30					30		5	
	22	23	30	35	48	200	160	0.8	6	age groups = 158
	20	25	20	30	15		110		7	age groups = postcovid. Precovid not reported
	35	32	35	60	20	120	182	1.5167	8	age groups = postcovid. Precovid not reported
						250	172	0.688	9	unspecified Pre = 250+
	7	5	2	10	18	40	42	1.05	10	40=avg explanatory sheet attached
	8	12	30	59	71	140	185	1.3214	11	age groups = 180 post # avg includes online & in person
	35	17	18	70	210	350	0	0	12	post is all virtual until 2/20/22
						3000	1600	0.5333	13	age groups unspecified
	4	1	4	21	117	300	275	0.49	14	age groups 50+ unspecified
Total	341	799	597	706	844	6815	4376			

64%

Table 2: People in Choir

Age	0-17	18-29	30-49	50-64	65+	PRECOVID	POSTCOVID		code	
	0	0	0	0	0	15	0	0	1	choir has not resumed post-COVID-19
		2	10	10	3	45	45	1	2	age groups = 25. Post-COVID-19?
	0	5	2	2	1	10	5	0.5	3	post-COVID-19, different 5 for ea. Svc, ages & skills vary
	0	1	2	4	10	24	17	0.70833	4	ages = post-COVID-19
		23					23		5	
	23	3	8	10	5	40	49	1.225	6	age groups = post-COVID-19
	0	0	5	14	2	0	21		7	post-COVID-19 #s only
	0	0	15	20	4	0	39		8	post-COVID-19 #s age groups
		1	0	5	22	48	28	0.58333	9	post-COVID-19 #s only
						12	12	1	10	age groups unspecified
				4	10	18	14	0.77778	11	
	15	6	12	20	15	68	23	0.33824	12	age groups pre-COVID-19
		18	27	32	31	120	108	0.9	13	pre-COVID-19 # per followup email
						27	17	0.62963	14	Ages 50+
Total Ppl in Choir	38	59	81	121	103	427	401	0.93911		

POST-covid
virtual until
2/20/2022

Table 3: Choir Adults

18-29	30-49	50-64	65+	PRECOVID	POSTCOVID	change	code	
0	0	0	0	13	0	0	1	no choir post covid
35					35		2	no data precovid
5	2	2	1	10	5	0.5	3	age groups pre-COVID-19. post-COVID-19 a different 5 for each svc
1	2	4	10	24	17	0.7083	4	age groups post-COVID-19
23					23		5	NO PRE-COVID DATA
3	8	10	5	28	34	1.2143	6	age groups postCOVID-19
	5	14	2		21		7	age groups postCOVID-20 NO pre-COVID-19 data
	15	20	4		39		8	age groups postCOVID-21 NO pre-COVID-19 data
1	0	5	22	48	28	0.5833	9	age groups postCOVID-22 NO pre-COVID-19 data
3	1	2	5		12		10	NO pre-COVID-19 data post info via email
		4	10	18	14	0.7778	11	age groups post covid
6	12	20	15	53	23	0.434	12	age groups precovid
18	27	32	31	120	108	0.9	13	age groups postcovid
		5	12	24	17	0.7083	14	age groups post covid
95	72	118	117	338	376	1.1124		

Table 4: Self-reported Gender

Age	0-17	18-29	30-49	50-64	65+	PRECOVID	POSTCOVID	CODE	TOTAL
F	2	1	1	2	6	12	0		
M	0	0	0	0	1	1	0	1	
F		12	12	8	1	33	33		
M		3	3	2	3	12	11	2	
F		2	1	1	0	4	2		
M		3	1	1	1	6	3	3	VARIES BY SERVICE
F		1	2	2	7	14	12		
M				2	3	6	5	4	
F		21					21		
M		2					2	5	
F	6	2	6	7	3		24		PRECOVID NOT REPORTED
M	2	1	2	3	2		10	6	PRECOVID NOT REPORTED
F			2	14	2		18		PRECOVID NOT REPORTED
M			3				3	7	PRECOVID NOT REPORTED
F/M							0	8	NOT REPORTED
F		1	0	3	14	30	18		
M				2	8	16	10	9	
M							6	10	ages and pre-covid not reported
F				3	7		10		PRECOVID NOT REPORTED
M				1	3		4	11	PRECOVID NOT REPORTED
F	8	6	9	18	12	53	19		
M	7	0	3	2	3	15	4	12	
F		12	19	2	19		52		PRECOVID age groups not reported
M		6	8	12	12		38	13	PRECOVID age groups not reported
F					10		10		PRECOVID age groups not reported
M					7		7	14	
						146	225		
						56	103		F 2:1>M

Table 5: Voicing

Total voicings reported post-COVID-19	
S	149
A	82
T	52
B	47
	<hr/>
	330

Table 6: Skill Level Post COVID-19

Professional	14
Skilled Volunteer	60
Casual	84
Un-skilled	34
	192
skill levels are under-reported	

Table 7: Accompaniment

Code	Accompaniment
1	Piano
2	Piano and Orchestra
3	Instrumentation varies by service
4	A cappella and Orchestra
5	Piano Piano, Organ, and Praise
6	Band
7	Praise Band A cappella, Orchestra, and Praise
8	Band
9	A cappella and Piano
10	Piano for children. All others are Praise Band
11	A few pieces a cappella, 98% piano, a few pieces Organ, rarely praise band
12	Piano and Praise Band Used but unspecified Piano, Organ, Orchestra, Praise
13	Band
14	A cappella, Piano, Organ, Bell Choir

