

The Chorus Impact Study
SINGING FOR A LIFETIME
$\mathbf{G}_{\mathbf{A}}$ Grunwald associates lic
Foreword ..... 1
Executive Summary ..... 2
Key Findings ..... 3
Finding 1. ..... 5
Choral singing is a significant part of American life,with more than 54 million Americans singing today
Finding 2 ..... 5Adults who sing in choruses report significantpersonal benefits, including feeling less lonelyand more connected to others
Finding 3 ..... 11Choral singers are remarkably strong contributorsto their communities
Finding 4 ..... 16Older choral singers report both a better quality of lifeand better overall health than the general public
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## Figures

Figure 1: Optimism ..... 7
Figure 2: Resilience ..... 8
Figure 3: Reasons for Singing ..... 10
Figure 4: Diversity and Tolerance ..... 12
Figure 5: Roles Among Volunteers ..... 14
Figure 6: Quality of Life ..... 16
Figure 7: Health Conditions and Improvement ..... 17
Figure 8: Mental Health ..... 20
Recommendations ..... 21
Acknowledgments ..... 23
About Chorus America ..... 24
About Grunwald Associates LLC ..... 24
Methodology. ..... 25
Research Notes ..... 27

## FOREWORD

As the advocacy, research, and leadership development organization for the choral field, Chorus America's mission is to empower singing ensembles to create vibrant communities and effect meaningful change. Our focus on research is key to this mission. Research shines a bright light on the amazing impact that group singing has on our communities and our world.

In the case of our new Chorus Impact Study: Singing for a Lifetime, the data is clear. The sheer number of Americans singing todayover 54 million, more than ever before-is truly striking. What's even more striking are the benefits that singing in a chorus offers to both individual singers and to communities. And the more engaged singers are in their art, the more benefits they report. Put simply: Singing is good, and more singing is better.

This new study builds on our previous Chorus Impact studies by tracking data on the number of people who sing and the ways in which group singing enriches their lives and our society. For the first time, the study also explores the value of singing for older adults, a growing area of the choral field.

Why is this research important now? Because the benefits of group singing directly


Catherine Peterson, Chair
address challenges we are facing today. At a time when we feel increasingly stressed and disconnected, singing encourages mindfulness and meaningful social relationships. At a time when we are searching for ways to bring different communities together and find common ground across divisive issues, choruses are powerhouses of connection and tolerance. And at a time when we are living longer and looking to maintain a high quality of life into retirement and beyond, singing promotes healthy, vibrant aging.

On any given day, people are singing together in small towns and big cities, in orchestra halls and churches, and at formal performances and casual community singing events. Their songs draw on musical traditions from gospel music to symphonic choral works to barbershop harmonies. The diversity and commitment of singers and the joy found in singing have the very real potential to create positive change.

We hope this report serves as a call to action to leverage the power of choral singing to improve lives and strengthen communities everywhere.


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## EXECUTIVE SUMMARY

Studies commissioned by Chorus America over the last decade on the social and civic impact of choruses in America provide the go-to source for understanding the benefits of choral singing. This new Chorus Impact study, commissioned in 2018, builds on the 2003 and 2009 Chorus Impact studies to compare findings across more than a decade. This latest study, Singing for a Lifetime, also provides a current look at the array of social, health, and psychological benefits that older chorus members reap now and over a lifetime.

Choral singing remains strong in America. That's good news, because choruses play an important role in society today. While this research does not prove that choruses cause singers to lead healthier lives, connect with others, or contribute to their communities, the data shows some remarkable connections. People who sing are more connected to others and more likely to contribute positively to their
communities. And as our population ages, choruses may contribute to keeping older Americans healthier, happier, and more active.

As with the 2009 study, this research was conducted by Grunwald Associates. It is based on online surveys completed in November 2018 by 5,736 chorus participants and comparative surveys with a representative general population sample of 506 U.S. adults age 18 or older, and a separate representative general population sample of 600 U.S. adults age 62 or older.

## About the Findings

Unless otherwise noted, all differences in the findings are statistically significant. Information on the diversity of the sample, steps taken to rule out potential confounding variables in the results, and details on how the research was conducted are provided in the Methodology section on page 25.


## KEY FINDINGS

## CHORAL SINGING IS Finding A SIGNIFICANT PART OF AMERICAN LIFE, WITH MORE THAN 54 MILLION AMERICANS SINGING TODAY.

- The number of Americans singing has increased over the past decade, with more than 54 million adults and children participating in choral groups today. More than one in six Americans over the age of 18 sings in a chorus.
- The percentage of Americans singing today has increased over the past decade, up to $17 \%$ today from 14\% in 2008.
- Music education in schools is key to lifelong singing and the benefits it brings. The majority of adults singing today say that they began singing because of a school choral music education opportunity. Over half of all choral singers started in elementary school, and threequarters started by the end of high school.


## ADULTS WHO SING Finding 2 IN CHORUSES REPORT SIGNIFICANT PERSONAL BENEFITS, INCLUDING FEELING LESS LONELY AND MORE CONNECTED TO OTHERS.

- Nearly three-quarters of singers (73\%) say choral singing helps them feel less alone or lonely. Compared to the general public, they are far less likely to report indicators of isolation or depression.
- Choral singers report stronger relationships and better social skills than the public at large. Nearly seven in 10 singers say that singing has helped them socialize better in other parts of their lives.
- Choral singers credit singing in a chorus with making them more optimistic, mindful, and resilient. Eighty percent of singers expect more good things than bad things to happen to them, while only $55 \%$ of the general public has the same positive outlook. Singers are also more likely to feel a sense of purpose in their lives and to find their lives meaningful.
- The more exposure people have to choral singing, the more benefits they report. Choristers who belong to more ensembles, rehearse more frequently, and have been singing longer are more likely to perceive benefits.
- Younger, low- or middle-income chorus members, and those with lower levels of education, are also more likely to feel they benefit from participation.


## CHORAL SINGERS ARE <br> Finding <br> 3 REMARKABLY STRONG CONTRIBUTORS TO THEIR COMMUNITIES.

- Chorus members give back to their communities in a big way. They are more likely to contribute financially to the organizations that they support than the general public. They also volunteer more frequently than the general public in a wider range of areas of need, both inside and outside of the arts-and they are more likely to take on leadership roles within the groups where they volunteer.
- Chorus members are good citizens and exhibit greater civic leadership than the general public. Ninety percent of singers report that they vote regularly in national and local elections, while only $55 \%$ of the general public makes the same claim. Choral singers also run for public office more often than their fellow Americans.
- Chorus members credit singing with helping them be better collaborators, team players, and listeners. Compared to the general public, choral singers rank themselves more reliable and are less likely to prefer electronic communication to face-to-face interaction.
- Chorus members are more adaptable and tolerant of others than the general population. Almost two-thirds of singers (63\%) believe participating in a chorus has made them more open to and accepting of people who are different from them or hold different views.


## OLDER CHORAL Finding SINGERS REPORT BOTH A BETTER QUALITY OF LIFE AND BETTER OVERALL HEALTH THAN THE GENERAL PUBLIC.

- Singing in a chorus seems to have a significant impact on mental health. Older choral singers (age 65+) are less likely
than the general public to say they have challenges with cognitive abilities, such as doing calculations in their heads, finding the right words to use, or organizing activities. Nearly eight in 10 older choristers credit their choral participation with helping to keep their mind sharper.
- Older singers (age 65+) engage in a broader range of activities than the general public in the same age cohort, such as reading, attending cultural events, and physical activities. They are also significantly more likely to continue working, including working by choice.
- Nearly $20 \%$ of older choristers say that choral singing has helped relieve or improve one or more chronic health conditions. Overall, singers who are age 65+ have fewer physical limitations than the general public of this same age.
- As with adult singers of all ages, older singers report that being part of a chorus helps them feel less lonely. Older choristers are significantly less likely than the general population to say they "often feel left out" or isolated from others.



## FINDINGS

## Finding 1: CHORAL SINGING IS A SIGNIFICANT PART OF AMERICAN LIFE, WITH MORE THAN 54 MILLION AMERICANS SINGING TODAY.

Choral singing remains remarkably strong in America. More than one in six Americans over the age of 18-over 43 million-sing in one or more choruses or choirs. One in 20 say at least one child living at home sings as well, which adds another 11+ million to that number. The percentage of Americans singing has increased over the past decade, up to $17 \%$ today from $14 \%$ in 2008, ${ }^{1}$ with more than 54 million Americans of all ages engaged in this shared social and musical activity. ${ }^{2}$ At a time when fewer people are participating in regularly scheduled group activities like religious services or social clubs, the fact that more Americans are singing together today than were singing together a decade ago is particularly notable.

The commitment of choral singers and the frequency with which they participate is notable as well. Nearly half of all choristers (44\%) sing in more than one chorus or choir. The primary group they belong


The number of children who sing in a choral group to has more than 70 members, on average, and nearly all choral singers (98\%) rehearse with one or more of their groups at least once a week. More than a third (36\%) report they rehearse multiple times weekly. And they've been doing it for an average of nearly 30 years each. ${ }^{3}$ Singing in a chorus offers an important opportunity to connect with others frequently and form longlasting social bonds.


Source: Grunwald Associates LLC

More than half (54\%) of choristers' first choral singing experience was in elementary school, nearly two-thirds (65\%) had this formative experience by the time they finished middle school, and more than three-quarters (76\%) were on their way to a lifetime of song by the time they had finished high school. The majority of adults participating in choral singing today began singing because of schoolprovided opportunities.

## Finding 2: ADULTS WHO SING IN CHORUSES REPORT SIGNIFICANT PERSONAL BENEFITS, INCLUDING FEELING LESS LONELY AND MORE CONNECTED TO OTHERS.

Our research suggests that choral singing plays an important role in singers' lives, contributing to positive personal qualities like optimism, resilience, and mindfulness, and to their feelings of connection to others.

This is especially true of choristers with more exposure-those who belong to multiple groups, rehearse more frequently, and have more years of experience-and, interestingly, those whose primary choruses are more racially and ethnically diverse.

## SOCIALIZATION

Nearly seven in 10 choral singers (68\%) say singing has helped them socialize better in other parts of their lives. Choristers report having stronger relationships and better social skills than the public at large. For example, choristers are significantly more likely than other Americans to say:

- They regularly entertain friends at home or meet them informally ( $66 \%$ vs. $50 \%$ of the general public).
- People often come to them with their personal problems ( $75 \%$ vs. $64 \%$ of the general public).
- They notice when words and gestures don't match ( $83 \%$ vs. $76 \%$ of the general public).
- They make a lot of effort to get to know others where they work or volunteer ( $71 \%$ vs. $60 \%$ of the general public).

At the same time, choristers are:

- Less likely to agree they're "often the last person to find something out" ( $15 \%$ vs. $28 \%$ of the general public).
- Less likely to say they "have a hard time controlling their emotions" ( $17 \%$ vs. $27 \%$ of the public).
Differences in mean levels of agreement or disagreement with each of these statements are also significantly different from the general public's in every case. ${ }^{4}$


## OPTIMISM

Nearly three-quarters of choristers (72\%) believe being in a chorus helps them be more optimistic about life.

Their belief seems supported by differences between choral singers and the general public with regard to a number of qualities and characteristics associated with optimism, as shown in Figure 1.


## Figure 1: OPTIMISM

Percentage responding "always" or "mostly" true on a five-point scale



## MINDFULNESS AND RESILIENCE

Nearly two-thirds of choral singers (65\%) say that chorus participation helps them be more "mindful," more "in flow," and more "present in the moment" in their lives.

Singers' answers to typical questions used to evaluate these qualities tend to support their assessment. Specifically, as compared to the general public, choristers say they are significantly less likely to:

- Experience emotions they're only aware of after the fact.
- Find it difficult to stay focused on what's happening in the present.
- Go places on "automatic pilot" and wonder how they got there.

The differences in qualities that indicate resilience between choristers and the general public are also striking, as shown in Figure 2.

Six in 10 chorus singers (60\%) credit their choral participation with helping them be more resilient, persistent, or both, in dealing with other parts of their lives. ${ }^{5}$

Figure 2: RESILIENCE

PLEASE RATE YOUR LEVEL OF AGREEMENT
WITH EACH OF THE FOLLOWING STATEMENTS ABOUT YOURSELF.
Percentage responding "completely" or "somewhat" agree on a five-point scale


## COMBATING LONELINESS

A regular social activity like choral singing might be expected to have real value in combating social isolation for singers of all ages, and this appears to be the case. Nearly three-quarters of all choristers (73\%) say choral singing helps them feel less alone or lonely, led by those who sing the most or have done so the longest. ${ }^{6}$

This finding seems to be borne out when choral singers as a whole are compared to the general public using common assessments of isolation. Relative to the general public, choristers are significantly:

- More likely to say they are content with their friendships and relationships ( $77 \%$ vs. $63 \%$ of the general public).
- Less likely to say they often feel left out ( $10 \%$ vs. $20 \%$ of the general public).
- More likely to say they have "enough people they feel comfortable asking for help at any time" (67\% vs. 44\% of the general public).
- Less likely to say they feel isolated from others ( $11 \%$ vs. $20 \%$ of the general public).

Singers themselves seem to be increasingly aware of the personal benefits of singing in a chorus. When respondents were asked to tell us the three most important reasons they sing in choruses, we observed a substantial shift in rationale from a decade ago when we asked the same question. As shown in Figure 3, singers in 2018 were more likely to say they participate for the feeling of well-being, the sense of connection, and the release from stress that choruses provide them. While many choral singers attribute their participation to a creative or artistic need, habit, tradition, or faith, the percentages who say that they sing in choruses for those reasons have all declined since 2008. ${ }^{7}$

Choral singers today increasingly view singing as an activity that has positive effects on their lives as a whole and helps them make connections with others.


Figure 3: REASONS FOR SINGING

Q.
WHAT WOULD YOU SAY ARE THE TOP THREE MOST IMPORTANT REASONS WHY YOU SING IN A CHORUS/CHOIR? UP TO THREE RESPONSES ALLOWED.


Source: Grunwald Associates LLC

## Finding 3: CHORAL SINGERS ARE REMARKABLY STRONG CONTRIBUTORS TO THEIR COMMUNITIES.

The positive personal qualities that choral singing apparently amplifies in individuals may have much larger positive impacts on communities. Choristers are more likely to be team players and collaborators, more adaptable and tolerant, and more likely to give back to their communities in a variety of ways.

## COLLABORATION, TEAMWORK, AND LISTENING

Given the intense shared social experience of choral singing, it's not surprising that choristers report higher levels of a variety of skills and qualities related to interactions with others. Three-quarters of singers (75\%) say that choral singing has made them better team participants in other areas of their lives, with nearly four in 10 (39\%) strongly agreeing with this statement. The effect is also more reported by those with more chorus exposure-members of multiple groups, greater rehearsal frequency, more years of experience, earlier first exposure (grades $\mathrm{K}-8$ )-and by those whose primary groups consist of a balanced mix of ethnicities. Sixty-one percent also say singing in choruses or choirs has made them better listeners, with the same subgroups with more chorus exposure more likely to report this.

These self-reports are reinforced when related qualities of choristers are compared to the general public. In particular, chorus members are significantly more likely to consider:

- Reliability to be one of their strong suits ( $91 \%$ vs. $83 \%$ of the general public).
- Most criticism of themselves to be fair/ legitimate ( $59 \%$ vs. $46 \%$ of the general public).

Choristers are less likely to feel or believe that:

- They come up with more of the best ideas in their organizations than they're given credit for ( $19 \%$ vs. $35 \%$ of the public in general).
- More people view them as a resource than as an ally ( $28 \%$ vs. $41 \%$ of the general public).

They are also less likely than the public to report that they:

- Prefer electronic communications to phone or face-to-face (42\% vs. $54 \%$ of the general public).


Source: Grunwald Associates LLC

## ADAPTABILITY AND TOLERANCE

 Sixty percent of choral singers feel being part of a choir has made them more open, flexible, and adaptable in life, particularly if they've had more choral exposure. There is support for this in differences between singers and the general public. For example, choristers are:- More likely to say they can easily identify alternative paths ( $61 \%$ vs. $46 \%$ of the general public).
- Less likely to say they'd prefer a routine day than one full of unexpected events ( $33 \%$ vs. $47 \%$ of the general public).

Singers who are younger, have lower income, and/or do not have a college education are also more likely to say chorus has played this role in their lives.

The openness and adaptability associated with choral singing may have larger implications
for building connections across society today. While most choristers are members of singing groups that are made up predominantly of one ethnicity (mostly white, in our sample), ensemble singing is an opportunity for many to interact with people from different races and ethnicities as part of a shared social activity. About one in seven singers (13\%) report the primary group they belong to is made up of a "balanced mix" of two or more ethnicities. Moreover, in a society where many citizens are separated by race:

- $82 \%$ of choristers say their primary group includes African-Americans.
- $75 \%$ say their primary group has members who are Latinx.
- $75 \%$ say their primary group includes Asians or Asian-Americans. ${ }^{8}$

The extent to which choruses are exposing their members to people different than themselves may help account for the strong correlation between choral singing and tolerance. Figure 4 shows that this tolerance is coupled with respect for the value of diversity.

Figure 4: DIVERSITY AND TOLERANCE

Percentage responding "completely" or "somewhat" agree on a five-point scale


Note: Our survey used questions designed by other researchers to separate tolerance from ideology. All of these differences between choristers and the public are statistically significant when mean levels of agreement or disagreement are compared. ${ }^{9}$

Choral singers themselves believe that their tolerance and respect for diversity is due to singing, with $63 \%$ of singers reporting that choral participation has made them more open to and accepting of people who are different from them or hold different views. This is particularly true of younger choristers, lower- to mid-income choristers, choristers with lower levels of education, choristers with more choral exposure, and choristers who belong to groups with a reported "balanced mix" of ethnicities in their membership.

## SINGERS AS VOLUNTEERS AND INFLUENCERS

Not surprisingly given the findings on adaptability, diversity, and tolerance, choral singers are much more involved in their communities and civically engaged than the members of the public at large surveyed, assuming more positions of leadership and influence in the process. Choristers are significantly more likely to:

- Do volunteer work in their communities outside their choruses ( $84 \%$ vs. $69 \%$ of the general public).
- Volunteer frequently ( $18 \%$ vs. $8 \%$ of the general public).
- Volunteer "fairly often" or more (44\% vs. $27 \%$ of the general public).
- Contribute financially to the organizations they support ( $77 \%$ vs. $63 \%$ of the general public).

Choristers who belong to multiple choral groups, have more years of experience, or both, are significantly more likely than their peers to volunteer and volunteer more often.

The average choral singer also volunteers in a wider range of areas of need. Some of the philanthropic categories to which choristers are statistically more likely than the general public to give their time include:

- Arts organizations (outside their own chorus or choruses) ( $42 \%$ vs. $12 \%$ of the general public).
- Education institutions/organizations (37\% vs. $19 \%$ of the general public).
- Religious institutions/groups (37\% vs. $18 \%$ of the general public).
- Human rights/civil liberties organizations ( $20 \%$ vs. $10 \%$ of the general public).
- Political/democracy organizations, campaigns ( $18 \%$ vs. $5 \%$ of the general public).
- Community/civic groups ( $17 \%$ vs. $12 \%$ of the general public).

- Cultural organizations such as museums (10\% vs. 7\% of the general public).
- Cross-cultural/international groups (6\% vs. $1 \%$ of the general public).
Choristers are less likely than the general public to engage in other categories of need, such as animal welfare, labor, and public safety, and many others where the differences between choristers and other members of the public are not significant.

Choral singers are more likely than their fellow Americans to play a wide range of roles
as part of their volunteer service, as shown in Figure 5.

More notably, choristers are especially more likely to take up leadership roles, including executive or management roles like directors or board members, within the groups in which they volunteer.

More generally, choristers are significantly more likely to exhibit characteristics associated with influence and impact in society. Specifically, they are significantly more likely than members of the public to:

Figure 5: ROLES AMONG VOLUNTEERS

WHAT ROLE(S) DO YOU PLAY IN THE ORGANIZATIONS WHERE YOU VOLUNTEER, INCLUDING YOUR CHORUS OR CHOIR? CHECK ALL THAT APPLY.
(Base: respondents who volunteer)


- Read a newspaper daily ( $48 \%$ vs. $26 \%$ of the general public).
- Vote regularly in national and local elections ( $90 \%$ vs. $55 \%$ of the general public).
- Be an officer or committee member of a civic or service organization ( $18 \%$ vs. $8 \%$ of the general public).
- Exercise at least weekly ( $67 \%$ vs. $52 \%$ of the general public).

In addition to or instead of these activities, choristers are significantly more likely than the general public to have:

- Worked for a political candidate ( $19 \%$ vs. $5 \%$ of the general public).
- Worked for a political party ( $15 \%$ vs. $3 \%$ of the general public).
- Founded or co-founded a social/civic/ charitable organization (11\% vs. $4 \%$ of the general public).
- Produced a website or app dedicated to a philanthropic cause ( $8 \%$ vs. $4 \%$ of the general public).
- Contributed money to a political party or candidate ( $48 \%$ vs. $13 \%$ of the general public).
- Read a book in the last 30 days ( $77 \%$ vs. $50 \%$ of the general public).

In addition to these activities and habits, choristers also report that they get two-thirds more friends, family, and/or colleagues to visit or look at their favorite websites on a regular basis, which makes them classic online influencers as well.


## Finding 4: OLDER CHORUS MEMBERS REPORT BOTH A BETTER QUALITY OF LIFE AND BETTER OVERALL HEALTH THAN THE GENERAL PUBLIC.

Findings comparing older choristers (65+) to older Americans in general suggest that choral singing may be an important way to help older Americans remain active and stay healthier longer. ${ }^{10}$

As shown in Figure 6, older choristers report an overall quality of life superior to the general public. Perceived quality of life can be the result of a number of factors, including being more likely to continue to work, engaging more often in a variety of leisure activities, and experiencing better physical and mental health, which we examined in more detail.

## ACTIVITIES

Older choral singers engage in a broader range of activities than the general public in the same
age cohort. Some areas where these differences are most significant include:

- Reading ( $84 \%$ vs. $69 \%$ of the general public)
- Cultural activities (concerts, theater, museums, zoos, movies) (77\% vs. 23\% of the general public)
- Family activities (with children, grandchildren) (50\% vs. $43 \%$ of the general public)
- Running, bicycling, working out (37\% vs. $16 \%$ of the general public)
- Nature activities (hiking, camping, birding, hunting, fly-fishing) ( $31 \%$ vs. $19 \%$ of the general public)
- Playing musical instruments (30\% vs. 9\% of the general public)
- Art creation (painting, drawing, sculpting, writing, photography) ( $27 \%$ vs. $13 \%$ of the general public)

Figure 6: QUALITY OF LIFE

Q.


- Education (taking online classes, going back to school, Learning Annex) (26\% vs. $6 \%$ of the general public)

There's no doubt that to a certain extent some of these differences can be accounted for by demographics, but the analysis we've conducted has indicated consistently that demographics can account for only some of the breadth of these differences. ${ }^{11}$

Beyond these leisure activities, older choristers are significantly more likely to be engaging in paid employment ( $29 \%$ vs. $22 \%$ of the general public), more likely to be doing so completely by choice (58\% vs. $46 \%$ of the general public), and less likely to be unable to work at all ( $<1 \%$ vs. $3 \%$ of the general public) -
though working senior members of the public at large report working more hours per week, on average.

## PHYSICAL HEALTH

Older choral singers are significantly more likely than the general public to rate their overall health as "excellent" (34\% vs. 5\% of the general public) or "very good" (45\% vs. 30\% of the general public). There are several possible reasons for this.

First of all, as shown Figure 7, many singers find that the choral experience helps ameliorate one or more of their chronic conditions.

Overall, one in five older choristers say that choral singing has helped relieve or improve at least one chronic condition that

Figure 7: HEALTH CONDITIONS AND IMPROVEMENT

## Q WHICH OF THESE MEDICAL CONDITIONS HAVE EITHER IMPROVED SINCE YOU JOINED A CHOIR OR SEEM TO IMPROVE THE MORE YOU SING?


they experience. ${ }^{12}$ This is notable even if choral singing has a purely placebo effect, since placebos can still have real impact. ${ }^{13}$

Beyond chronic conditions, physical limitations contribute substantially to an individual's perception of health (and often, eventually, the reality), as well as regulating the types and frequency of activities in which that person can participate. Compared to the general public, older choral singers say they are significantly less likely to have difficulty:

- Climbing several flights of stairs without resting ( $27 \%$ vs. $43 \%$ of the general public).
- Pushing or pulling large objects, such as a living room chair ( $10 \%$ vs. $21 \%$ of the general public).
- Lifting or carrying weights greater than 10 pounds, such as a heavy bag of groceries ( $11 \%$ vs. $20 \%$ of the general public).
- Walking one block or more (6\% vs. $18 \%$ of the general public).
- Climbing one flight of stairs without resting (4\% vs. $16 \%$ of the general public).
- Driving a car ( $2 \%$ vs. $6 \%$ of the general public).
- Shopping for groceries ( $1 \%$ vs. $6 \%$ of the general public).

On a related note, nearly six in 10 singers say singing in a chorus makes their speaking voice stronger, and the more exposure to the choral experience, the stronger this effect appears to be. This is not only an indicator of better health in general, of course, but, like many components of physical health, has a clear potential bearing on mental health and vice versa.

## MENTAL HEALTH

Older adults are particularly at risk for experiencing loneliness. In combination with greater physical challenges they face, isolation can have an especially negative effect on their quality of life.


As described earlier, choral singing appears to have compelling benefits in combating loneliness for singers of all ages. These findings carry over to choristers age 65+, albeit less strongly. Compared to the general public of the same age cohort, older choral singers are:

73\%
of singers age 62+ say being in a chorus
has made them feel less alone or lonely.

- Significantly more likely to report they are content with their friendships and relationships ( $81 \%$ vs. $70 \%$ of the general public).
- Significantly more likely to say they have enough people they feel comfortable asking for help at any time ( $70 \% \mathrm{vs} .53 \%$ of the general public).
- Significantly less likely to say they often feel isolated from others ( $7 \%$ vs. $12 \%$ of the general public).
- Significantly less likely to agree they often feel left out ( $6 \%$ vs. $10 \%$ of the general public).
Overall, $73 \%$ of singers age $62+$ say being in a chorus has made them feel less alone or lonely.

The combination of social and emotional connection that singing music in a group provides seems, in turn, to have an impact on older choristers' mental health, ${ }^{14}$ as shown in Figure 8.

On the opposite end of the mental health spectrum, nearly eight of 10 older choristers (77\%) say they believe being in a chorus helps keep their "mind sharper," helps them "think more clearly," and/or keeps their "memory stronger than would otherwise be the case." Chorus members who have had more exposure to the choral experience are especially likely to feel this.

There may be at least some basis for their belief. For example, older choristers are significantly less likely than the general public to say they have:

- Problems doing calculations in their heads
- Difficulty finding the right word or words to use
- Difficulty organizing activities outside their routines
- Problems navigating a room or keeping track of time
Older choristers are also significantly more likely than the public to report they're learning new skills "often" or "all the time or nearly so" ( $47 \%$ vs. $39 \%$ of the general public), a difference that's also significant when mean frequencies are compared.


Figure 8: MENTAL HEALTH

OVER THE LAST TWO WEEKS, HOW OFTEN HAVE YOU BEEN BOTHERED BY ANY OF THE FOLLOWING PROBLEMS?

Percentage responding "nearly every day" or "more than half the days" on a five-point scale

Q.

HAS THERE EVER BEEN A PERIOD OF TIME WHEN YOU ...
Percentage responding "yes"


## RECOMMENDATIONS: How to Put this Report to Use

## CHORAL LEADERS IN COMMUNITIES, SCHOOLS, AND PLACES OF WORSHIP

- Create opportunities to discuss the many ways your chorus benefits your community, schools, and places of worship with elected officials, key leaders, and other policymakers. Invite civic leaders, elected officials, and funders to your concerts, making each performance an advocacy opportunity.
- Use data from the Chorus Impact Study in your grant proposals and development opportunities. Illustrate the positive impacts of choral singing on people, communities, and beyond.
- Throughout multiple channels-programs, emails, websites, newsletters, subscription letters, donor receptions, and preconcert lectures-use information from the study to help establish an awareness of the personal and communal benefits of choral singing.
- Support in-school choral music programs. With more than $75 \%$ of choristers beginning
to sing before they leave high school, these programs are crucial to the future of choral singing. Use the data in this report to encourage local communities and school districts to strengthen music education and choral music opportunities as an entry point to the lifelong benefits of choral singing. If your chorus is not part of a school, think about additional ways you might support K-12 choral programs, such as offering professional development opportunities to teachers or volunteering.
- Consider how your chorus's current or future programs can help support and expand singing opportunities for older singers to extend the benefits of choral singing over a lifetime.
- If you are a choral leader in a place of worship, use the data in this report to demonstrate how choirs inherently promote and support attributes of a strong religious community, providing inspiration, fellowship, motivation, and care for one another.

- Consider how your chorus can contribute to furthering diversity, equity, and inclusion in your community. Because choral singers as a group are unusually tolerant and highly value diversity, and because choruses are places where singers of different races and ethnicities interact with each other, choruses have a lot of potential for doing effective diversity, equity, and inclusion work. The fact that most ensembles are predominantly made up of one ethnicity (predominantly white in the case of respondents to this survey) reveals an important opportunity for choruses to more fully realize this potential.
- Draw on the information in this study to help with singer recruitment. Talk with prospective singers about the benefits of choral singing and the positive characteristics of choral singers in general to make a strong case for joining your chorus. Review the data on the reasons singers join choruses and tailor your messages to appeal to their motivations, particularly if you want to attract singers in a specific age range. Look for potential singers through organizations where your current singers feel connected and give their time - where there may be people with similar attributes and interests.


## COMMUNITY LEADERS <br> AND POLICYMAKERS

- Choral singers are a large and influential group of people who exhibit high levels of civic involvement and care for their communities. Consider the power of this constituency and think about how you can partner with singers and choruses to address issues, benefit your community, and raise support for policies and initiatives.
- Look for additional ways to involve choruses in community gatherings and events. When convening health and wellness policy conversations, consider including choral leaders at the table.
- Ensemble singing has the potential to improve mental and physical health for
older adults, retaining them as active community members. Support projects and organizations that offer singing opportunities to benefit older constituents, whether working or retired.
- Do your part to make sure that your town, region, and state benefit from a healthy arts sector, including supporting school arts funding and arts education initiatives that establish this important pipeline. Give consideration to policies that encourage the development and sustainability of choruses and other arts organizations.


## FUNDING COMMUNITY

- Choruses are powerhouses for civic engagement and creating community connections. They are a relatively inexpensive means of encouraging public participation in the arts with a low barrier to entry-just bring your voice! Consider how your grant priorities allow for the sustainability of these valuable organizations.
- Choruses also promote mental and physical health for older adults, which, in turn, has economic and social benefits for communities. If you fund programs that support older adults, consider the benefits that choruses bring to your funding portfolio.
- Involve representatives of the choral community in your convenings, research, policy, and planning dialogues.
- Consider supporting additional research on the benefits of ensemble singing. The findings in this study are limited in two ways: they are based on self-reporting, and many reflect correlation, not causation. Our hope is that this report will provide stimulus and support for the research community to further investigate the benefits that choruses and choral singers offer our communities.


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## ABOUT CHORUS AMERICA

Chorus America empowers singing ensembles to create vibrant communities and effect meaningful change by offering services that promote artistic achievement, organizational strength, and advocacy.

Chorus America is the advocacy, research, and leadership development organization that advances the choral field. We support and serve choral conductors, administrators, board members, and singers with tools, training, peer networking, and access so that choruses are better able to contribute to their communities.

Chorus America serves more than 6,000 choruses, individuals, businesses, and organizations with a wide array of programs, publications, research, and personal services. These services strengthen their ability to build strong organizations that foster quality choral performances and community connections.
www.chorusamerica.org

## ABOUT GRUNWALD ASSOCIATES

Grunwald Associates is a full-service research and consulting firm whose work has informed the debate on a range of national policy issues. Grunwald offers an in-depth understanding of education and innovation, combined with mastery of state-of-the-art research methodologies.

The firm specializes in challenging public and proprietary assignments for nonprofit, corporate and government clients. Services include sophisticated quantitative and qualitative research, desk research, stakeholder communications and engagement, and strategic counsel.

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Design and editorial assistance by Vockley•Lang
Photos sourced from Chorus America member choruses


## METHODOLOGY

## CHORAL SINGER SURVEYS

In total, 5,736 singers completed an online survey after being recruited to do so through email invitations, social media, or a link from the Chorus America home page. The survey consisted of approximately 55 questions and took about 19 minutes to complete.

At the close of the main choral singer survey, respondents age 62 or older were invited to complete an additional series of approximately 20 questions (taking on average about 6 minutes) to gather additional data more focused on the impacts of singing on the health and wellness of older Americans. These individuals were given a choice between proceeding directly to the additional survey or receiving an email link to complete it at a later time. In total, 1,833 singers age 62 or older completed the additional block of survey questions.

## GENERAL PUBLIC SURVEYS

Two separate surveys of the general U.S. population were conducted to measure overall participation in choirs or choruses as well as comparisons between singers and the general public.

The general U.S. population survey was completed by 506 U.S. adults age 18 or older who were recruited through an online commercial research panel and fielded contemporaneously with the choral singer surveys described above in October/ November 2018. The survey sample was drawn and weighted to align closely to U.S. Census statistics for the national adult population with respect to age, gender, ethnicity, household income, and region of the country. The survey itself consisted of approximately 25 questions and took respondents on average about 13 minutes to complete.

The senior U.S. population survey was completed by 600 U.S. adults age 62 or older who were recruited through an online commercial research panel. Of these, 500
respondents are age 65 or older. As with the general U.S. population survey, the senior population survey sample was drawn and weighted to align closely to U.S. Census statistics for the older adult population with respect to gender, ethnicity, household income, and region of the country. The survey consisted of approximately 30 questions and took respondents on average about 13 minutes to complete.

## SURVEY DESIGN

Many survey questions were chosen and placed into each of the survey questionnaires based on prior use in the 2008 Chorus America research (for tracking trends). Others were based on more recent research on related topics of chorus participation, community involvement, and health and wellness to enable comparisons and verifications across studies. Question items used for comparisons were drawn almost exclusively from well-regarded assessments and self-assessments already in use in the field. The design and flow of each questionnaire followed survey research best practices to minimize bias and respondent fatigue and maximize respondent engagement in the survey and the quality of the resulting data.

## COMPARATIVE ANALYSIS

The choral singer survey samples were very successful in terms of bringing in many responses, but the demographic profile of these singers is highly educated, not very diverse ethnically, and could include a small number of responses outside the universe of the general public surveys. For these reasons, when making comparisons to the general public, a subset of all singers was selected to enable a fair comparative analysis as follows:

Of the 5,736 total singers surveyed, 1,200 were selected for comparison to the general U.S. population sample of adults 18 and older. The selected sample first excludes respondents who:

- Are under age 18.
- Do not live in the United States (50 states and the District of Columbia).
- Refused to indicate their age, gender, or race/ethnicity.
Second, of the remaining interviews, all available members of underrepresented ethnic minority groups were included along with a random selection of overrepresented ethnic groups (non-Hispanic whites and Asians) to arrive at a final comparative survey sample of 1,200 singer interviews that better represents all adult singers in the United States.

A similar process was followed for the senior sample. We elected to focus the comparative analysis on adults age 65 and older. The selected senior singer sample first excludes respondents who:

- Are age 62-64.
- Do not live in the United States (50 states and the District of Columbia).
- Refused to indicate their gender or race/ ethnicity.
Second, of the remaining senior interviews, all available members of underrepresented ethnic minority groups were included along with a random selection of non-Hispanic whites to arrive at a final comparative survey sample of 700 senior singer interviews that better represents singers age 65 or older in the United States.

Throughout this report, comparisons between samples or subgroups within samples that are called out for discussion were chosen based on statistical significance testing performed at the $95 \%$ confidence level ( $p<0.05$ ).

## NUMBER OF CHORAL SINGERS

The current estimated number of adult choral singers ( 43 million) was derived by multiplying the $17 \%$ of adults surveyed in the general population survey who report "singing in a chorus or choir in a regular basis" by the 2018 total U.S. adult population of $254,580,000$. The current estimated number of children under 18 who sing (11 million) was derived from the share of adults surveyed who report
that children in their household sing (5\%), the average number of children who sing in these households (1.33), while accounting for the relative ratio of children living in single-parent vs. multiple-adult households to avoid doublecounting singing children who live with both parents.

## LIMITATIONS

While nearly $90 \%$ of U.S. adults use the Internet today, according to the Pew Research Center (www.pewinternet.org), this ratio drops to about two-thirds of adults age 65 and older. Since our surveys were conducted online, our senior population and singer survey samples may be less representative of the total audience and more representative of seniors and senior singers who are regular Internet users. As a result, our samples are younger and better educated than the wider populations the samples are intended to represent.

When comparing singers in the selected samples to the general public, there are demographic differences to consider. Choral singers are more likely to be female and tend to be older, more affluent, and better educated than the general public. To account for these demographic skews, we performed an extensive and careful demographic analysis, using standard statistical techniques, of each observed disparity before concluding and reporting that the disparity between singers and the general public is truly correlated with chorus participation rather than simply a reflection of the demographics of singers.

## RESEARCH NOTES

${ }^{1}$ In 2009, we found and reported that $18.1 \%$ of households had one or more adults who sing, and used household incidence for the sake of comparison with an earlier 2003 study. Household incidence is typically higher than population incidence, and in this case our 2009 results translated to $14 \%$ of all adults.
${ }^{2}$ The population incidences we're reporting and the total number of singers we've estimated differ from at least some others in the field. Some possible reasons for this that we're aware of include differences in wording of our query vs. others, the location of our query within our instrument vs others, and the possibility that our general population sample, while demographically representative, may have unknown psychographic characteristics that caused a greater proportion of choral singers to end up in the sample. It should be noted that if the latter is the case, it makes the number, breadth, and size of the differences we put forward between choristers and the general public throughout the rest of this report even more striking (since at baseline this would/should reduce the potential to find differences between the groups). The total number of singers we estimated also could differ from other surveys because our estimates include children under the age of 18 , whereas others include adults only. In any case, none of these possible explanations, whatever their validity, impact our finding that choral singing is a growing phenomenon, since the methodology we used to determine population incidence for this report is the same as was used in the 2008 survey to which we're comparing.
${ }^{3}$ Choral singers told us the mean number of members in their primary group was 78, and the median size was 67. The mean number of years respondents had been singing in choirs was 28 ; the median 26.
${ }^{4}$ When analyzing the results of scalar questions that ask respondents to rate their agreement with a statement, we often look at differences in mean levels of agreement with the statement by different populations. For example, if the question is on a $1-5$ scale, Group A may rate their level of agreement as 3.93 out of 5 on average, while Group B's level of agreement might be 4.12 out of 5. Knowing this, we can use standard statistical tools to determine whether these differences are statistically significant, which can be particularly important to avoid falsely representing differences between groups when one of the two groups' responses are highly polarized (i.e., a large portion of the group agrees, but a large portion also disagrees, with relatively few group members having a neutral view). Comparing means can also help surface differences in cases where Ns are
relatively small, since these comparisons involve all of Group A being compared to all of Group B, rather than just the portion of each group that agrees. More generally, we feel this approach provides a more holistic sense of group opinion.
${ }^{5}$ With respect to both resilience and optimism, we specifically considered the possibility that religious affiliation might account for some or all of the differences between choristers and the general public, since many singers belong to choirs in the context of a religious institution. When comparing choristers who say they "regularly attend a church, synagogue, or mosque" with those who don't, however, we found that the differences between choristers and non-choristers were so much larger than the differences between religious and nonreligious choristers that faith could not account for the differences we were seeing, particularly given that $40 \%+$ of our chorister sample was, itself, nonreligious or not regular in its religious practice.
${ }^{6}$ For example, $76 \%$ of choristers who belong to two or more choirs say being in a chorus or choir has made them less lonely vs. $71 \%$ of singers who belong to only one choral group; 77\% of those who rehearse more than once a week agree with this vs. $71 \%$ of those who rehearse only once a week or less; and 75\% of singers who have belonged to choral groups for more than 20 years credit choir with this impact, as opposed to $72 \%$ who have been singing for 20 years or less. With an N of nearly $6,000(N=5,736)$, all of these differences are statistically significant.

7 In addition, there's reason in the demographics of these responses to believe these trends will continue. In particular, singers over the age of 65 are significantly more likely than those under 45 to cite spiritual growth or faith as one of their three most important reasons for choir participation ( $24 \%$ vs. $14 \%$ ), while choristers ages $18-44$ are significantly more likely to cite choir's capacity to relieve stress as particularly important to them than their $65+$ peers do ( $31 \%$ vs. $23 \%$ ). In both cases, the middle age group (45-64) is intermediate in its opinion between the two, but much closer to their older counterparts-young singers (18-44) are significantly more likely to cite stress release and less likely to cite faith than either of the older cohorts.
${ }^{8}$ Reporting of statistics like these naturally raises the question of "tokenism." While choruses are not a universal solution for bringing different races and ethnicities together, nearly a quarter of choristers ( $24 \%$ ) report that more than $5 \%$ of the choir they sing most in is African-American, and nearly as many ( $22 \%$ ) report the same level of Latinx representation in their main chorus. A quarter of
singers ( $25 \%$ ) say more than $5 \%$ of their choir's members are Asian or Asian-American. Overall, choristers report that the mean number of AfricanAmericans in their primary group is seven, joined by five Latinx and five Asian or Asian-American singers on average.
${ }^{9}$ Ideologically neutral items were drawn from sources such as Conway et al. in Political Psychology 37(6), 2015, and Malka et al. in The Politics of Social Psychology, Crawford \& Jussim, Eds., 2017.
${ }^{10}$ Throughout this section of the report, we provide comparisons between older choristers age 65+ and a general public sample of the same age demographic, intermingled with findings about older choristers age 62+ in general. In all cases, we chose to focus on the age 65+ demographic for comparison with the public because we believed this comparison would surface more differences resulting from what we thought could be choral participation's ameliorating effects on the impact of aging. When looking at the opinions and experiences of choristers in isolation, on the other hand, we chose to cast the net a little more broadly (age 62+) so as to be able to use the larger number of respondents that could be included in this way to better identify differences between demographic and psychographic subgroups within the older chorister population.
${ }^{11}$ See the Methodology section of this report.
${ }^{12}$ Respondents also were asked about Alzheimer's/ dementia. Results are not included because of several limitations, including the low number of respondents who reported suffering from these conditions. This topic could be better explored in additional research that includes data from caregivers.
${ }^{13}$ To be clear, improvement in a patient's experience of a medical condition, especially from a personal perspective, is not the same as a clinical finding. But these findings seem to track with research about the impact of support groups, for example, including their physical effects and, more broadly, the connections between stress and the experience of adverse health conditions. We know many choristers find choir participation helps relieve stress.
${ }^{14}$ No clinical diagnoses would be made solely on the basis of responses to one or even all of these questions. But it's worth noting that the first set of items are typically associated with depression, the second set are associated with bipolar and other mental health disorders, and in all but one case (the percentage of respondents who indicated they've "done things other people might have thought were excessive, foolish, or risky"), the differences in response shown in Figure 8 are statistically significant.


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