

## OLDER ADULTS USE OF MUSIC IN DAILY LIFE: POTENTIAL FOR SELF-ADMINISTERED THERAPY

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### ABSTRACT

*Background:* To prepare for the impending effects of an aging society, more non-invasive and/or holistic therapy methods are needed. Older adults need cost-effective, long-term methods for improving brain and body health as well as self-controlled opportunities to create joy or alleviate suffering. Music is nearly free and ubiquitous, and yet some older populations lack access. *Purpose/Design:* Survey of self-reported use of music among active, healthy elders and assess gender differences. This survey research describes usage of music among 99 healthy older adults as well as exploring potential barriers and gender differences. *Results:* In this high-functioning sample, 90% of elders reported access to music weekly or more often including nearly 70% who listened to music daily; usually for at least 1 hour at a time, and 84% reported using music to lift a bad mood. There were no significant gender differences in music access or using music to adjust a bad mood. Most commonly reported styles of music to lift mood were classical, jazz and easy listening. Although the survey also made use of some open-ended items, there were not enough meaningful responses for deep qualitative analyses. *Conclusion:* Music listening was common among this sample and they agreed they used music for mood adjustment with classical, jazz or easy listening being the most common genres consistent with generation stereotypes. Music listening has untapped potential for both specific therapies and well-being among elders and more research is needed on barriers to music associated with age-related health and/or social changes as well as the range of benefits available to older adult who listen passively or engage more actively in creating music.

**Keywords:** Music Listening, Aging, Music Therapy, Recreation Therapy, Personal Playlists.

### INTRODUCTION

The modern medical field currently focuses on the Western model of prescription medicine as therapy, in an effort to gain short-term results (Meyer, et al., 2010). Under the current model of doctor-prescribed rehabilitation, patients are often prescribing pills and bed rest, which furthers restricts mobility. Creative and specifically musical activities, in contrast, have more broad and humanistic aims such as providing temporary well-being, improving mood, communicating socializing, memory formation/retrieval, creating “mindset”, and relaxation (Spiro, 2010). Holistic models of therapy such as music listening are largely under-studied and we lack very basic information such as general access, preferred media and genre preferences among older adults. Spiro (2010) argues that if the medical field were to shift their focus from the currently enacted short-term model, to a more long-term model they might produce real and lasting results. This long-term model could come in the form of simple holistic methods, such as different forms of music therapy. Furthermore, in-line with Spiro’s emphasis on continuity of care producing positive results, music making and listening activities can be easily adapted to meets the diverse needs of the older adult population. The non-toxic and easily adapted activities around music make it very useful for any age and it has already been studied in many contexts. The benefits just a single therapeutic listening session for elders include diverse outcomes such as helping with sleep quality (e.g., see

Thompson, 2006), reducing pain ratings (e.g., see Gutgsell, et al., 2013) and reducing levels of the stress hormone cortisol (Suzuki et al., 2007). We all have associations with music formed by repeated listening to specific songs over time. When we are listening to the radio and a song comes up from our youth it can elicit memories we may have not experienced in many years. For older adults, music may play an even more important role than for youth. If nothing else, it may easily enrich the quality of life for isolated elders, elders with dementia and otherwise elders who lack access to their preferred music. This review of literature provides an overview of some prior research using music listening among elders to improve quality or life in general but also for reducing stress, anxiety and agitation among elders with dementia. In general, these findings support an agenda for bringing music into the lives of elders as well as for studying this topic using a variety of methodology.

## **REVIEW OF THE LITERATURE**

Although long ago now, McCullough (1981) is one of the few to systematically assess older adult's use of music in their daily lives. Her dissertation findings include that elders' depth of meaning associated with music had increased over time and that although still very interested in music; many elders had hearing loss or other age-related problems that create barriers to music access. Today, one obvious challenge is maintaining access to one's preferred music over time when cognition may decline and technology may change in ways that making our past music media inaccessible. The cognitive decline of people with dementia leave them especially affected by changing music listening technology and they may also benefit the most from this easily provided therapy. Suzuki, Kanamori, Nagasawa, Tokiko, and Takayuki (2007) looked at the behavioral and biological effects of music therapy when implemented in a small sample of elderly population with dementia. The intervention was to play the patients favorite songs during the patients' routine therapy. The quasi-experimental design tested the patients before and after the individual listening sessions. Results showed that the participants reported lower stress levels and had lower levels of the stress hormone cortisol in the saliva, but no cognitive improvement in this short music listening time frame. A recent study of older adult cancer patients and their caregivers found improved mood, stress and biomarkers for immune response after just one session of group singing for 70 minutes (Fancourt, et al., 2016). Thus, we know that music listening to music or more active music engagement is not only socially and emotionally valuable, it has significant impact on physiological functioning even in the most significant health conditions older adults may face.

Another common complication from dementia is anxiety and agitation. Sung, Chang, and Lee (2010) studied a preferred music listening intervention to reduce anxiety in 29 older adults with dementia in nursing homes using 30 minute sessions twice a week for six weeks. Compared to an un-treated control group, the patients who received music therapy from nursing staff had lower anxiety using the clinical scale Rating Anxiety in Dementia. The authors believe that reducing anxiety might also assist with other dementia problems such as loss of cognitive skills, confusion, stress on the body, and even reduce falls, which are a leading cause of hospitalization. Ledger and Baker (2007) studied the long-term effects of group music therapy on agitation levels of people with Alzheimer's Disease. Although not a controlled trial, they concluded that music therapy was a creative, non-invasive way to improve not only agitation but also cognition. Beyond anxiety and agitation, some dementia patients experience outburst of behavior that can range from verbal (e.g., berating, shouting) to physical (e.g., punching, kicking). Chang et al. (2010) evaluated a music program during lunchtime for a core group of 41 residents diagnosed with dementia. During their lunch time for 8 weeks, on alternating days the staff played either soothing sounds of nature or songs

that had a particular rhythm. Behavioral outbursts lessened on the weeks of and the days after the music was played. Chang et al. (2010) concluded that the music was more soothing overall to the patients than the non-musical nature sounds. The purpose of this survey research is to report on the frequency and amount of music access among a sample of active, healthy older adults, as well as describe how many report using music listening as a strategy to lift their mood; and finally, an open ended question was used to explore the most preferred musical styles elders use when seeking to lift their moods. An additional goal was to assess gender differences on these self-reported music listening measures.

## **METHODOLOGY**

### **Participants**

The participants were 99 older adults residing in a retirement community in the San Francisco Bay Area ranging in age from 65 to 93, primarily representing the age range of “The Greatest Generation” but also some “Baby Boomers”. The sample included 30 men and 66 women, and three participants did not report their gender. The 99 who voluntarily completed the survey were out of the total 120 persons who were recruited while attending a social event. The participants were from many ethnic backgrounds, different parts of the world and many regions of the United States of America. The on-going “Friday Lunch” social event is staffed by volunteers and sponsored by “Meals on Wheels” who have provided free lunch for all attendees for many years. Over 10,000 total residents live in this large upscale retirement community consisting of almost exclusively independent living units. Given the “free lunch” aspect of this activity, this sample is less biased toward wealthy elders than the host retirement community in general. Yet, we fully acknowledge that this sample is not representative of elders everywhere, or even locally. In order to focus on music experience and maximize participation, we did not ask many background demographic questions and therefore are unable to describe our sample with regard to SES, ethnic background or other important social variables. In general, this population is well-educated, middle to upper class socially, and has low a very percentage of African American, Asian American and Latino American residents compared to the surrounding areas.

### **Materials and Procedure**

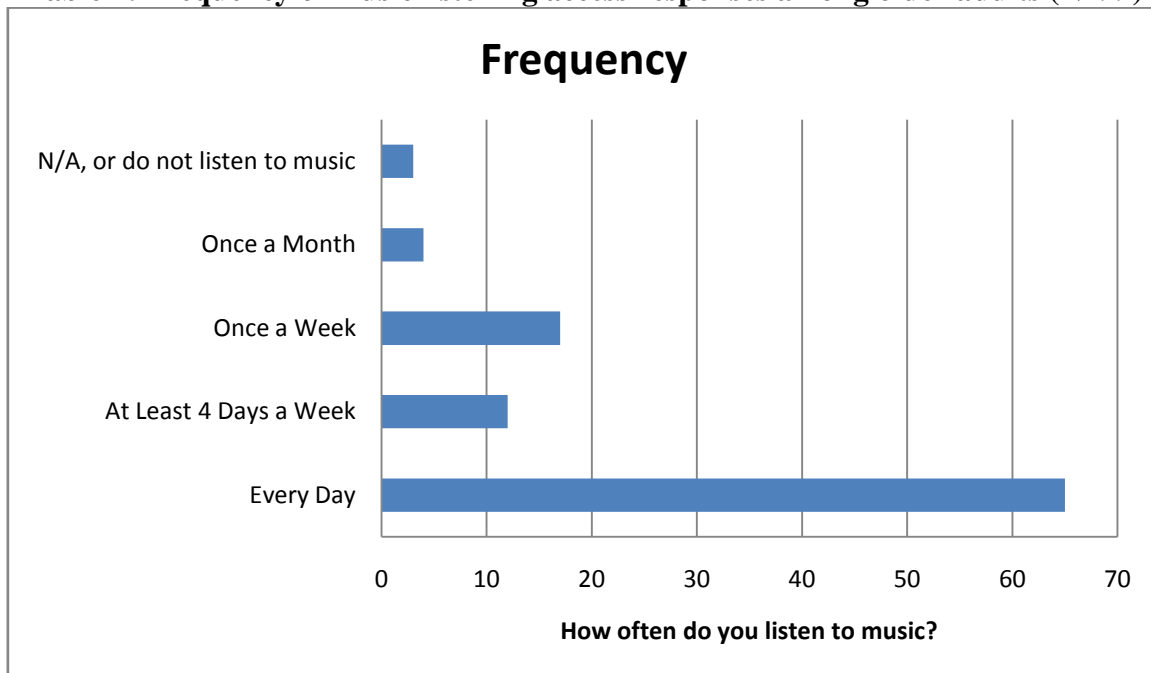
The materials used for the study were a physical copy of the survey (one for each person) and an information sheet for reviewing the nature of this voluntary study and to assure them of the anonymity of their answers – response sheets had no identifying information. The questionnaire itself contained minimal background information, some simple response categories to music questions and some open ended items. Questions were designed to gain categorical background information on their access to music, frequency/amount of music usage, ways they use music, their preferred styles of music and what music means to them. At the start of the social event, just after announcements, the student researcher (A.F.) was also given the opportunity to address the group and describe the study. A.F. was already familiar to the group through volunteer service, and she read the study invitation aloud to the group, assured full anonymity in their responses, and thanked them for listening and their possible participation. During free music listening time and lunch, participants could voluntarily complete the surveys with no penalty for non-participation. Given the non-sensitive nature of the questions and lack of identifying information, this study was exempt from a paper record of informed consent and participants gave their assent by completing the questionnaire. The raw data from the participants’ response forms were entered in an Excel worksheet. All open-end data was transcribed exactly to ensure accuracy, or not at all, if

illegible. Simple descriptive analyses helped assess the frequency of different responses to create a picture of older adults’ use of music. Some t-tests and chi-square analysis were used to evaluate any gender differences in the use of music.

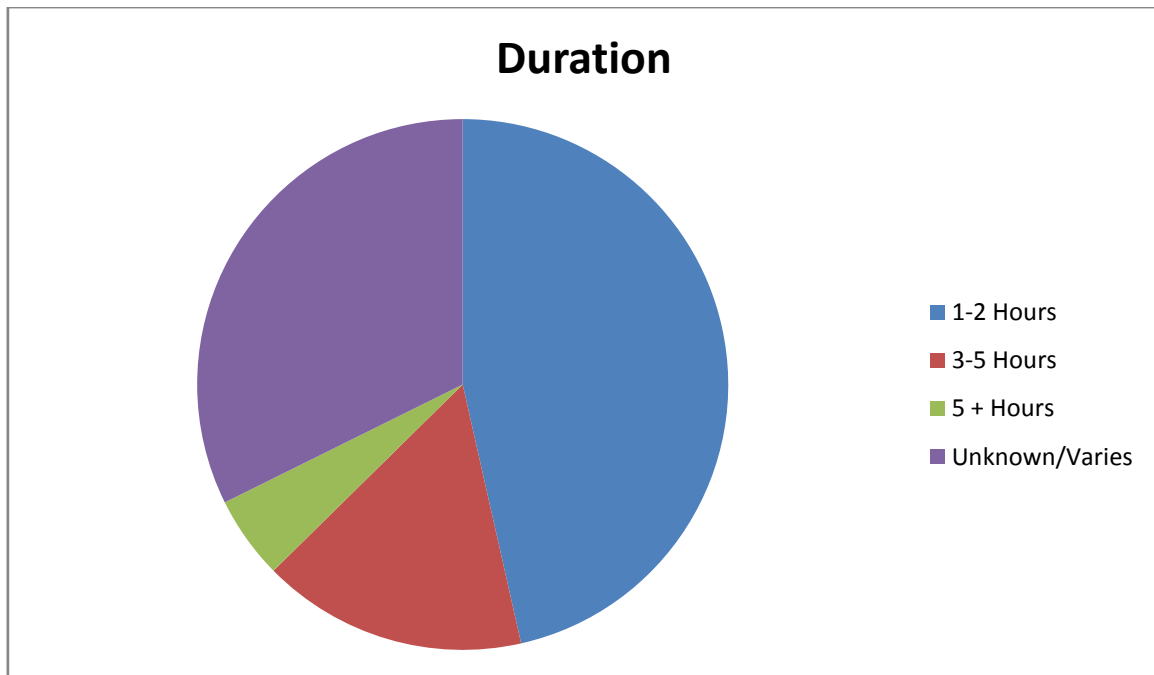
**RESULTS**

With regard to the frequency of music listening;65 participants stated they listened to music every day, 12 at least 4 days a week, 17 stated once a week, 4 once a month, and 3 did not know or did not listen to music (See Table 1). When it comes to gender and how often an individual listens to music, there were no statistically significant findings of gender differences ( $t=1.9333$ ,  $df=95$ ,  $p = .562$ ). With regard the duration of music listening, the most frequent category was 1-2 hours (the lowest amount) followed by “unknown/varies” (see Figure 1). This item appears to need revision to a more continuous rather than categorical variable, but suggests that those who listen to music listen a lot. There were no gender differences in how long they listen to music ( $t=.6122$ ,  $df=95$ ,  $p=.542$ ) The most popular formats for listening to music were: CD, Radio, and TV. Those who did listen, the majority listened for one hour or more at a time (see Figure 1). The most popular type of music the participants liked was Classical, Jazz, and Easy Listening. The majority of participants (84%) answered “Yes” to “Do you use music to uplift your mood?”, while 13% answered “No”, and three did not respond. Table 2 shows how this responded is distributed by gender, and there were no gender differences is using music to uplift mood however some cell frequencies were quite low which violates the assumptions of some statistics tests.

**Table 1: Frequency of music listening access responses among older adults (N=99)**



**Figure 1: Duration of music listening per listening session among older adults (n=99)**



**Table 2: Cross-tabulation and Chi-square Results of Gender by Use of Music to Uplift a Bad Mood (n=96)**

**Gender \* Mood Crosstabulation**

Count		Mood			
		N/A	No	Yes	Total
Gender	Female	4	7	55	66
	Male	2	3	25	30
	Total	6	10	80	96

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.019	2	.990
Likelihood Ratio	.019	2	.990
N of Valid Cases	96		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.88.

When asked the open-ended question “What music do you prefer when you are/or want to be in a happy mood?” the most popular music choices were softer music such as Classical, Jazz, and Easy Listening. One participant listed “Lady Gaga” which would not be possible with a forced list to choose from. This one-off response may reveal that at least some elders seek contemporary popular music (or just have a sense of humor). When asked the similarly open-ended-question “Are there types of music you do not care for?” the most frequent response was Rap, followed by Heavy/Hard Rock. When asked, “Do you have favorite songs that you play when you are in a bad mood?”, 30 said “Yes”, 58 said “No” and 11 did not answer that item. So, although most elders (84%) use music to lift mood, only a little more half (58%) use



a set of specific songs for that purpose. The survey also made use of three additional open-ended items at the end, and far fewer participants answered them. The first one asked “How has music impacted your life?” Although many gave positive responses, the results were difficult to tabulate and a detailed qualitative analysis was beyond the scope of this study. The question “Are there any barriers you face to listening to music? If so, what are they?” was answered by only eight participants that identified barriers such as hearing impairments, and housing considerations (neighbors, others in the home). For the majority, music seemed to be an at-will activity with no barriers identified by most participants. The final question asked “Is there anything else you would like to add regarding your use or experience with music?” Many responses stated that they remembered songs from their past experiences, which reminded them of good times when they heard those songs. Some stated they had musical families, and it was simply pleasurable to have music on.

## DISCUSSION

This survey research presented the frequency and amount of music access self-reported by older adults, use of music to lift mood and explored the most preferred musical styles among elders seeking to lift their moods. Among this sample, older adults provided self-reports suggesting that music was quite available both in frequency and duration and was often used to lift their mood. None of our self-reported measures of music usage showed any gender differences. One key limitation is certainly that the sample was one of convenience for exploratory purposes rather than representative and we should therefore avoid generalization of these findings to all older adults. Indeed, it is very likely that specific sub-groups of older adults may face significant barriers to accessing music due to a variety of factors. Although the populations sampled were residents of an upscale retirement community, the social function was the “Friday Lunch” program, offered by “Meals on Wheels”. Therefore, the type of function they were attending shaped a sample of greater diversity of socio economic status than the retirement community at large. Furthermore, no economic qualifying questions were asked of the participants at the time and their financial situation was not assessed in the questionnaire in order to focus only on the variables of interest and to minimize strain on the volunteer participants.

Some limitations of this study could not be avoided. On the questionnaires themselves, the participants hand wrote their responses, and some of the handwriting on the response forms could not be transcribed accurately. It should also be noted that, as this survey was administered in a group atmosphere, it is possible that group discussions could have persuaded some of the participant’s responses. Given the community-based nature provided by our community partner, we could not provide a clinical setting, and private space away from others. Therefore, this work should be seen as exploratory rather than pure independent responses from each person individually. Future work might assess what technology elders are most often using for music access as well as which are most likely to allow them access to preferred music. Assembling personal music playlists while healthy and active may provide an avenue to maintain access to that same music later in life in age-related health declines impair their cognition or mobility required to seek out and play their preferred music. *Alive Inside* (Rossato-Bennet, 2014) is a recent U.S. based documentary film that illustrated the transformative possibilities of music listening in palliative care. The film even hints at music’s potential for effective memory therapy in persons with dementia. The Alive Inside Foundation was formed after the film’s success, and provides resources for individuals or groups to develop personal music playlists for themselves, family members or as a service to other elders (See <http://www.aliveinside.org/>). Hopefully, as the practice of developing and

using personal playlists among elders becomes more common, health care practitioners and researchers will assess their effectiveness on a number of potential therapeutic outcomes.

## CONCLUSION

Elders continue to enjoy music, but some lack access. This particular sample appears to have few barriers to their access to music, but some named their own hearing and co-habitants or neighbors as possible barriers to listening more. Given the financial picture and rich social offerings of this particular retirement community, we may have an idealized view of access to music among these elders. Therefore, further work is needed to identify those groups at risk for losing access to music as well as developing programs to deliver free or low cost technology or musical content to older adults who would benefit from but lack access to their preferred music.

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