



CONTRIBUTIONS OF THE MUSICAL ACTIVITIES IN OLDER PEOPLE QUALITY OF LIFE

C. Solé, M. Mercadal, S. Gallego y M. A. Riera

Universitat Ramon Llull

ABSTRACT

The purpose of this study was: (a) To evaluate and to compare the impact of three music programs (choir, music appreciation and preventive music therapy sessions) on the quality of life of healthy older adults, and (b) to identify the motivation and the difficulties that the seniors encounter when participating in activities of this type in order to come up with recommendations and strategies for the design of appropriate programs for older adults. A pre-posttest quasi- experimental design without equivalent control group was used in this project. The sample included 83 persons over 65 years of age. The sampling was intentional. The data collection was carried out through an ad hoc questionnaire that included the four aspects of the construct of quality of life (physical health, subjective health, psychological well-being and interpersonal relations), a questionnaire on motivation and another on satisfaction about the program. This last questionnaire was administered twice: at the beginning of the programs (pre-test) and at the end (posttest). The results of this study indicate that the participants perceived improvements in some aspects of their quality of life. In addition, the main reasons which motivate participation in these musical activities are to broaden their social network and to acquire new knowledge. The results are discussed in the light of the challenges of active and satisfactory ageing.

Today, in Spain the number of people older than 65 represents 16,6% of the population, and the population projections of the United Nations for the year 2050 indicate that this country will be third in the world with older people reaching 34,1% of the population, after Japan (35,9%) and Italy (35,5%) (*Informe Personas Mayores Imsero*, 2004). This noticeable increase in people older than 65 implies the need to establish actions and programs to contribute to their quality of life. In this sense, many countries, including Spain, are working towards promoting an active and satisfactory aging process.

Active aging is defined as “the process of optimizing the opportunities for physical, cognitive and social wellbeing throughout life with the objective to increase a healthy life expectancy, productivity and quality of life in older age” (WHO, 2002, pg. 12). It is important to facilitate to this population not only the possibility to remain physically active, but also the opportunity to participate in social, economic, cultural, spiritual and civic activities throughout later life.

Another important concept is that of satisfactory or successful aging. Rowe and Kahn (1997) indicate that although there is no fixed pattern of successful aging, the following characteristics tend to be involved:

1. A low probability of suffering diseases and disabilities associated with aging (health and ability).
2. A high level of physical and cognitive functioning. An active implication and commitment



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towards life. The development of a specific set of activities.

Successful aging, as Rowe and Kahn (1997) explain, can be related to two types of basic activities:

- Social activities, which are those activities that are able to maintain pleasant interpersonal relations to facilitate a socially healthy and independent life style.
- Productive activities, which are those that are similarly capable of contributing to the maintenance of social life or personal growth. In this category, educational activities are important.

With regard to the educational activities, recent studies indicate that older people can learn new things, and do them well (Mehrota, 2003). To be active and be part of social activities has a positive impact on the wellbeing of older people, particularly at a time of their lives when they are exposed to a number of losses (professional role - retirement, changes in social circles, loss of spouses...). The relationship with other people is a good predictor of wellbeing and quality of life.

Quality of life is understood as a multidimensional concept, consisting of the same dimensions for all people. It is influenced by environmental and personal factors and their interaction, and it is improved through self-determination, resources, inclusion and goals in life. Shalock i Verdugo (2002) indicate that quality of life is a concept that reflects a person's desired life conditions in relation to eight basic needs which represent the nucleus of each person's life dimensions: emotional wellbeing, interpersonal relations, material wellbeing, personal development, physical wellbeing, self-determination, social inclusion and rights. In the study that we propose, we will concentrate on four of the dimensions of quality of life: physical health, subjective health, emotional wellbeing and interpersonal relations.

Being aware of the need to promote continuing education among older people, as elements of social transformation and as a means to dignify the person and to improve their quality of life, in 1978 the Spanish Cultural Ministry, initiated the program of *Aules de la Tercera Edad* (ATE) (Third age classrooms). These programs are aimed towards people older than 55 and intend to respond to their cultural demands, their wish to improve knowledge and keep up to date. They intend to act in two directions:

1. Cultural. They intend to generate individual and community capacity to live better and to have a more productive and creative leisure time.

2. Social. The main objective is to give older people the possibility to become integrated in groups; to promote their participation and recognition in the social task, and to collaborate with those institutions which carry out research on older people.

These classrooms for older people become meeting points, spaces for dialogue, participation, and education through recreational, educational, and cultural activities. Older people have the opportunity to expand and enrich their interpersonal relations, to participate in the management and promotion of culture. Aging is accompanied by a decline in functioning, at the physiological and psychological level. One of the consequences that many older people have to face as they age is an increase in social isolation. Providing an environment that maximizes and prolongs functioning and promotes independence and well-being for as long as possible is recommended for this age group (Onishi, Masuda, Suzuki, Goth, Kawamura, & Igucvhi, 2006).

There is ample literature reporting on the importance and benefits of music for older adults (Cohen et al., 2002; McCaffrey, 2008; Ruud, 1997). Listening to music appears to be rated as a very pleasant experience by older adults since it promotes relaxation, decreases anxiety and distracts people from unpleasant experiences (Cutshall, Fenske, Kelly, Phillips, Sundt & Bauer, 2007). The contributions of music on the quality of life and on life satisfaction of older people has been a topic of interest for researchers for some time (Venderak, Newman, & Bell, 1983). Coffman (2002) reports that music activities (both passive and active) can affect older adults' perceptions of their quality of life, placing a strong value on the non-musical dimensions of being involved in music activities such as physical, psychological and social aspects. Music appears to be a source of entertainment, an activity that allows older people to interact with others and share aspects of their life, and gives them an opportunity to connect with a sense of spirituality (Hays & Minichiello, 2005).

Research up to the present time highlights some of the general benefits of music with older adults



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and it supports its inclusion in their lives. However, some aspects still remain unanswered. *The purpose* of this study was: (a) To evaluate and to compare the impact of three music programs (choir, music appreciation and preventive music therapy sessions) on four dimensions of the quality of life of healthy older adults, and (b) to identify the motivation and the difficulties that the seniors encounter when participating in activities of this type, in order to come up with recommendations and strategies for the design of appropriate programs for older adults.

Secondary objectives included:

1. To learn about the social-demographic profile of older adults that participated in the three different music programs.
2. To identify what motivates older people to get involved in music activities.
3. To evaluate the level of satisfaction with the different programs.

METHOD

Subjects

A total of 83 people who were enrolled in one of three different types of music activities in the Barcelona area participated in the study. The music activities included ran from October-June (approximately an academic year) and were the following: choir ($n = 52$), music appreciation class ($n = 19$), and a preventive music therapy program (PMTP) ($n = 12$). The mean age for the participants was of 72.6 years ($SD = 6.91$), and 83.13% ($n = 69$) were women and 16.87% ($n = 14$) were men. The participants had to meet the following criteria to be included in the project: (a) to live at home, (b) to maintain an independent life, and (c) not to have any major cognitive impairment.

The participants were recruited from a variety of senior centers from the Barcelona area that offer different educational, recreational and cultural activities for older adults.

Instruments

The measurement instruments used to evaluate quality of life were administered twice: (a) during the first month of the activity (pretest), and two weeks before the end of the activity (posttest). The instruments used to collect the data included:

1. A researcher-designed questionnaire (Villar et al., 2006) to collect subjects' demographic information and their reasons for enrolling in the different programs (only administered in the pretest). The section on motivation to participate in the program included 23 items grouped in four main factors: cognitive, social, family related, and to avoid present problematic situations. This questionnaire included a Likert scale (1-4) and was administered in the pretest.

2. Questionnaire on Quality of Life (combination of standardized tests and researcher-designed questionnaire). This questionnaire included four components of this construct: physical health, subjective health, psychological well-being, and interpersonal relations. In order to measure the participant's physical health, the questionnaire included items related to days of hospitalization or days of required rest in bed or at home in the last year, and also questions on activities of daily living (ADL). In regards to subjective and comparative health, subjects had to respond to questions related to their general health, and its comparison with the health of other people.

To measure the psychological well-being, the subscale of the *CUBRECAVI Quality of Life questionnaire* (Ballesteros & Zamarrón, 1996) was used in addition to the *Rosenberg's self-concept test* (Rosenberg, 1965), the *Yesavage depression scale* (Yesavage et al., 1982), and the *Philadelphia Geriatric Scale* (PGC) (Lawton, 1975) to evaluate life satisfaction. The PGC has been validated and standardized with Spanish population by Stock, Okun and Gómez (1994).

3. The interpersonal relations factor was measured through a researcher-designed questionnaire that included 5 questions in which the participants had to specify how often they participated in different programs or if they were part of specific organizations for older adults.



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4. At the posttest, besides the above scales on Quality of Life, the participants also filled out a researcher-designed questionnaire to evaluate their perception of change in their lives in regards to physical health, self-satisfaction, family relations, activity, friendships, life enjoyment and feelings of usefulness.

At the posttest, participants also filled out a questionnaire to evaluate their level of satisfaction with different components of the programs: teachers, concepts, timing, participation, relationship with other participants, equipment, organization of the program, and overall satisfaction. In addition, the participants had to evaluate the difficulties they had encountered to access the chosen music program.

Procedure

A pre-posttest quasi-experimental design without equivalent control group was used in this project. After having established initial contact with the people in charge of the different programs and obtaining their permission, the researchers explained the aims of the project to the potential participants. General instructions on how to fill out the questionnaires were given some time before the beginning of a class. Then, the questionnaires that were to be filled-in individually were handed out to the participants, assuring them that their participation was totally voluntary. The following week, the researchers went back to the classrooms to pick up the completed questionnaires. This same procedure was repeated at the end of the program 8 months later. A total of 27 posttest questionnaires were not returned for each of the programs (choir = 12, music appreciation class = 10, preventive music therapy program = 5).

RESULTS

Descriptive Analyses

Data were analyzed by the Statistical Package for the Social Sciences (SPSS) 17.0 by an independent statistician. The final sample included 83 subjects, although the initial sample included 101. Table 1 shows a summary of the subjects' socio-demographic information. According to these results, the percentage of women (83%) that participate in music activities within the population of older adults was much higher than men (17%). Likewise, the percentages of people who are married (51%) and widow (35%) are higher than those who are single (7%) or divorced (7%).

In general, the educational level of the participants in this study is of primary/elementary school. However, the participants in the music appreciation class have a more diverse educational level than the participants in the other two music programs.

With regard to the people with whom these subjects live, it can be observed that living with the spouse (42%) is more common than living alone or with other family members in this group of subjects.

Regarding monthly income, considering quantities higher than 900_ per month, more participants in the choral activity have higher incomes (67%) than those in the music appreciation class (63%) or the PMTP (17%).



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Table1. Summary of Participant's Sociodemographic Information

Men	Total = 17%		
Women	Total = 83%		
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Married	Total = 51%		
Widow	Total = 35%		
Separated/Divorced	Total = 7%		
Single	Total = 7%		
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Education Level			
No studies	4%	5%	33%
Elementary/middle	69%	28%	59%
High School	19%	28%	8%
University	8%	39%	0%
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Lives with			
Alone	Total = 37%		
Spouse	Total = 42%		
Children	Total = 5%		
Other family members	Total = 5%		
Other people	Total = 2%		
Spouse and children	Total = 9%		
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Monthly Income			
< 300_	Total = 3%		
300-600_	Total = 24%		
601-900_	Total = 22%		
901-1200_	Total = 11%		
1201-1500_	Total = 24%		
>1500_	Total = 16%		
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*Preventive Music Therapy Program



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Another portion of the questionnaire that has been analyzed descriptively is that on the reasons for the participants to enroll in these three different types of music activities. The type of motivation that the participants rated most were social reasons ("to have a good time with friends"; "to relate to pleasant people"; "to make friends") and cognitive reasons ("to enjoy learning", "to develop my imagination", "to look for new knowledge") as the main motives for participating in these activities. The lowest rated refer to family related motives ("to follow the rhythm of other family members"; "to prepare myself for new family changes", "to be able to answer questions to children and grandchildren").

Quality of Life

The first two dimensions analyzed of this dependent variable are physical health and psychological health. With regard to the objective perception of health, 83% of the participants declared that they did not have to be hospitalized or stay in bed in the last year. As far as the subjective perception of health, 63% perceived that their health was good to excellent.

To the question on the participants' level of satisfaction with their present health, 77% of the subjects expressed feelings from satisfied to very satisfied with their present health. When asked to rate their health in comparison to the health of people of the same age, 56% expressed that their health is as good as the health of other people of the same age.

Subjects had to answer three questions in regards to their psychological health. In regards to the first question, 82% of the participants indicated that they almost never feel depressed or sad; 57% indicated having memory problems very seldom, and 96% answered that they never get disoriented or lost in places. Therefore, it appears that this group of people have good psychological health.

Regarding the interpersonal relations component, and specifically the level of participation and community integration, 36,1% of the participants in this study answered that they attend cultural activities and centers for older adults on a weekly basis.

At the end of the program, subjects answered 10 questions related to their perception of change in their lives. The results show that the mean is above the established mean which indicates that the three programs seem to have contributed to a perception of change in their lives. The subjects especially point out the fact that the participation in these music programs have contributed to making new friends, acquiring new knowledge, feeling more useful, and feeling satisfied and optimistic in life.

With regard to the evaluation of the program, in general, the three programs are evaluated very highly by the participants. The mean general satisfaction score is 3,44 (on a maximum of 4). The item that was rated lowest was that referring to the subjects' participation. As far as the possible difficulties the participants encountered to carry out the activity, results show that the participants had no important difficulties. However, the participants in the music appreciation course and in the choirs pointed out the item "not having enough music knowledge", as something that intimidated them more.

Statistical Analysis

Socio-demographic profile

When comparing the subject's age for the three music activities, the results of the Kruskal Wallis One-Way analysis of variance show that there is a significant difference between the age of the participants in the PMTP and the age of the choral groups, the subjects in the PMTP being older than those in the choral groups ($H = 6,84$, $df = 2$, $p < 0.05$).

With regard to marital status, there is a significant difference between the number of married people in the choral group and in the PMTP ($X_2 = 12.57$, $df = 2$, $p < 0.01$). There are more married people in the choral groups than in the PMTP.

Quality of Life

Pre-test

When comparing the answers among subjects in the three music activities to the questions related to physical health perception, results show that there are more participants in the PMTP that perceive their health from good to excellent ($X_2 = 7.03$, $df = 2$, $p < 0.05$).



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From the three questions evaluated in regards to the psychological health, the one that presents significant differences among the three music activities is the one referring to “feeling depressed, sad, anxious...”, which seem to affect more the participants of the PMTP ($H = 8.92$, $df = 2$, $p < 0.05$).

In addition to the above questions, subjective well-being is evaluated through three different standardized scales: Rosenberg’s self-esteem scale, Lawton’s life satisfaction scale (PGC), and Yesavage’s depression scale. The mean on the Rosenberg’s scale is above the established mean. The same can be observed with the Lawton’s scores. It is important to mention that only the question “You feel less useful as you get older”, was scored slightly below the mean by the participants in this study. Regarding the depression scale, according to the results, it can be stated that there are not symptoms of depression among the subjects in this study. In addition,

the results of the t-tests for repeated measures show no significant differences between the pretest and the posttest scores for the Rosenberg’s self-esteem test ($t = -.70$, $df = 48$, $p = .49$), the Yesavage’s depression scale ($t = 1.14$, $df = 51$, $p = .26$) and the Lawton’s life satisfaction scale ($t = -1.19$, $df = 49$, $p = .24$).

Table 2. Pre and Post-Test Mean Scores and Standard Deviations of the Standardized Scales

Test	Mean	Standard Deviation
Depression Pretest	45,04	10,14
Depression Posttest	43,46	6,92
Self-concept Pretest	25,84	5,46
Self-concept Posttest	26,35	4,90
Life Satisfaction Pretest	42,30	8,37
Life Satisfaction Posttest	43,84	8,37

At the posttest, in the questions related to perceived change in their lives because of their participation in the three different music programs, the participants in the PMTP score higher in the item “It helps me to learn new material” ($H = 6.46$, $df = 2$, $p < 0.05$).

CONCLUSIONS

Everybody is able to learn throughout life, and everybody should have the opportunity to keep their knowledge up to date, or to acquire new knowledge. In this project, we have focused on musical activities, specifically music appreciation classes, choral groups and preventive music therapy programs. We have studied the impact of music on the quality of life of older adults, specifically on four aspects of this construct : physical wellbeing (physical health, subjective health), psychological/emotional wellbeing and interpersonal relations.

According to the objectives addressed, we present the following conclusions:



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Objective 1. To learn about the socio-demographic profile of older adults who participate in three musical programs (adult choirs, music appreciation courses and preventive music therapy programs).

With regard to age, genre and marital status, it is important to point out that the studied sample has the following profile: retired people and mainly married women. These results are similar to the ones from previous studies where the majority of people that are involved in educational activities are also married women (Villar et al., 2006; Villar et al., 2007).

As far as the level of studies is concerned, this sample includes people with an elementary level of studies. The percentages indicate that very few people have university studies or no studies at all. In this case, the results are not in concordance with previous studies in which the participants have a high level of studies. Perhaps one explanation is the fact that previous studies were done in different settings and with people that attend university programs and not cultural programs which are offered from civic and senior centers. Another explanation is the fact that music is a very inclusive and familiar type of activity, easily adaptable to different levels of education and levels of functioning. Therefore, the education level of the participants is not as important (Davis, Gfeller, & Thaut, 2000).

Regarding the economic variable, the results show that the mean level of monthly income is between 900-1200_. It is important to mention that the differences in income among the participants in the different programs are not significant although the income of the people involved in choral groups are slightly higher, and the level of income of the participants in the PMTP are very low. We think that the fact that all the participants in the PMTP belong to the same city area (Raval, a low-income area) may have affected these results.

Objective 2. To identify the motivation of older adults to get involved in music activities

The main conclusion that we can reach from the results is that there is no single motive for participating in a music program, although there seem to be some reasons that are more important than others. According to the quantitative measures, the main reasons for which older adults enroll in music programs (choir, music appreciation course or PMPT) are: (a) the possibility to meet new people and to create new friendships, where the social component is one of the main reasons that encourage older adults to enroll in activities; and (b) the need to learn more about music (cognitive component). A considerable number of people expressed their interest in music, especially the participants in the music appreciation course in which the sessions take a more theoretical approach.

On the other hand, the types of motivations that are less important to enroll in these different programs are family related. It appears that these people do not have the need to be a part of a music activity as a form of evasion or as a means to be a part of an activity that simply fills out their time. Those involved in the choral groups also expressed the fact that they enjoy singing.

Objective 3. To learn about the level of satisfaction with the different programs and to identify the difficulties or barriers that they encounter to do them.

The general conclusion that we have come to, according to the data, is that the participants rated the three programs very highly. All the different aspects evaluated (teachers, content, time dedicated, relationship among participants, space and organization of the activity) were evaluated very positively. The component that was rated lower was the subjects' participation (less initiative, less implication, not to take the activity seriously enough). In general, this perception is equal in all three programs. We understand that the majority of participants would like to see more implication of their peers in the music activities. The fact that all these activities take place in civic and senior centers (less structured activities), does not help to achieve students' implication, unlike what can be observed in university classrooms where attendance and implication are monitored very closely. The activities evaluated in this study are possibly seen more as recreational activities rather than formal.

At the qualitative level (open questions), the participants point out that the best component of the activity is the fact that they enjoy music very much, and the comradeship that these activities generate. Regarding aspects about the programs to be improved, they named their participation, as has been mentioned in previous studies (Hays & Minichiello, 2005).



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Difficulties and barriers that the participants come across when carrying out these activities are, in general, not very relevant. The only aspect in which we have observed significant differences is “not to have enough music knowledge”, especially in the program of music appreciation and choral groups. It is obvious that more music knowledge is helpful to get more out of the activity although this is not an essential requirement to participate in it.

Objective 4. To identify potential changes in quality of life

One of the main objectives of this study was to observe and to evaluate if the participation of healthy older adults in three different music programs (choral, music appreciation and PMTP) contributed to their quality of life. According to the results, it can be stated that there are no substantial changes in quality of life between the pretest and the posttest scores. It is important to mention that according to the scores of the different subscales, it can be observed that the initial scores of the different aspects involved in the quality of life are already very high. This implies that the margin for change is small. That is to say, that the subjects that have participated in this study, already had a good quality of life before initiating any of the music programs. What can be said, though, is that participating in these programs helps to maintain it. Despite these results, the participants' subjective perception is that being involved in these programs has improved some components of their quality of life, especially in social relations (more friends) and in personal development.

To conclude, we emphasize that the study we present is a first step that has allowed us to gather preliminary data which needs to be replicated in the future with more systematic studies and with larger and more varied samples. In addition, we see the need to add semi-structured interviews in future projects in order to give the participants the possibility to express the changes they perceive as a consequence of participating in music activities. The standardized tests might not pick up these more subjective perceived changes, especially in the emotional/affective area.

In general, as has been mentioned in previous studies (Cutshall, Fenske, Kelly, Phillips, Sundt & Bauer, 2007; McCaffrey, 2008), the results of this project also point out that being involved in music activities contributes positively to a more active and satisfactory aging process.

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