

# The Role of Music in Lifelong Learning

Luísa Correia Castilho<sup>1</sup>(⊠), Cristina Pereira<sup>2</sup>, and Filipa Maria Castilho<sup>3</sup>

- Polytechnic Institute of Castelo Branco, CESEM & Age.Comm, Castelo Branco, Portugal luisa.correia@ipcb.pt
  - <sup>2</sup> Instituto Politécnico de Castelo Branco, Castelo Branco, Portugal cristina.pereira@ipcb.pt
    - <sup>3</sup> Agrupamento de Escola nº. 2 de Abrantes, Abrantes, Portugal

Abstract. Understanding the motivations, objectives, advantages and constraints in participating in music activities is the topic for the present investigation, organized as an exploratory and descriptive study. In this communication we point out the results of our investigation, analysing what music means in the lives of individuals and identifying the advantages and constraints felt in participating in musical activities. A questionnaire survey "Music in lifelong learning (MALV)" and the scales "SWLS—Satisfaction with life scale" and "Subjective Happiness Scale (SHS)" were applied to our target audience, defined according to the following criteria: age over 65 years, involved in some activity with music. The results point to medium or high levels of satisfaction with life associated with pleasure and a sense of accomplishment in the performance of musical activities.

**Keywords:** Lifelong learning  $\cdot$  Musical activities  $\cdot$  Life satisfaction  $\cdot$  Sense of accomplishment

# 1 Introduction

If the 20th century were the century of the elderly, in which the World Health Organization had its main objective to increase the average life expectancy, the challenge of the 21st century would be to give quality to time of life (Fontaine 2000).

Taking this assertion as a starting point, the present study is part of the field of research that is conceptually based on transversal concepts such as "lifelong learning" and "active ageing". We consider that these concepts can generate a change in perspective that will allow for a new perspective of the ageing process and, consequently, alternative ways of interacting and analysing this period of life.

One of the central challenges of the 21st century is to face longevity as an opportunity for development and well-being (Jacob 2007). It is consensual that the success of increasing longevity reflects significant advances in health practices and social and economic development that have allowed the extension of human life to ages not expected a few decades ago. We share, however, the idea of Fontaine (2000) questioning the overlap of concepts associated with quantity and quality of life.

# 2 The Ageing Process: Challenges and Learning

According to the World Health Organization (WHO) (2005), active ageing allows people to realise their potential for physical, social, and mental well-being throughout life and for these people to participate in society according to their needs, desires and skills.

It is undeniable that the ageing process has taken on new and multiple facets associated with the exercise of multiple activities and challenges. Through rediscoveries and different definitions of themselves, the elderly seek to build their life with new meanings.

From the perspective of psychological models of lifespan (Baltes and Carstensen 2008; Erikson 1994), human development is conceived as a longitudinally integrated process, allowing us to conceive of old age as a moment in the life cycle with its particularities that cannot be reduced to regressions, or involutions, with a wide range of potentialities that can be realised. According to Pinto (2008) mentioned by Maia (2010), regardless of age, we should all take advantage of our potential daily, making the most of them as we can to prepare for tomorrow.

At the beginning of the 21st century, it is considered that there is a new old age since the process itself is experienced in a globally more positive way. Individuals in this age group are, in general, healthier, with higher academic qualifications, having access to more social and cultural opportunities.

Active ageing is inextricably linked to involvement in social and productive activities, in a logic of social participation in which the individual maintains and (re)creates relational networks. Some studies report that the average life expectancy in sedentary and socially isolated individuals is lower than those harmonised by life strategies (Maia 2010).

According to Osório (2005), involvement in activities is essential to maintain seniors' balance and personal development. The development of an activity suited to their situation, not only related to what the person is, but to what they can be, is a fundamental principle to maintain this group's health status and involve them more in society as an active subject.

Based on this framework, we define the concept of lifelong learning, understood as a longitudinal process that allows the subject, at any time in his temporal dimension, to enjoy a more confident, autonomous, and self-directed life.

In Western culture, the ageing process occurs when the individual no longer assumes formal professional responsibilities, facing the possibility of managing their routines and activities with greater autonomy. This fact can generate anguish and conflict in the confrontation with feelings of existential emptiness, but, at the same time, it can allow the exploration of postponed projects and interests or the development of new skills.

According to the reports of the elderly themselves, at this stage of life, the individual (or most of them) is freer, with fewer responsibilities, fewer time constraints, and greater experience accumulated throughout life, which favours the creative process. In the research carried out by Rodrigues et al. (2015, p. 152), cited by Silva et al. (2020, p. 91): "Now that the children are raised, I am able to dedicate my time to activities that give me pleasure, I can study, go for walks, participate in courses and workshops that I consider interesting and important in my life".

In addition to redefining family and affective relationships and routines, cultural and leisure activities are opportunities that favour the socialisation and self-esteem of the elderly and can stimulate creativity, well-being, and a sense of self-fulfilment.

Throughout the different stages of human development, supportive social networks and the sharing of positive emotional experiences play a crucial role in well-being and a sense of satisfaction with life. The WHO (2005) considers that the subject's health status is not characterised solely and exclusively by the "absence of disease", requiring a self-assessment of well-being experiences related to the satisfaction of needs and aspirations in the different dimensions that make up human nature. In this sense, psychological well-being is crucial for successful adaptation.

We also emphasise that some limits or restrictions, whether of a cognitive or motor nature, associated with the ageing process, can be partially overcome through compensatory mechanisms, which can be that of discussing health and physical and mental well-being positively, even when objective health and life circumstances are increasingly adverse (Fonseca 2006). Corroborating the perspective of Maia (2010), the interest, discovery, and insertion in activities by personal initiative, the creation of interpersonal relationships, and the performance of new social roles help combat the feelings of discouragement and loneliness traditionally associated with elderly individuals.

# 3 The Role of Music in Human Development

Learning is a process inherent to human beings, from birth to death. Through this process, they develop skills, updating individual potentials and interests, changing their behaviour in the interaction with their life contexts. Ordonez and Cachione (2011) consider that learning is not an end in itself but a bond through which a person can find a variety of personal and growth goals.

Contextualising this perspective in the learning that occurs during the ageing period, there has been an increasingly active search by the elderly for formal or informal educational contexts to initiate or deepen specific skills, establish new networks of social interaction, and implement postponed projects. Responding to these new needs and assuming the underlying principles of active ageing and lifelong learning, the different territories and municipalities have been providing multiple occupational alternatives and support structures, so that elderly individuals can exercise their sense of initiative and autonomy, according to their interests and guaranteeing their citizen participation.

In the educational context, music becomes a vital instrument for promoting knowledge and self-knowledge (Kater 2004) and is an instrument that facilitates communication and human expression (Marques 2011).

In the context of Gerontology, music learning enhances the creative and expressive development of their individuality, being also essential in promoting the quality of life of this population. Even without any musical training or purpose in the training of professional musicians, musical activities allow to revive memories, often lost, stimulate motor and sensory dimensions, namely the coordination of movements, rhythm, and body expression, in a context of social interactions. According to Gomes and Amaral (2012), the use of music as a teaching-learning process promotes significant effects in these people's psycho-emotional, physical, and social spheres, resulting in improved self-esteem and socialisation.

There is a consensus among educators and other people indirectly involved with education about the teaching of Music as an enhancer of human development. In addition to providing students with activities that require group cooperation and coordination (Hummes 2004), music can promote the development of sensitivity, creativity, rhythmic sense, the pleasure of listening to music, imagination, memory, concentration, attention, self-discipline, respect for others, socialisation and affection, also contributing to an influential body and movement awareness (Chiarelli and Barreto 2005).

Shafer et al. (2014), considers music a vital experience for human beings and can positively change their lives.

Musical experiences (IMEs) have proven to be of high significance for the people who have them. We investigated the long-term effects of such experiences on people's way of life and developed a process model: (1) IMEs are characterised by altered states of consciousness, which leads to the experience of harmony and self-realisation; (2) IMEs leave people with a strong motivation to attain the same harmony in their daily lives; (3) people develop manifold resources during an IME; (4) IMEs cause long-term changes to occur in people's values, their perception of the meaning of life, social relationships, engagement, activities, and personal development. Results are discussed as they relate to spirituality and altered states of consciousness and conclusions are drawn from the process model that forms a starting point for quantitative research. Results suggest that music can indeed change our lives – by making it more fulfilling, spiritual, and harmonious (p. 525).

Music is also closely related to social and emotional behaviours, given its direct link with human emotions, cognition and social interactions (Saarikallio 2019). The idea of music as a form of action (musicing), and not simply "something to be learned", was emphasised by Christopher Small (1999). Making music gives rise to relationships in which the interaction of those participating is essential, whether as listeners, performers, instrumentalists, singers, improvisers, composers, or dancers. Through music, individuals regulate their emotions, giving meaning to their ways of being in the world (DeNora 2000).

We thus have the combination of two functions: social and personal. Bearing these aspects in mind, Stefan Koelsch (2013) proposed seven social functions of music: (1) contact; (2) cognition; (3) empathy; (4) communication; (5) coordination (6) cooperation; and 7 (social cohesion). However, based on Alan Merriam's (1964) classification of the functions of music in society, Martin Clayton (2016) proposed four functions for music: (1) regulation of emotional, cognitive and physiological states; (2) mediation between self and others, (3) symbolic representation, and (4) coordination of action.

Bearing in mind these theories, Beatriz Ilari (2020) suggested that the music activity can reinforce the social flexibility of its participants and make the collective musical activity gain coherence, thus reinforcing interpersonal relationships positively and strengthening the identity of the participant groups. Estelle R. Jorgensen (2020) states that Iris Yob developed a conceptual model of the necessary provisions for social change favouring the common good in three domains: knowledge, skills and socio-affective experiences.

According to Jorgensen (2020), systematising music education offers a stimulating environment to enhance the collaborative skills essential for working together in a democracy, respectful relationships and valuing the differences between people and their music. The musical practice can cultivate respect for rules. It also offers space for developing a love for spiritual rather than material experiences and for an awareness of how the arts are precious manifestations of human creativity in the profusion of its diversity.

# 4 Methodological Design

Based on the concept of lifelong learning, the present study aims to understand the role of musical practice in the well-being of the elderly population and identify the motivations and cognitive and socio-emotional dimensions associated with this experience. In this sense, we organised the study based on the following questions:

- What motivations lead elderly individuals (over 65 years old) to participate in musical activities?
- What goals and expectations do these individuals have when participating in musical activities?
- What advantages and constraints do you relate to this activity?

In turn, we set out the following objectives:

- Identify the motivations that led individuals to participate in musical activities.
- Understand the objectives and expectations underlying the participation in musical activities.
- Understand what music has changed in your life in general.
- Identify the advantages and constraints felt in participating in musical activities.

#### 4.1 Methodology

According to the objectives and context of the study, we chose to carry out an exploratory investigation based on an essentially descriptive data analysis (Bogdan and Bibklen 1994). This is a methodology frequently used in the social sciences since it allows the collection of descriptive data and assigning meaning to them from the perspective of the research subjects, thus enhancing the identification of questions to be explored in further studies with more significant samples.

This option is not unrelated to the fact that the study was carried out during the Covid-19 pandemic, with the data collection phase coinciding with the second period of confinement. This situation compromised the operationalisation of a study of a qualitative nature by making direct contact with the subjects of the sample and the contexts associated with their musical practice.

#### a. Data collection instruments

Based on the bibliographic review consulted, as well as the knowledge of the areas of Music and Psychology of the authors of the study, we created the questionnaire "A música na aprendizagem ao longo da vida—MALV (Music in lifelong learning)".

MALV integrates five thematic blocks:

- (a) Sociodemographic characterisation of the respondents;
- (b) Identification of descriptive aspects related to their musical practice (e.g., the institution where they perform this practice, a musical activity carried out...);
- (c) Identification of motivations associated with musical practice;
- (d) Levels of physical, psychological and socio-emotional well-being provided by the musical activity;
- (e) Open-ended question about the meaning of music;
- (f) Identification of conceptions about lifelong learning.

In addition to the MALV, two scales were used:

• SWLS—Life Satisfaction Scale (Pavot and Diener 1993)

The variable satisfaction with life corresponds to each individual's judgment of their life in general and is a component/dimension of the happiness/subjective well-being construct (Diener 2000).

• SHS—Subjective Happiness/Well-being Scale (Lyubomirsky and Lepper 1999)

Happiness is a fundamental positive emotion that has mobilised the most diverse approaches and conceptualisation attempts. Being a subjective concept and marked by cultural and social representations, it is associated with different variables and mediators. Starting from a conception of happiness of intrinsic nature, Positive Psychology, although it does not deny the influence of external events, works with the concept of subjective well-being that corresponds to the cognitive and affective evaluation that each individual makes about his own life (Diener et al. 2002).

In summary, subjective well-being involves positive emotional experiences, rare negative emotional experiences such as depression or anxiety, and satisfaction with various aspects of life and life as a whole.

The instruments were made available through the Google Forms platform and sent by email to institutions linked to music activities, along with the request for collaboration to send them to the respective respondents.

#### b. Sample selection criteria

- People over 65 years old;
- Involved in musical activities;
- Live in the Castelo Branco area.

As it was not possible to know the population universe of our research study, a sample of 17 individuals was obtained, corresponding to the respondents to the survey. The survey includes multiple choice question allowing single or multiple answers.

# 5 Data Analysis

The collected data were subject to descriptive statistical treatment, namely through their organisation in frequency tables and graphic representation, using the EXCEL program for this purpose. The open-response questions were subjected to descriptive content analysis.

# 5.1 Sample Characterisation

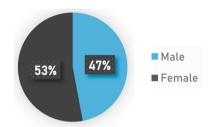


Fig. 1. Gender

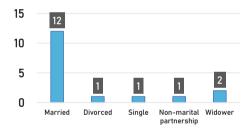


Fig. 2. Marital status

The sample is composed of nine (53%) women and eight (47%) men (Fig. 1). The vast majority are married (12), but one is divorced, one is single, one in a de facto relationship and two widowers (Fig. 2).

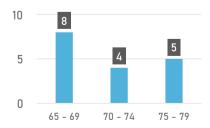


Fig. 3. Age

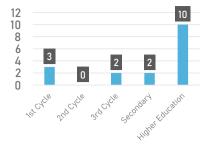


Fig. 4. Education

Approximately half are in their 60s and the other in their 70s (Fig. 3). Most have a higher education degree (10), but three have only the 1st cycle of schooling, two the 2nd cycle and two the secondary (Fig. 4).

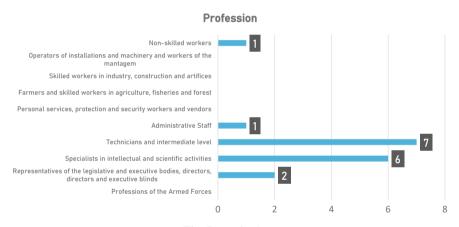


Fig. 5. Professions

Although the subjects are currently retired, their professions were mainly in technicians and intermediate-level professions (7), and specialists in intellectual activities (6), with representatives of the legislature and executive bodies (2), administrative staff (1) and unskilled workers (1) (Fig. 5).

### 5.2 Identification of Descriptive Aspects Related to Musical Practice

Almost half attend an activity in the field of music at the USALBI (Senior University) (8), followed by Orfeão (5), Orquestra Típica Albicastrense (2) and the Viola Beiroa group (2), with an informal group, Rancho Folclórico and Philharmonic Band (1) (Fig. 6). In the musical activity, the choir (6) stands out, followed by playing an instrument, with a predominance of the cavaquinho (5) (Fig. 7).

In the role within the activity, there is a preponderance of instrumentalist (10) in relation to singer/choir player (7) (Fig. 8). In the choir, the various voices of Soprano,

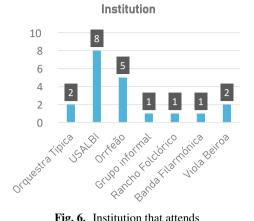


Fig. 6. Institution that attends

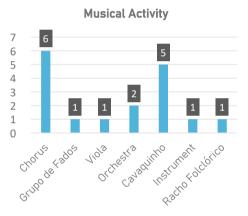


Fig. 7. Musical activity

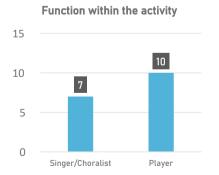


Fig. 8. Function within the activity

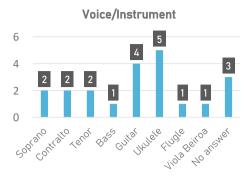


Fig. 9. Voice/Instrument

Alto, Tenor and Bass find a certain numerical balance; as for the instruments, there is a predominance of the cavaquinho, perhaps because it is an accessible instrument and because there is a cavaquinho orchestra at USALBI. The guitar also still has some preponderance (Fig. 9).

#### 5.3 Identification of Motivations Associated with Musical Practice



Fig. 10. Motivation to participate in musical activities

What led to participating in musical activities was mainly learning for the pleasure of learning (12), followed by interestingly filling the available time (9), responding to an old unfulfilled interest (6), continuing previous learning interrupted (5), responding to a challenge (4); still with three answers: integrate myself in a new environment and live a different experience, share experiences with other people and curiosity. There was still an answer in the option "escape the daily routine" (Fig. 10).

Learning is associated with the need for knowledge, influence on self-concept and wanting to learn. As it is voluntary, it is often associated with motivations of an affective nature and of an essentially intrinsic nature.

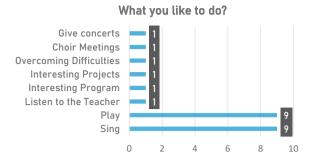


Fig. 11. What you like to do in musical activity

The tasks they most enjoy are playing (9) and singing (9), giving concerts, participating in choir meetings, exciting projects, overcoming difficulties and listening to the teacher (Fig. 11). It is essential to mention that the respondents could indicate more than one answer option.

As less motivating, in the execution of the musical activity, the reasons indicate insecurities in musical learning or technical difficulties (5) ("thinking I can't do better", "not having more in-depth musical knowledge", "not evolving as much as I would like"); time spent and/or waiting whether in rehearsals when another voice is being prepared, or in shows to perform (5); improper behaviour ("conversations outside the learning process"); (5) having to repeat certain parts of the songs many times (2); no activities because of Covid (2). Two subjects did not respond.

The reasons for what they consider more difficult in musical activity point to technical issues of performance (7) or musical theory (8); or it still does not match, evolve or fail (5): "Some chords that I try to play them. I have tendinitis and arthrosis problems in some fingers, making it difficult for me to perform properly"; "The perception of timbre and melody".



Fig. 12. Motivation individual and in group

Group performance is overwhelmingly more motivating (94%) than individual performance (6%). The first is based on cooperative learning, as it is based on a form of organisation of a collaborative workgroup, according to which one must work so that

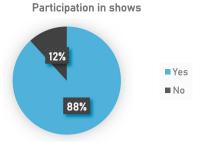


Fig. 13. Participation in shows

the final result is more favourable for everyone (Fontes and Freixo 2004). Group learning has a more positive interdependence than individual learning since all elements feel responsible for each other's learning; the goal is only achieved if all members achieve their goals (Johnson and Johnson 1999) (Fig. 12).

Participation in concerts or recitals is an asset for 88% of respondents, which shows the appreciation of social and interpersonal dimensions in musical activities. As an example, some of the answers are cited: "A moment of conviviality and presentation of the harmonious final product, the result of the interaction and effort of each one in their suit"; "It becomes more motivating"; "In the show there are many people participating, raising the energy level. The skin shivers with so many vibrations" (Fig. 13).

# 5.4 Levels of Physical, Psychological and Socio-emotional Well-Being Provided by Musical Activity

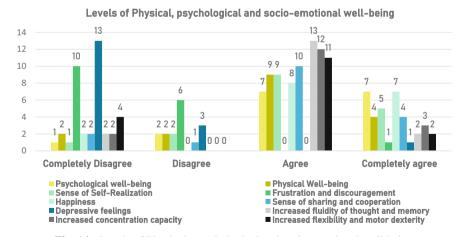


Fig. 14. Levels of Physical, psychological and socio-emotional well-being

For the levels of physical, psychological and socio-emotional well-being provided by musical activity, mostly the answers marked in the "agree" or "completely agree" option

point to greater fluidity of thought and memory (15), greater ability to concentrate (15) and happiness (15), followed by psychological well-being (14), a sense of self-fulfilment (14), a sense of sharing and cooperation (14) and also physical well-being (13) and greater flexibility and motor skills. To disagree or disagree entirely are, with the same number of choices, on equal terms, frustration and discouragement (16) and depressive feelings (16) (Fig. 14).

The answers show the importance of musical activities in the general well-being of the respondents, valuing their role in promoting different dimensions, namely their contribution to the dynamisation of cognitive processes. We emphasise that almost all subjects have evidenced the contribution of these activities to their happiness.

# 5.5 Meaning of Music

The words associated with music mainly indicate positive emotional experiences, such as joy, pleasure, dream, beauty, emotion, well-being, and even "very healthy drug", indicating agreement and reinforcing the results obtained in the previous question. Other answers refer to musical concepts, such as sheet music, composing, symphony and sonata.

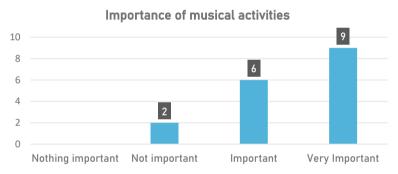


Fig. 15. Importance of musical activities

Most respondents consider musical activities in their lives as necessary (6) or very important (9). Only two individuals considered it unimportant (Fig. 15).

# 5.6 Identification of Conceptions About Lifelong Learning

In this section, we present three graphs that result from the combination of multiple questions made to all the participants, the goal was to present in a clear way the feelings, perceptions and a happiness scale.

In the conceptions of lifelong learning, all items have a high level of agreement: it allows the development of new skills (16), delays the effects of ageing (15), enriches the community (15), is a necessity in today's society (14) and provides meaningful social interactions and qualifies citizens (14). Only the statement "it is a reality in today's

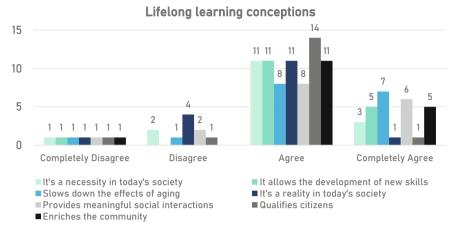


Fig. 16. Lifelong learning conceptions



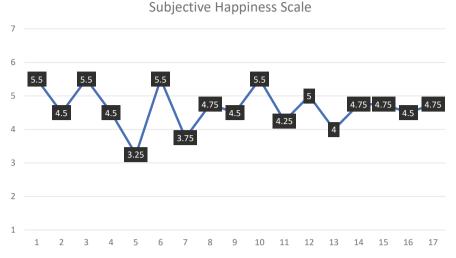
Fig. 17. SWLS—satisfaction with life scale

society" integrates a more significant number of negative responses, which indicates that they currently consider this reality still insufficient (Fig. 16).

The SWLS consists of 5 items: 1. In many fields, my life is close to my ideal 2. My living conditions are excellent 3. I am satisfied with my life 4. So far, I have achieved the important things I want for my life 5. If I could live my life over again, I would change almost nothing.

Most subjects are on the positive pole regarding the assessment of the variable satisfaction with life. We point to the fact that an individual marked "strongly agree" on all items, which means that he/she evaluates the dimensions positively included in the scale. On the other hand, there is no answer situated in the "disagree" and "strongly disagree" options (Fig. 17).

Finally, we present the results obtained on the Happiness/Well-being-subjective scale:



#### Fig. 18. Subjective Happiness Scale

The results indicate, in general, positive average levels in the happiness/subjective well-being variable, but slightly below those found in the quality of life (Fig. 18). This result coincides with those found in other studies that show the non-coincidence of the constructs evaluated in the two scales. Diener (2000) stated that the variable satisfaction with life corresponds to the judgment that each individual makes of their life in general and is just a component/dimension of the happiness/subjective well-being construct.

#### 6 Conclusions

The results obtained show that involvement in musical activities plays a vital role in physical, cognitive and socio-emotional well-being. Respondents associated this experience with a sense of self-fulfilment, greater fluidity of thought and memory, better concentration capacity, greater flexibility and physical dexterity, and experiences of sharing and cooperation. Group activities and performances are highly valued aspects, identifying the importance of the socio-emotional dimension associated with musical practice. Only two individuals consider this experience to be unimportant. These data are in agreement with the studies by Gomes and Amaral (2012), Hummes (2004), Shafer et al. (2014) and Stefan Koelsch (2013), authors mentioned in point 2 of this article that highlight the importance of involvement in musical activities in the physical, socio-emotional and cognitive well-being of human beings, throughout their life cycle.

According to the expectations of the study authors, the motivations underlying the choice of musical activities are, in general, of an intrinsic nature, the most mentioned being "Learning for the pleasure of learning, "To fill the available time in an interesting way", and "To respond to an old unfulfilled interest". The musical learning of the subjects coincides with a period of their lives in which they no longer assume professional responsibilities, and may choose to engage in tasks that motivate them, essentially, for

the pleasure associated with performing this task. We reinforce the fact that intrinsically motivated activities promote a sense of self-fulfillment and involvement, promoting more meaningful learning (Deci and Ryan 2008), also identified in the subjects of the sample.

There is an appreciation of lifelong learning, with almost all individuals considering it an opportunity to develop new skills and a necessity in today's society. Active ageing is inextricably linked to involvement in social and productive activities, in a logic of social participation in which the individual maintains and (re)creates relational networks.

In general, the data obtained indicate that the subjects who participated in the study have the profile of a group of elderly people who emerged at the beginning of the 21st century: it is considered that there is a new old age since the process itself is experienced in a generally more positive way. Individuals in this age group are, in general, healthier, with higher academic qualifications, having access to more social and cultural opportunities.

Data analysis also allowed us to understand that the results obtained in the questionnaire agree with those obtained in the satisfaction with life and subjective well-being scales, having found values slightly above the average in these two scales.

As a limit, we highlight that the sample is small and very restricted, comprising mainly of individuals with higher education, which may "bias" the way they analyse their involvement in musical activities and the results obtained in the SWLS and SHS scales. In this sense, we consider it pertinent to extend the study to a larger and more heterogeneous sample in terms of academic qualifications. The continuity of the study will allow us to assess with greater accuracy the adequacy of the Questionnaire MALV, even if it has proved to be helpful to meet our objectives.

# References

Baltes, M., Carstensen, L.: The process of successful ageing. Ageing Soc. 16(4), 397–422 (2008). https://www.cambridge.org/core/journals/ageing-and-society/article/process-of-successful-ageing/C1E6F81ADC2C4D91484A8819C7BED061

Bogdan, R., Biklen, S.: Investigação Qualitativa em Educação – uma introdução à teoria e aos métodos. Porto Editora, Porto (1994)

Chiarelli, L., Barreto, S.: A importância da musicalização na educação infantil e no ensino fundamental: a música como meio de desenvolver a inteligência e a integração do ser. Revista Recre@rte 3 (2005). https://musicaeadoracao.com.br/25473/a-importancia-da-musicalizacao-na-educacao-infantil-e-no-ensino-fundamental/

Clayton, M.: The social and personal functions of music in cross-cultural perspective. In: Hallam, S., Cross, I., Thaut, M. (eds.) The Oxford Handbook of Music Psychology, pp. 47–59. Oxford University Press, Oxford (2016)

Deci, E., Ryan, R.: Self-determination theory: a macrotheory of human motivation, development, and health. Can. Psychol. 49(3), 182–185 (2008). https://doi.org/10.1037/a0012801

DeNora, T.: Music in Everyday Life. Cambridge University Press, Cambridge (2000)

Diener, E.: Subjective well-being: the science of happiness and a proposal for a national index. Am. Psychol. 55(1), 34–43 (2000). https://doi.org/10.1037/0003-066X.55.1.34

Diener, E., Lucas, R.E., Oishi, S.: Sujective well-being: the science of happiness and life satisfaction. In: Snyder, C.R., Lopez, S.J. (eds.) Handbook of Positive Psychology, pp. 463–473. Oxford University Press, Oxford (2002)

Erikson, E.: Identity and the Life Cycle. Norton & Company, New York (1994)

Fonseca, A.: O Envelhecimento Uma abordagem psicológica. Universidade Católica Editora, Campos do Saber, Lisboa (2006)

- Fontaine, R.: Psicologia do envelhecimento. Climepsi (2000)
- Fontes, A., Freixo, O.: Vygotsky e a Aprendizagem Cooperativa uma forma de aprender melhor. Livros Horizonte, Lisboa (2004)
- Gomes, L., Amaral, J.: Os efeitos da utilização da música para os idosos: Revisão sistemática. Revista de Enfermagem Contemporânea 1(1), 103–117 (2012). https://www5.bahiana.edu.br/index.php/enfermagem/article/view/46
- Hummes, J.: Por que é importante o ensino da música? Considerações sobre as funções da música na sociedade e na escola. Revista da Associação Brasileira de Educação Musical 11, 17–25 (2004). http://www.abemeducacaomusical.com.br/revistas/revistaabem/index.php/revistaabem/article/view/343
- Ilari, B.: O ensino da música e os comportamentos pró-sociais na infância. In: Boal-Palheiros, G., Boia, P.S. (org) Desafios em Educação Musical. CIPEM/INET-md, ESE-P. Porto, pp. 63–83 (2020)
- Jacob, L.: Posso participar: Animação de Idosos, actividades. Colecção Idade do Saber, Ambar, Porto (2007)
- Johnson, D., Johnson, R.: Learning Together and Alone—Cooperative, Competitive and Individualistic Learning, 5<sup>a</sup> Allyn and Bacon, Massachusetts (1999)
- Jorgensen, E.R.: Alguns desafios para a educação musical. O que podem fazer os professores de música? In: Boal-Palheiros, G., Boia, P.S. (org.) Desafios em Educação Musical, pp. 17–36. CIPEM/INET-md, ESE-P, Porto (2020)
- Kater, C.: O que podemos esperar da educação musical em projetos de ação social. Revista da Associação Brasileira de Educação Musical 10, 43–51 (2004). http://www.abemeducacaomus ical.com.br/revistas/revistaabem/index.php/revistaabem/article/view/361
- Koelsch, S.: From social contact to social cohesion—the 7 Cs. Music Med. 5(4), 204–209 (2013). Sagepub.com/journalsPermissions.nav. https://doi.org/10.1177/1943862113508588
- Lyubomirsky, S., Lepper, H.: A measure of subjective happiness: preliminary reliability and construct validation. Soc. Indic. Res. **46**, 137–155 (1999). http://sonjalyubomirsky.com/wp-content/themes/sonjalyubomirsky/papers/LL1999.pdf
- Maia, M.: Itinerário de educação artística não formal para seniores através da obra de arte contemporânea. Dissertação de Mestrado. Universidade de Lisboa, Faculdade de Belas Artes, Lisboa (2010). https://repositorio.ul.pt/bitstream/10451/7281/2/ULFBA\_tes%20391.pdf
- Marques, J.: Até hoje aquilo que aprendi não esqueci: Experiências musicais reconstruídas nas/pelas lembranças idosas. Dissertação de Mestrado, Universidade Federal de Uberlândia, Instituto de Artes (2011). https://repositorio.ufu.br/bitstream/123456789/12283/1/AteHojeAq uilo.pdf
- Merriam, A.: The Anthropology of Music. Chicago University Press, Northwestern University Press, Evanston, Illinois (1964)
- Ordonez, T., Cachione, M.: Motivos para frequentar um programa de educação permanente: Relato dos alunos da universidade aberta à terceira idade da escola de Artes, Ciências e Humanidades da Universidade de S. Paulo. Revista Brasileira de Gerontologia **14**(3), 461–474 (2011)
- Osório, A.: Educação permanente e educação de adultos. Horizontes Pedagógicos, Edições Piaget (2005)
- Pavot, W., Diener, E.: Review of the satisfaction with life scale. Psychol. Assess. **5**(2), 164–172 (1993). https://doi.org/10.1037/1040-3590.5.2.164
- Saarikallio, S.: Access awareness-agency (AAA) model of music-based social emotional competence (MuSEC). Music Sci. **2**, 1–16 (2019). https://doi.org/10.1177/2059204318815421
- Shafer, T., Smukalla, M., Oelker, S.: How music changes our lives. A qualitative study of the long-term effects of intense musical experiences. Psychol. Music **42**(4), 525–544 (2014). https://www.researchgate.net/publication/259869200\_How\_music\_changes\_our\_lives\_A\_qualitative\_study\_of\_the\_long-term\_effects\_of\_intense\_musical\_experiences

- Silva, V., Risse, L., Maciel, P.: Arteterapia e envelhecimento: Uma visão interdisciplinar. In: Rosalee, I., Manhães, F., Sousa, C. (orgs) Envelhecimento humano, inovação e criatividade Diálogos interdisciplinares, pp. 86–97. Brasil Multicultural (2020). https://encontrografia.com/wp-content/uploads/2020/03/ebook-Envelhecimento-humano.pdf
- Small, C.: Musicking—the meanings of performing and listening. A lecture. Music Educ. Res. **1**(1), 9–22 (1999). https://doi.org/10.1080/1461380990010102
- World Health Organization: Envelhecimento Ativo: Uma política de saúde (Tradução Susana Gontijo). Organização Pan-Americana de Saúde (2005). https://bvsms.saude.gov.br/bvs/public acoes/envelhecimento\_ativo.pdf