Article

Sono-libro: Educational Innovation in Musical Teaching. Interdisciplinary Learning

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Abstract: In this paper, a study developed at the University of Seniors in Aragón is presented. The Sono-libro, used as an innovative resource, is assessed in the proposal with an educational and pedagogical purpose. The aim is to understand the motivational and learning perception variation after the incorporation of the Sono-libro in the sample. In this quantitative longitudinal design study, the listening habits of the participants are comparatively analyzed at two moments: The first data collection took place before the implementation of the proposal, and the second collection occurred after the proposal. The sample consists of 116 subjects, with 64.16% being women and an average age of 66 years of age. Data was obtained through a validated ad hoc questionnaire judged by experts. The results of the data collections showed an increase in both motivation and perception of the learning obtained, indicating the benefits of incorporating digital resources into contexts of adult students.

Keywords: musical education; educational innovation; interdisciplinarity; motivation; Sono-libro; third age

1. Introduction

Lifelong learning contributes to the fostering of societies that promote the development of people in all stages of their lives. Active aging is a central objective in which adaptation to the changing social environment is favorable, achieving the empowerment of individual autonomy, self-efficacy, and motivation that allows for continued learning (Alonso et al., 2021; Martínez Vicente et al., 2023; Rodríguez y Platas- García; 2022). As long as learning processes remain activated, physical and psychological skills will also be preserved. The aging population will be able to remain linked to society as long as they participate in quality training that facilitates their personal fulfillment, creative development, and artistic expression (Folch et al., 2019).

In a globalized outlook there is a need for everything that contributes to promoting reflection and active thinking, helping to connect and understand that the current reality is essential to actively participate in social reality (Flores Guerrero, 2016). The interdisciplinary connection allows to focus, with a diverse and broad vision, objectives and purposes from the individual and the collective, revaluing the interaction between adults with different backgrounds and training. There is an evident population longevity which requires the reinforcement and promotion of healthy lifestyles, ensuring inclusive social environments that enhance autonomy and

independence (Latorre, 2019), such as the innovative, interdisciplinary, and artistic proposal presented in this work.

The learning environment provides a space for students to meet, and it promotes individual and social development; in this re-educational and updating process, equality, inclusion, and social cohesion take precedence. Hence, it is necessary to have a teaching environment that is focused on the creation and adaptation of resources that reinforce cognitive skills: interpreting, relating, reflecting, and analyzing critically (Canquiz-Rincón et al., 2021; Duk Murillo, 2020). The attention provided to the elderly population implies a greater investment in services, adaptation of resources, and leisure offers that enhance equity, promotion, and protection of the rights of elderly people (Mariano et al., 2020).

Social inclusion, personal well-being, and health monitoring are interconnected in a transversal way, merging various disciplines that promote interaction, a sense of belonging, social cohesion, and equity (Iglesias et al., 2020; Seijo et al., 2023). Healthcare includes maintaining visual ability through the promotion of reading and caring for auditory capacity, which is incorporated with this innovative resource of the Sono-libro. It contributes to the training of cognitive functions through communication and relationships, as well as slowing down mild cognitive impairment by keeping the mind active and connected to the environment through digital tools (López-Higes et al., 2012).

2. Theoretical framework

We can consider visual stimuli as predominant in terms of aesthetic and sensory expression, but specialized pedagogues prefer proposals that combine text, image, and sound to mobilize emotional states, avoiding exclusively intellectualized approaches (Monge et al., 2022; Ramos Agudo, 2015). The current outlook reflects a highly influenced digitalization scenario: social networks, virtual communities, and blogs. Focusing on musical listening, these digitally driven changes imply new ways of perceiving, producing, and interacting with existing repertoires; underlying this is a code based on intuitive interaction (Alcocer-Vázquez and Zapata-González, 2021; Volpi, 2011). Taking advantage of the incorporation of digital resources in the classroom as an innovative component is not only a means to facilitate the achievement of academic objectives (Padilla-Carmona et al., 2022), but it was also considered that the Sono-libro could be an interesting tool as a motivator and enhancer of listening habits, serving as an approach in this case to Russian culture (through musical repertoire linked to the proposed novel).

The educational process expands, becoming a lifelong endeavor, with continuous education holding a significant position for both the European Union (EU) and the Organization for Economic Cooperation and Development (OECD) (Donaire et al., 2022). For this reason, there is a need to strengthen the connection with the context, an aspect that is constantly in transition. The university should promote learning experiences that connect one's own cultural, social, digital, historical, and economic reality beyond the classroom; this will facilitate autonomy (Castellano-Sanz, 2023; Suárez-Cretton and Castro-Méndez, 2022), as well as individual reflection and critical thinking (Iglesias et al., 2020; Rodrigo and e Ibarra, 2022).

The emphasis is shifted from intellectualization to enhance learning that connects psychological and emotional aspects, incorporating practical concepts, expanding the horizon of learning beyond the classroom, and linking it to life experiences to provide innovative experiences and facilitate meaningful learning (Rodrigo and e Ibarra, 2022). The classroom experience, in this case, goes beyond its educational function; through experiences, it is possible to strengthen self-esteem, social engagement, and identity construction (Monge et al., 2022).

The connection of diverse disciplines connected in an artistic approach and with digital resources showcases active proposals where the knowledge and skills of participants converge. We find a heterogeneous sample in terms of origin, experiences, and studies, allowing the fusion of individual value with collective value to provide interconnection, equity, and inclusion in the classroom, as well as equal opportunities (Belavi and Murillo, 2020; Revelles-Benavente, 2022). We build fairer societies when we involve cultural, digital, and artistic resources in learning, as they contribute to the development of intellectual aspects (prior knowledge, thinking, reflection, ideation, and decision-making) while respecting differential features through flexibility and adapting creative proposals on an individualized basis (Carrascosa Sánchez et al., 2022).

The incorporation of artistic expressions in didactic proposals allows for emotional self-management, empathy, cooperation, and a sense of belonging to the group (Soontorntanaphol, 2021). Providing new experiences increases motivation and positive learning outcomes (Ramos-Vera et al., 2023), integrating benefits in self-concept, memory, concentration, efficiency, mastery, listening, emotional expression, and teamwork (Granero-Gallegos et al., 2021; Herros-Sánchez y Jarvio-Fernández, 2022; Martínez Vicente et al., 2023). In this case, it involves learning with a human-centered approach, as it is an enriching experience for participants with a holistic vision. The habit of listening allows individuals to stay updated and connected to reality and oneself, generating introspective reflection, promoting active social participation in artistic-creative spaces, facilitating the connection between the past and the present, and, being linked to a literary resource, it could also enhance identification with certain characters (Briones and Vélez, 2022; Encabo-Fernández et al., 2023).

The fourth Sustainable Development Goal (SDG) advocates for the need to provide lifelong learning, which is reinforced in the Strategic Plan for Lifelong Learning published in 2015 by the Ministry of Education, Culture, and Sports (Ministerio de Educación and Cultura y Deporte, 2015; UNESCO, 2016; UN, 2015). These measures aim to ensure that older adults maintain their intellectual activity, feel self-fulfilled, and remain socially integrated. Legislation should promote the efforts of public administrations to guarantee respect for human rights, active participation (Carballal, 2023), and the opportunity for older adults to receive education as a way to combat social exclusion and isolation, pursue personal self-fulfillment, enhance professional development, and strengthen intergenerational interaction (Gayol-Fernández et al., 2020).

Engaging in artistic activities implies a broadened perspective of the environment, and this impacts the empowerment of divergent thinking. In other words, it provides an open perspective where problem-solving is not a singular path

but a multidisciplinary one. It involves providing an experience capable of connecting and relating contents from various disciplines, promoting cross-disciplinarity, and reinforcing interaction and active critical participation in the classroom (Rodrigo and e Ibarra, 2022). When individuals from diverse backgrounds come together, it is interesting to create an environment respectful of the diversity of opinions. In creative proposals, intuitive thinking is encouraged, along with the intellectual challenge of solving posed problems, the challenge of research, and the value of sensitivity (Batet et al., 2015; Batlle y Capdevila, 2013; Pineda-Alfonso y Márquez-Guerrero, 2022).

The current scenario presents a globalized environment where a significant effort is required to stay updated and connected both in the real and digital realms, with an ever-changing vision. This reality needs to be understood through the practice of analysis and reflection, enabling active participation in a vital renewal and transformation, leading towards a society with fewer inequalities (Flores Guerrero, 2016; Revelles-Benavente, 2022; Sotto et al., 2023). Active listening and its numerous associated proposals can be a magnificent individual and collective facilitating tool to develop skills that enable this updated connection with the environment. Additionally, it recognizes the educational role of musical beauty, which, in this case, is linked to a novel, allowing the reader to explore and create new realities (Caro, 2014). This proposal aims to contribute to the activation of artistic-creative, individual, social, ethical, and digital-scientific mental processes. Developing this initiative helps strengthen self-esteem, decision-making, enhance analytical capacity, work on awareness of values, and connect with activities related to research and digital resources, all of which are involved in effective communication (Kárpava and Martínez, 2018).

The Seniors University provides an educational space that fulfills not only an academic training function but also a social function: ensuring support and personal development by creating a meeting place for updating and coexistence. It becomes an inclusive empowering agent that promotes democratic citizenship (Duk and Murillo, 2020) and serves as an equalizing resource, addressing the imbalance between cultural and educational offerings for children and youth compared to those for older adults (Belavi and Murillo, 2020). Some proposals developed in this same life stage that focused on improving the quality of life (Sarfson y Albini, 2017) have shown benefits related to well-being, emotional state and emotional management, self-esteem, expressive capacity, sense of belonging, and social interaction. It is a formative process that facilitates learning inside and outside the classroom (Revelles-Benavente, 2022; Seijo et al., 2023).

The radio resource generates, with relative ease, a journey through time that allows listeners to understand the atmosphere in historical eras distant from the present. In this case, the Sono-libro, like in the past radio broadcasts, gathers the human group in the same space, promoting attentive listening and subsequent reflection, becoming a social act that entertains but also educates (Melgarejo and Rodríguez-Rosell, 2013). This is not the first innovative resource linked to radio; we find universities using radio and even television as supports in distance education (Pedró and Ramos, 2022). The podcast resource (or audio report) has also been incorporated, allowing listeners to hear previously recorded programs at their desired

time, stored for future listening (Legorburu et al., 2021). In this case, the Sono-libro also incorporates a sound theatricalization that enhances the emotional connection of the listener and facilitates the creation of the mental image of the story.

3. Empirical framework

For this study, we had a sample of 116 subjects belonging to the senior university program, divided into two different groups who participated in the learning experience chronologically between the months of November and January (Group 1, in Huesca, $n = 52$; Group 2, in Zaragoza, $n = 64$). Regarding the categorical gender variable, of nominal type, there is a certain predominance of women over men (64.16% women compared to 35.84% men). Breaking down the percentage by groups, a clear predominance of women emerges (71.15% in = 52 and 64.06% in $n = 64$) over men (28.85% in $n = 52$ and 35.84% in $n = 64$). In terms of age, the sample shows an average of 66.09 years per participant with data of great uniformity for both groups ($n = 52:66.75\%$; $n = 64:66.04\%$) since enrollment possibility depends on age.

Similarly, in the variable of previous studies, both groups show homogeneity, with a similarity between secondary and higher education, as opposed to primary education, which has lower scores (**Table 1**). Therefore, 46.24% of the sample has achieved a university education, 43.93% has achieved secondary education, and lastly, 9.83% has achieved primary education, indicating that almost half of the participants have returned to university after a positive experience. By groups, there is equality in the Zaragoza group, where university studies are close to or exceed half of the sample ($n = 64$: primary 7.81%, secondary 40.63%, higher 51.56%), compared to the Huesca group, where the weight of primary education is evident ($n = 52$, primary 17.31%, secondary 40.38%, higher 42.31%).

Table 1. Sociodemographic data, variable of previous studies (own elaboration).

			Studies			Total
			Primary	Secondary	Higher	
Group	Huesca	Count	9	21	22	52
		% within Studies	64.30%	44.70%	40.00%	44.80%
	Zaragoza	Count	5	26	33	64
		% within Studies	35.70%	55.30%	60.00%	55.20%
Total		Count	14	47	55	116
		% within Studies	100%	100%	100%	100%

The following describes the variable of habits in listening to the studied music in the two groups under investigation, Group 1 (Huesca) and Group 2 (Zaragoza). In this section, the statistics show that 100% of the participants in $n = 52$ claim to listen to "classical" or "cultured" music, while $n = 64$ also exhibits a significant predominance, with 85.94% compared to 14.04% who claim not to like it. Similarly, in response to the question of whether they have prior knowledge of Russian music from the transition between the 19th and 20th centuries, which will be listened to during the learning experience, 28.45% claim familiarity, while an overwhelming

71.55% do not. The sample shows homogeneity in attendance at "classical" music concerts, with 55.17% attending and 44.83% not attending. By groups, the Huesca group reports a value of 65.38% attendance at concerts, while the Zaragoza group shows a significant decrease to 46.88%.

Before the pedagogical experience, at the level of prior knowledge in the studied elements, significant differences are observed in relation to the variables studied based on dichotomous questions that assess knowledge of the artistic material covered: novel, film, and music of the period. In this way, the preeminence of cinema over the novel and, certainly, over music is perceived, as it occupies a peripheral place in the prior knowledge of the sample. This is because 91.67% had seen David Lean's film, while the percentage of reading the novel was almost inversely proportional, with only 18.26% having read Boris Pasternak's text. As for Russian music of the time (**Table 2**), 67.24% were not familiar with it, compared to 32.76% who were. By groups, the results appear to be similar; in Huesca, 63.46% had no prior knowledge of Russian music, and in Zaragoza, the value rose to 70.31%, compared to 29.69% who claimed to be familiar with it.

Table 2. Sociodemographic data, variable of listening habits (own elaboration).

			Russian plays		Total
			0	1	
Group	Huesca	Count	33	19	52
		% within Russian plays	42.30%	50.00%	44.80%
	Zaragoza	Count	45	19	64
		% within Russian plays	57.70%	59.00%	55.20%
Total		Count	78	38	116
		% within Russian plays	100%	100%	100%

Finally, to conclude the section on listening habits, participants were asked about the usual medium for music listening, observing (**Figure 1**) a significant predominance of radio (47.37%) along with more traditional means such as a music player (19.30%) or attending concerts (14.91%), with a very small percentage for new technologies (YouTube: 15.79%; Spotify: 2.63%) in a sample of participants averaging 66 years of age.
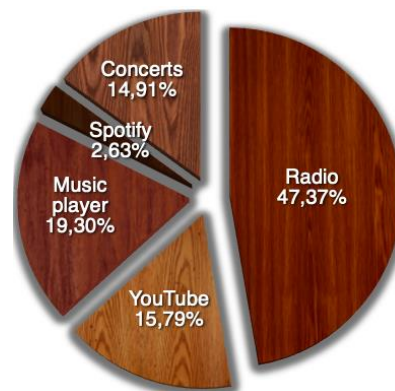

Figure 1. Favorite medium for music listening (own elaboration).

3.1. Design

This work has been approached as a quantitative study. It presents a correlation of personal variables on one hand, aiming to investigate the sensation of learning after the intervention; on the other hand, it seeks to elucidate the degree of short-term motivation in music listening.

Data collection, through a questionnaire, took place at two time points, before and after the learning experience, making this study a quasi-experimental pre-post design with a longitudinal nature. The time elapsed between the first and the last data collection, coinciding with the time duration of the implementation of the proposal, was prolonged during the entire first four-month period of the course, thus resulting in a total duration of 14 weeks. This time does not include the first week of the course, since a presentation of the subject and this proposal was carried out, nor the last week, since that week was dedicated to sharing the research results with the participants.

3.2. Instrument for the investigation

A two-part ad hoc questionnaire has been designed. The first part gathers various socio-demographic variables of the participating subjects–age, gender, education, and music listening habits—as well as prior knowledge regarding music. The second part, focusing on learning factors—literature, music, films, epoch, and interdisciplinary context—aims to understand the sample's opinion about the learning experience and the results derived from the work in an interdisciplinary artistic context.

The questionnaire has been validated by three external judges regarding its clarity, usefulness, and relevance. In fact, the subscale that measures the level of reliability (5 items; Cronbach's α = .886) exhibits a high index of internal consistency.

The quantitative data have been analyzed using the SPSS (Statistical Package for the Social Sciences) software by IBM. The following are the research variables:

- Socio-demographic variables: age, gender, previous studies, listening habits
- Likert-type questionnaire on learning factors rated from 1 to 5
- Questionnaire on the degree of learning and short-term motivation

3.3. Procedure

The experience carried out reveals itself as an interdisciplinary artistic activity in which literature, film, music, historical context, and radio interact to achieve a comprehensive learning experience. It involves a commented listening session of the program "Doctor Zhivago: Russia between two worlds", first aired on September 30, 2018, on the "Music with Style" segment of Radio Clásica. The Sono-libro is a sound resource that relates what happened in Pasternak's work, integrating into its discourse a musical thread that accompanies and contextualizes to improve the listener's understanding and emotional involvement. The program includes a dramatized recreation of Boris Pasternak's novel, accompanied by Russian music from the era:

https://www.rtve.es/alacarta/audios/musica-con-estilo/musica-estilo-doctor-zhivago-rusia-entre-dos-mundos-30-09-18/4764718/

In this way, we avoided reproducing David Lean's homonymous film to explore beyond the visual aspect, whose evident power is acknowledged, a different kind of more peripheral artistic knowledge. In this case, we focused on Russian music bridging the 19th and 20th centuries, linked to the title of the program in relation to the symbolic conception used in harmony with historical events. We encounter a clear dichotomy (**Figure 2**): tonal music belonging to the nineteenth-century world and, therefore, to the prevailing bourgeois social sphere, represents the main characters (Beethoven, Rachmaninov, Tchaikovsky, Khatchaturian, Scriabin, Jarre). In contrast, avant-garde music composed after the events of 1917 represents the brutal change that occurred and, in general, the senselessness of violence during the years of the revolution and subsequent civil war in Russia (Shostakovich, Degeyter, Stravinsky, and Prokofiev).

Figure 2. Musical selection from the program "Doctor Zhivago: Russia between Two Worlds" (own elaboration).

In this way, music reveals itself as the guiding thread of the history (**Figure 3**), but also as a source of dichotomous contrasts surrounding the protagonists' nostalgia for the nineteenth-century world versus the unleashed violence of the revolutionary era. It is erected, as in the structure of Pasternak, around the four encounters in the novel that culminate with the death of Yuri and Lara.
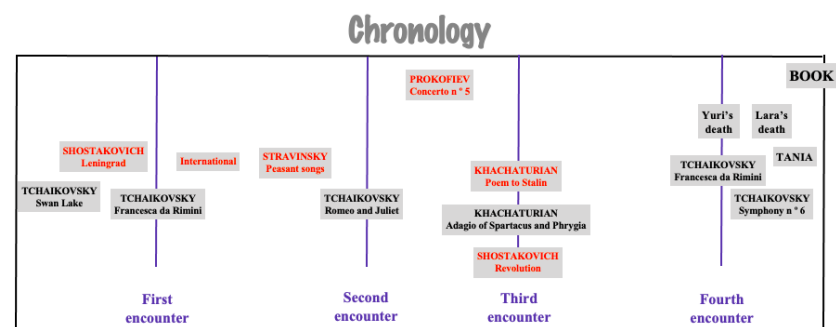

Figure 3. Musical selection from the program "Doctor Zhivago: Russia between Two Worlds" in relation to the action of the novel (own elaboration).

After the interdisciplinary pedagogical experience, that is, listening to the podcast along with some images from the era on the screen, a debate about the experience has been fostered, focusing on the interrelation of various artistic contents. Subsequently, a Likert-type questionnaire on the degree of learning has been administered, using a scale of 1–5 (1 = no learning; 5 = significant learning; other numbers represent intermediate scores). Additionally, it is complemented with a final set of dichotomous response questions (**Figure 4**): learning about the novel (yes or no); learning about the film (yes or no); learning about music (yes or no); learning about history (yes or no); learning about interdisciplinary arts (yes or no).

LEARNING ABOUT THE NOVEL

LEARNING ABOUT THE FILM

LEARNING ABOUT MUSIC

LEARNING ABOUT HISTORY

LEARNING ABOUT INTERDISCIPLINARY ARTS

Figure 4. Questions about the perception of learning (own elaboration).

4. Results

The data obtained during the course of the statistical study indicates the appropriateness of a correlational analysis of variables (Pearson's *r*). In this way, a relationship is found between belonging to one group or another in terms of the habit of listening to music ($p = 0.005$; $r = 0.465$) and also in concert attendance ($p = 0.047$; $r = 0.385$). The latter result is supported by the Chi-Square test (X2) value, with $p = 0.46$. However, no relation was found between the group variables and prior knowledge of Russian plays ($p = 0.439$; $r = 0.073$).

Next, a factorial design linear regression study was conducted to understand the weighting of determining factors in the sensation of learning extracted during the pedagogical experience (**Figure 4**). This test establishes a dependent variable, in this case, the previous studies-in relation to the predictor variables-, that is, the five items scored in the assessment of the feeling of learning. Therefore, the linear regression test confirms the weight of each predictor variable in the overall feeling of learning, depending on the dependent variable chosen, the previous studies of the sample. According to the statistics, the level of education influences the score obtained with a

value of $p = 0.004$. For each variable, the three most reliable values are found in learning about music ($p = .001$; $\beta = .265$), learning about the film ($p = .029$; $\beta = .199$), and learning about the epoch ($p = .047$; $\beta = .142$). In the remaining cases–learning about the novel, the epoch, and interdisciplinarity–a p-value greater than 0.05 prevents rejecting the null hypothesis. Thus, music emerges as the most reliable predictor variable among all studied, given that the sample started from a low level of prior knowledge and that the focal point of the multidisciplinary experience had been centered on music listening.

Subsequently, a group comparison test was conducted to determine if there is a statistically significant difference in the sensation of learning about the novel Doctor Zhivago with scores from the two groups included in this study. To do this, we used the t-Student statistic for independent samples, which requires, beforehand, checking the normality of the random variable with the Kolmogorov-Smirnov test, suitable for a sample of >30 individuals ($p = 0.000$ for both groups). Thus, with a p-value of .330 in the Levene test, we can verify that there is no truly significant difference between the groups, with a total mean of 3.81 in group 1, compared to 3.45 in group 2, on a five-point scale, where the option five = significant learning, 1 = no learning, and the rest are intermediate options, reflected in $p = 0.567$. The t-Student test value reveals that there were no significant differences in the sensation of learning between the two groups in the sample, with a p-value of .687 that does not allow us to reject the null hypothesis.

Finally, aside from the statistical study obtained after comparing groups using the *t*-Student statistic, regression test, and Pearson correlation, two dichotomous response questions were posed regarding short-term motivation (**Figure 5**):
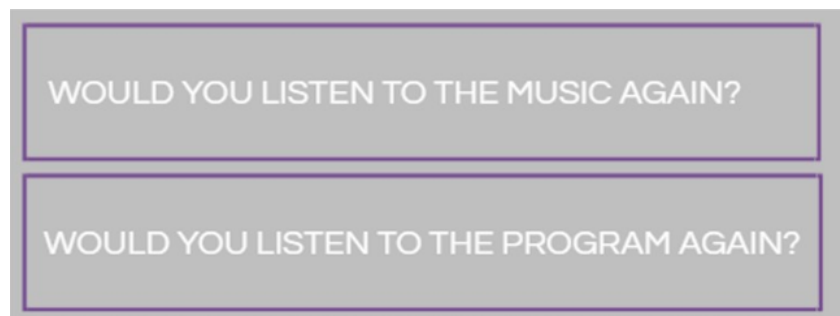

Figure 5. Motivation after the experience (own elaboration).

Let's recall that in the prior knowledge block, only 20.23% had read Boris Pasternak's novel, compared to 82.46% who had watched David Lean's homonymous film, and 28.45% had previously listened to Russian music from that period. The result of the dichotomous questions shows clear values in short-term motivation (Figure 6), one of the initial objectives of this study. 90.43% would be willing to listen to Russian music, while 71.05% would listen again to the Radio Clásica program "Doctor Zhivago: Russia between Two Worlds".
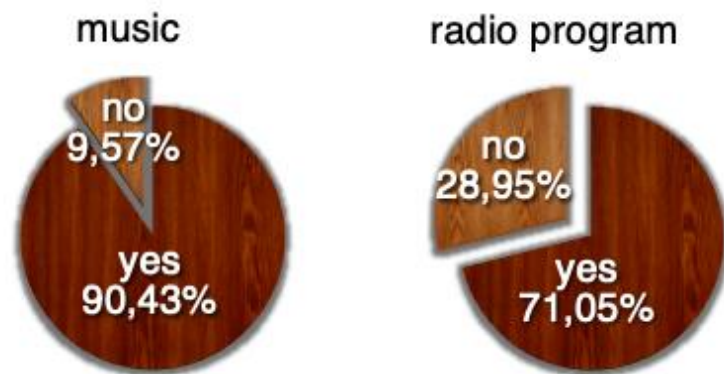
Figure 6. Results of dichotomous questions.

Once again, the Pearson correlation underscores the reliability of the data regarding motivation and the sensation of learning from the lived experience: there is no relationship between the sample that would recommend the program and concert attendance, indicating that the intervention has overcome the lack of prior knowledge of the participating subjects ($p = 0.815$; $r = -0.015$). There is also no relation between those who would recommend the program and those who had previously listened to Russian music ($p = -0.051$; $r = 0.587$) or between those who would like to listen to the program again even with the knowledge of Russian music ($p = 0.131$; $r = 0.142$). Furthermore, there is no correlation between those who had regularly attended concerts and those who would like to listen to the program again ($p = 0.103$; $r = 0.153$).

Therefore, the tool used in the learning experience, the Sono-libro, has proven to be an effective experience in motivating a significant majority of the sample to listen to the Russian music discovered in the class. This was observed in various educational contexts, with diverse cultural levels and unequal percentages in prior studies.

The enthusiasm of the students, both in Huesca and Zaragoza, led to the creation of new didactic materials on demand, which were not initially planned. Thus, a playlist with the order of the podcast music was generated for them on the Spotify streaming platform (which many were not familiar with and, according to the questionnaire, only a few used). They could access it through a QR code on their devices (**Figure 7**):

https://open.spotify.com/playlist/1yHbIkZhZa0deJE1xHpUS2?si=63d78a5cc96 54e34&pt=b0f7793731f3719a1d5370091877a87b

Figure 7. Russian music playlist on Spotify.

5. Discussion and conclusions

Upon reviewing the degree of achievement of the proposed objective, which aimed to analyze whether the incorporation of the Sono-libro resource could contribute to increased motivation and learning, we can conclude that the results are favorable. The majority of the sample expresses motivation to repeat the listening of the program and Russian music, which was mostly unknown before this experience. This aligns with studies that suggest an increase in listening habits when presented as entertainment or cultural leisure time (Soto-Vázquez et al., 2021).

The incorporation of this innovative resource has resonated very positively with the participants. It raises the question of whether the favorable result is related to their age. Perhaps the connection with radio is more evident in older adults than in individuals of other ages. To verify this suspicion, it would be necessary to conduct a similar study with a sample from a different age group. This remains an avenue for future research to determine if the connection with radio resources is exclusive to older participants. Additionally, the incorporation of the Spotify playlist shared with participants through a QR code has increased their understanding of digital resource management, enhancing their digital competence in this proposal.

It was interesting to observe a higher participation rate in Huesca, which has slightly less than a third of the population of Zaragoza (222,687 inhabitants in Huesca according to the National Institute of Statistics (INE) in 2020, compared to 716,040 inhabitants in Zaragoza). This difference could be attributed to Zaragoza having a broader cultural offering, making attendance somewhat diffuse, while in Huesca, there are likely fewer cultural options for this age group, resulting in a concentrated volume of attendance at interventions. This research also explores the predominance of females in the sample, with the majority stating that they regularly listen to classical music.

The increased knowledge of the musical genre combined with the radio program has enhanced interest in musical listening. In the responses, over 85% of the sample states that they would recommend the Sono-libro resource. There is a dominance in the preference for radio and the player compared to other music access

methods. Hence, providing a playlist on the least familiar medium for the sample (Spotify) was considered interesting. The intention was to encourage them to explore digital resources unknown to them, thus expanding their knowledge and usage.

Numerous educational research studies have expanded their focus to include proposals at various stages of life. In the past, many studies seemed to concentrate solely on childhood and youth. Promoting interdisciplinary projects for diverse participants has become a current necessity, allowing for the acknowledgment of social diversity (Martínez-Ezquerro, 2020). It is crucial to remember that the way we perceive stimuli, whether through listening or any other sensory connection (audiovisual resources, literary elements, dramatization, etcetera), depends on experiences, environment, knowledge, and current circumstances (Yubero et al., 2022). Given this, adulthood requires special attention, as its diversity surpasses that of other stages. Perception in adulthood is influenced by more conditions than in other age groups, demanding considerable effort to ensure an enriching experience that facilitates active aging (Fajardo Ramos et al., 2021).

The results obtained in this experience can inspire future researchers to develop or combine innovative resources focused on providing spaces for learning, interaction, and connection with the reality of our seniors. The fusion of resources from music and radio has been attractive for the participants, and we, therefore, conclude that the implementation of the proposal has obtained excellent results in motivational aspects. We consider that the study is limited by the small size of the participating sample. To consider these conclusions extirpable, it would be advisable to extend the sample by implementing this resource in other communities. New interdisciplinary and innovative possibilities arise for future interventions focused on adults, aiming to ensure active aging and an improvement in the quality of life by promoting the use of digital resources, exploring new avenues for technology access, and enhancing their digital competencies.

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