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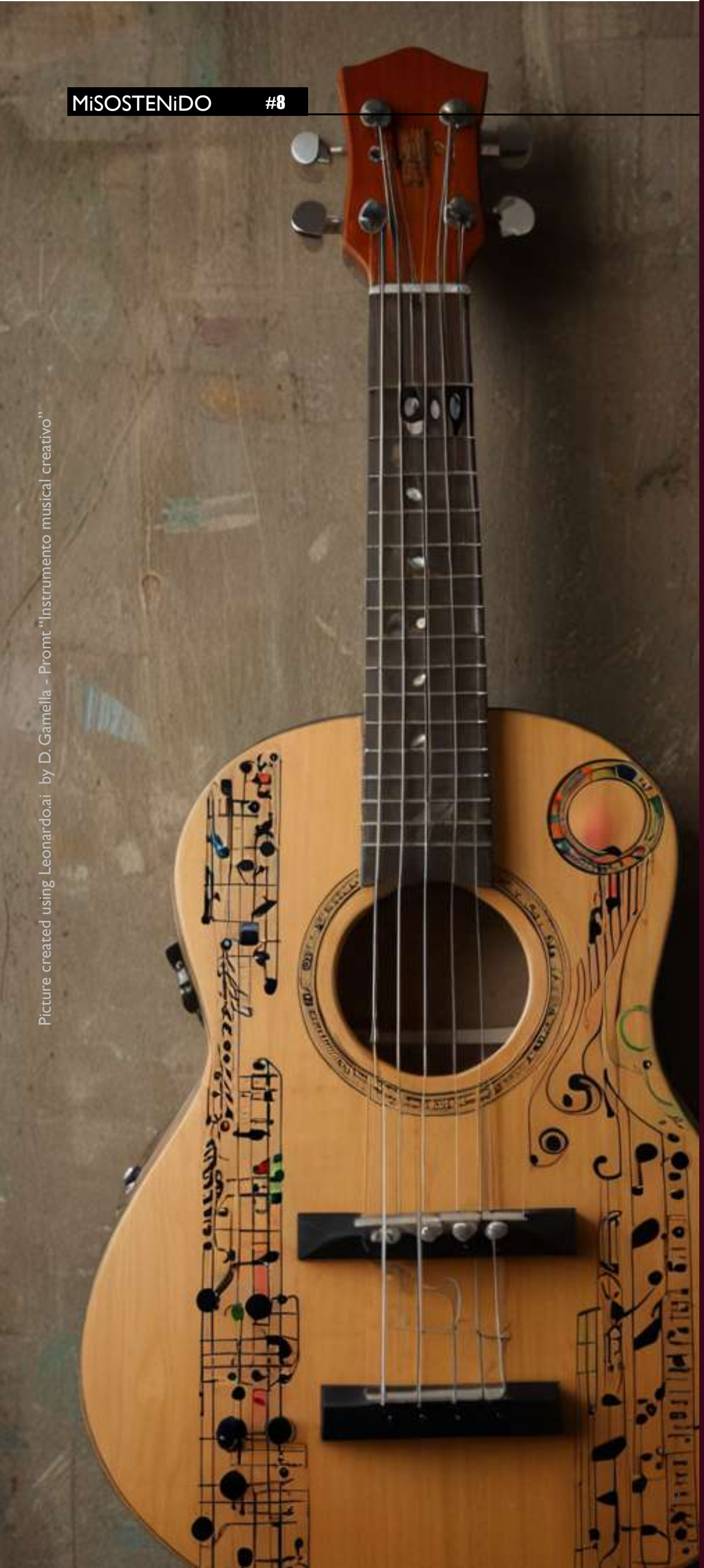
THERAPEUTIC BENEFITS OF MUSIC

The combination of research and clinical practice defines the concept of music therapy.
Both give meaning to the therapeutic work done with patients.
Music therapists do not just make music, we see the expression of sound as a means to achieve benefits for people.
The extent to which these goals are achieved depends on measurements, evaluations and studies,

Picture created using Leonardo.ai by D. Gamella - Promt "Creatividad musical"



Picture created using Leonardo.ai by D. Gamella - Promt "Instrumento musical creativo"

EDITORIAL TEAM

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> We started the therapeutic journey on the same path as medicine, which meant embracing positivist and neo-positivist currents, i.e., we decided to climb the steepest slope. Historically, this has led to conceptual and procedural frustrations that have yet to be resolved.

POSITIONING IN MUSIC THERAPY

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Music therapy as a clinical discipline aspires to the status of science, or at least to a respectable body of evidence-based beliefs. This means being collectively accepted in epistemological terms by the other disciplines of health and therapeutic treatment of people. We started the therapeutic journey on the same path as medicine, which meant embracing positivist and neo-positivist currents, i.e., we decided to climb the steepest slope. Historically, this has led to conceptual and procedural frustrations that have yet to be resolved.

It is well known that epistemic heights vary according to the degree of knowledge that can be achieved. Music therapy has yet to universalise the nature, possibilities, scope, and foundations of its therapeutic principles. Although some practitioners have succeeded in defining the basic premises of the discipline, the cultural heterogeneity of its main independent variable makes it difficult to standardise treatments, evaluation methods and, consequently, results. Giving objectivity to the effects obtained, justifying the achievement of therapeutic goals as a direct result and not a coincidence of a thoughtful and rational intervention methodology, or demonstrating the controlled influence of music on the development of patients, are just some of the collective tasks and challenges that remain unsolved.

In the scientific context, not all statements are valid for the construction of knowledge. It is imperative to avoid any paralogism and sophistry by increasing controls and rigour in observations, experiments, and supervised case studies. The design of music therapy research methodologies must serve to define our identity and assert our true nature. Are we aware of how many institutional refusals there have been to validate music therapy according to models of thought far removed from our clinical essence?

The challenge for music therapists is to recognise and accept their own therapeutic nature. To know, to define and to defend the field of action, to justify the validity of the working tools and the scope of their expressive possibilities to bring benefits to people, and thus to determine the philosophical framework that frames their activity.

As a collective, we need to unify the underlying theory of music therapy. To position what is the attribute of disciplinary knowledge in order to clarify the ontological, metaphysical and epistemological problem we face. From this constructive order, we will be able to dialogue with other disciplines, avoiding the debates that remain outside our competence and taking responsibility for our own means and systems that prove our practices.

The way is no other than research, but that which is organised in coherence with what we are, not with what others demand of us. It is often appropriate to propose reverse definitions. Those which, by recognising what you are not, allow you to define what you really are.

Music therapy does not play in the league of the natural sciences, even though it shares users with medicine. Our premises do not belong to the realm of the exact sciences, so we do not have to respond to their challenges. The social and human sciences have created a space to explain this part of human experience from a cultural, social, emotional, and experiential point of view. This implies a perspective that is not as equidistant as objectivist studies demand. Our challenge is to know how to interpret the meanings derived from the use of music for therapeutic purposes. Let us explain our principles from there, let us clarify the specific contribution of music in therapeutic processes using the appropriate method of inference.

This forces us, within the eclecticism inherent in the discipline, to agree on assessment methods and session analysis tools, to unify intervention models, and to develop research methodologies that are robust enough to validate and exploit the enormous data production that a single process, with a single patient, can potentially generate.

We are asked for evidence, high-end epistemic quality, true propositions, convincing demonstrations, answers that unequivocally explain the therapeutic purposes of music. The field of reflection is growing, but so are the possibilities of establishing that our participation, as an adjuvant treatment, produces timely and significant benefits in people. It is up to us to review, replicate and build on the contributions of those with more and better experience.

See you on the road.

TABLE OF CONTENS AUTHORS

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BENEFITS OF SINGING IN THE DEMENTIA CONTEXT

OPEN ACESS

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Los beneficios del canto en el contexto de las demencias

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ABSTRACT

Background: Pharmacological treatments for managing dementia symptoms have shown limited effectiveness. Psycho-social interventions are typically considered the first option. Recent research highlights singing as a particular beneficial activity for people with dementia. **Objective:** The objective of this paper is to present a narrative synthesis of the existent literature from January 2019 to June 2024 on the contributions of singing with people with dementia and their family caregivers. **Method:** A data base search was conducted across three databases: PubMed, PsycINFO, and ScienceDirect. Manual searches were also performed in Voices: A World Forum for Music Therapy issues from January 2019 to June 2024, as well as on ResearchGate. This descriptive review included quantitative, qualitative and mixed methods studies. **Results:** Nine studies met the inclusion criteria. Narrative syntheses revealed five main outcome areas: engagement (musical and social), cognitive function (including reminiscence), depression and positive feelings or emotions (as part of well-being), quality of life, and caregiving relationship and/or experience of caring. **Conclusions:** The results of this review highlight the potential benefits of singing in the well-being of individuals with dementia and their family caregivers, as well as the importance of continued investigation in this field.

Keywords: music therapy, singing, dementia.

RESUMEN

Antecedentes: Los tratamientos farmacológicos para manejar los síntomas de la demencia han mostrado una efectividad limitada por lo que las intervenciones psicosociales suelen ser la primera opción. Investigaciones recientes destacan el canto como una actividad particularmente beneficiosa para las personas con demencia. **Objetivo:** El objetivo de este artículo es presentar una síntesis narrativa de la literatura existente desde enero de 2019 hasta junio de 2024 sobre las contribuciones del canto en personas con demencia y sus cuidadores familiares. **Método:** Se realizó una búsqueda en tres bases de datos: PubMed, PsycINFO y ScienceDirect. También se realizaron búsquedas manuales en "Voices: A World Forum for Music Therapy" desde enero de 2019 hasta junio de 2024, así como en ResearchGate. Esta revisión descriptiva incluyó estudios cuantitativos, cualitativos y de métodos mixtos. **Resultados:** Nueve estudios cumplieron con los criterios de inclusión. La síntesis narrativa identificó cinco áreas principales de impacto: compromiso/participación (musical y social), función cognitiva (incluyendo reminiscencia), depresión y sentimientos o emociones positivas (como parte del bienestar), calidad de vida, y la relación de cuidado y/o la experiencia de cuidado entre la persona con demencia y el cuidador. **Conclusiones:** Los resultados de esta revisión destacan los posibles beneficios del canto en el bienestar de las personas con demencia y sus cuidadores familiares, así como la importancia de continuar investigando en este campo.

Palabras clave: musicoterapia, canto, demencias.

BACKGROUND

The World Health Organization (WHO), in its recent report, revealed that to date, a total of 55 million individuals have been diagnosed with dementia, with approximately 10 million new cases of dementia occurring each year worldwide. Dementia is a syndrome characterized by the progressive deterioration of cognitive function, often accompanied by changes in mood, emotional control, behavior, or motivation.

Moreover, this is a devastating condition that significantly impacts family members and society as a whole (WHO, 2023).

Psychosocial interventions for people with dementia

Due to the limited effectiveness of pharmacological treatments in managing dementia symptoms, non-pharmacological techniques are typically the first option before considering adjuvant pharmacological treatments (Muengtaweepongsa & Choolam, 2021). The therapeutic benefits of music-based interventions, such as listening to music, singing, and playing instruments, are well-established in elderly care, particularly for individuals with dementia (Mercadal-Brotons et al., 2021). These interventions are commonly used by music therapists and have been adopted by other various health professionals. They serve as non-pharmacological or psychosocial approaches for patients with Alzheimer's disease and related dementias (ADRD) to address cognitive and neuropsychiatric symptoms (NPS) such as memory problems, language difficulties, disorientation, executive function impairments, anxiety, depression, and agitation with. In addition to addressing areas affected by the disease, these therapies aim to improve quality of life (QoL) (Fang et al., 2017; Hanser, 2021; Leggieri et al., 2019).

Music therapy

Music therapy, a credentialed profession that requires academic training in working with clinical populations and applying clinical and evidence-based practices, has been used for many years with people living with dementia (PwD) (Fang et al., 2017). It addresses therapeutic goals across physical, cognitive, emotional, and social domains. Credentialed music therapists, by definition and training, are skilled in achieving treatment objectives through various musical techniques, including singing, playing instruments, improvising, and listening to music. In recent years, research has started focusing on specific aspects of music therapy, such as particular techniques, to determine the most effective outcomes for PwD.

Singing, on people with dementia (PwD) has been a major target of recent research. Benefits of singing for health and well-being have been reported for the general population (Daykin et al., 2018) as well as for individuals with various mental health or neurological conditions (Monroe et al., 2020). Several studies have also examined singing programs specifically for people living with dementia (Unadkat et al., 2017). However, there are few studies comparing the effects of different music activities on specific outcomes for PwD. Such studies are crucial for identifying the most effective and suitable interventions for various types and stages of dementia.

Singing is one of the most popular and frequently used active music intervention technique employed by music therapists to achieve therapeutic goals for people with dementia (Unadkat et al., 2017). This is partly because individuals with dementia often retain their singing abilities and can participate in singing even in the later stages of the condition (Smith et al., 2022). Despite memory loss, they can recognize melodies and lyrics of familiar songs (Tsoi et al., 2018) and learn new songs (Baird & Samson, 2015). Additionally, engaging in music activities with caregivers or care partners, such as choral singing, has been shown to improve social engagement and cognitive functions, enhance acceptance of the diagnosis, increase energy, reduce stress and anxiety, and alleviate depressive symptoms (Thompson et al., 2021).

Although several scoping and systematic reviews have addressed singing groups for people with dementia and their caregivers or relatives, this paper aims to provide a narrative synthesis of the existing literature from January 1, 2019, to June 30, 2024, on the impact of singing with people with dementia and their family caregivers. The specific questions this project seeks to answer are:

1. What outcomes have been measured in the existing literature?
2. What does the literature reveal about the effectiveness of singing for these outcomes?

To achieve this objective, both quantitative and qualitative research will be reviewed to gain a comprehensive understanding of how singing may benefit people with dementia and their caregivers.

Materials and Method

Search strategy

An electronic database search (PubMed, PsycINFO, and ScienceDirect) was conducted using the keywords: (*singing OR *choir singing) AND (*dementia). Manual searches were also performed in Voices: A World Forum for Music Therapy issues from January 2019 to June 2024, as well as on ResearchGate. A total of 162 articles were identified.

Inclusion/exclusion criteria

- Articles must have been published between January 2019-June 2024 and written in English or Spanish.
- Articles must have been published in peer-reviewed journals.

- People with dementia and/or their caregivers must have participated in singing as an active activity (not as a passive activity, such as being sung to), and the implementation of the activity had to be clearly described.

- Studies could include quantitative, qualitative data, or both.

Articles were excluded in any of the following conditions were given:

- Case reports, conference papers, personal opinions, and research proposals for which studies had not yet been conducted.

- Mixed groups (people with dementia as well as individuals with other diagnoses), where the results between the groups were not differentiated.

- Studies involving multiple musical interventions where singing was featured but not the main focus, or where the percentage of time singing in the program was unclear.

- Studies with no clear focus on the effect, impact or experience of the singing on or for the participants.

- Studies that featured carer-directed singing (i.e., where a carer sings to a person with dementia to assist during care routines).

The review is reported according to the PRISMA statement (Moher et al., 2009).

Selection process

Search results from each database and manual search were exported into an Excel spreadsheet. After duplicates were removed, the author screened the titles and abstracts for eligibility. Articles that appeared eligible based on title/abstract were then reviewed in full.

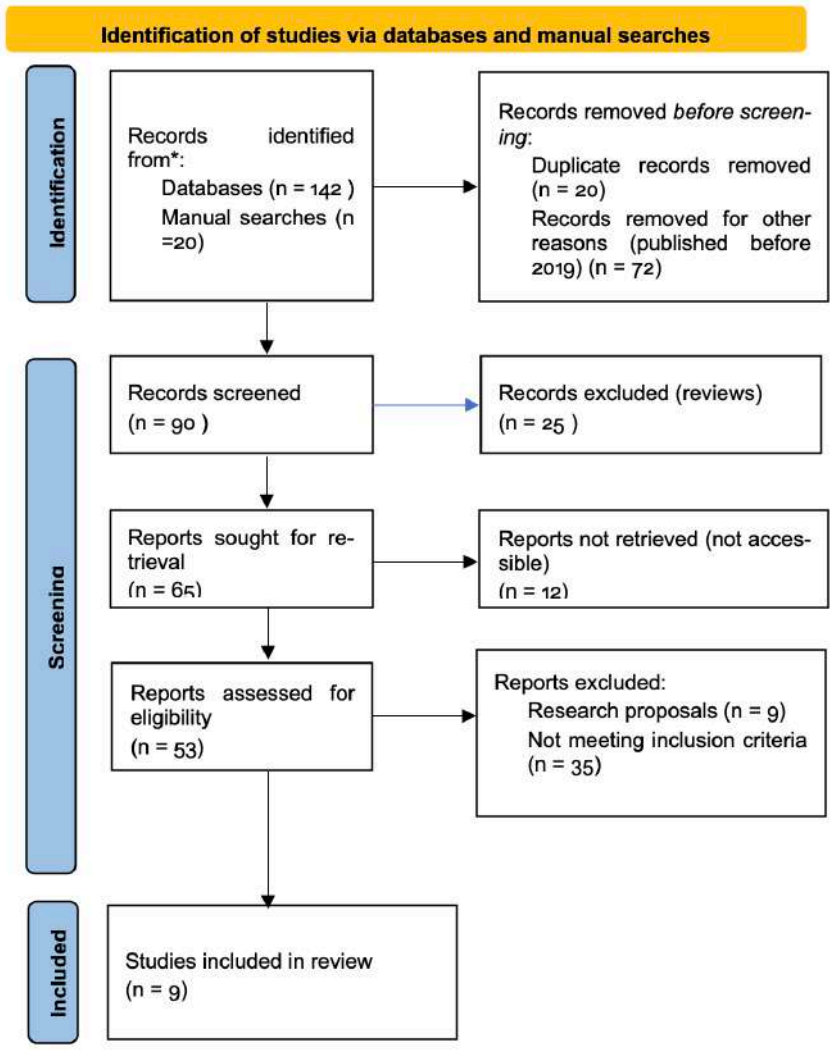
The PRISMA Flow chart was used to illustrate the search strategy and selection process of the sources included in this review (as well as the number of sources) (Figure 1).

The systematic review has included the following phases:

- Article search in databases and manual searches.
- Exclusion due to duplication and other criteria.
- Review of all the eligible articles, followed by further exclusions.
- Analysis of the results.

Figure 1.

PRISMA Flow Chart.



Critical appraisal

The methodological quality of the included sources was not evaluated, as the primary objective of this paper was to analyze the contributions and effects of singing on people with dementia and their family caregivers.

Data extraction and management

The sources that met the inclusion criteria were exported to Mendeley desktop version 1.19.8 where all references were managed.

The author extracted relevant data from publications using a standardized form. Each article was analyzed according to the following fields: author/year/country/design, diagnosis/stage/age, sample size, intervention/number of sessions and length, context/facilitator, and outcomes (see Table 1). Qualitative data were also collated.

RESULTS

A total of 53 studies were initially eligible for inclusion after

Tabla 1.
Studies characteristics.

Author/Year/ Country/Design	Diagnosis/Stage/ Age	Sample size	Intervention/# Sesions/Lenght	Context/Facilitator	Outcomes
Evans et al./2019/UK/ Pre-post (medidas cuantitativas + cualitativas)	ADRD /various stages/ $\bar{x}$ = 79.6	20 PwD	MMMRP (singing songs on specific themes)/ 7 sessions (weekly)/1h.	Not specified/Trained leader	Engagement (↑), reminiscence (↑), social interaction (↑)
Tamburry et al., 2019/ Canadá/Pre-post (cuantitativo)	ADRD/Mild-moderate/ $\bar{x}$ = 77.4	54 (PwD + caregivers + high school students)	Intergenerational choir/ weekly for 2-3 seasons/ 2h.	Community/Professional conductor	Cognitive funtion (=), depressive symptoms (↓)
Feng et al./2020/ Singapur/RCT (cuantitativo)	Older people/ with cognitive complaints/ $\bar{x}$ = 71	93 (47 to the CSI; 46 to the ECD)	Choral singing for two-years (weekly) vs. education on cognitive decline/1h.	Community living/ Professional musicians	Cognitive function (=), brain aging (=).
Clark et al./2020/ Australia/Pre-post (cuantitativo + cualitativo)	ADRD + family caregivers/Various stages/ $\bar{x}$ = 77 (PwD); $\bar{x}$ = 67 (caregivers)	16 (8 PwD + 8 family caregivers)	Therapeutic songwriting/6 sessions (weekly)/ 1 h.	Community aged care support facilities or residential aged care homes/ Professional music therapists	Quality of the Caregiver–Patient Relationship (=); Depression in Dementia (↓); QoL (=)
Lee et al., 2020/Irlanda/ Fenomenológico	ADRD /(early stage) + family caregivers.	7 (3 PwD + 4 family caregivers)	Group singing/ 6 sessions (weekly) 1h.	Community arts/ Professional music therapist	Social connection; happiness and rejuvenation; reconnection with the self; supporting the carer-cared for relationship →well-being
Baker et al., 2022/ Australia/RCT (cuantitativo)	ADRD + depression/ Various stages/ $\bar{x}$ = 86.5	214 PwD	Recreational choir singing(MIDDEL) vs. GMT/ 39 -78 sessions (1-2 sessions per week for 6 months)/45min.	Residential care home/ Community musicians-Professional music therapists	Depression (↓) , NPS (↓) , QoL. (↑)
Walker et al., 2022/UK/ Caso múltiple (cuantitativo)	ADRD/Mild-moderate/ ??	15 PwD	Community singing group vs. music listening/ 1 session/ 1 h.	Residential care home/ Experienced choral conductor	EDA (↑), HR (↑), movement and engagement (=), ST (=)
Downson et al./2023/ UK/Pre-post (medidas cuantitativas + cualitativas)	ADRD (various types of dementia/mild & moderate) & care partners/ $\bar{x}$ =81.06	30 (16 PwD + 14 carers)	Online singing group/10 sessions (weekly) /1h.	Community/2 Community musicians	QoL (↑), depression (↓) musical engagement, caring relationship (↑), experiences of caring (↑)
Reschke-Hernández et al., 2023/USA/RCCT (cuantitativo)	ADRD/ Various stages/ $\bar{x}$ =84.13	32 PwD	Singing-based intervention vs. verbal discussion/ 6 sessions (3 x week)/ 25 min.	Residential care home / Professional music therapists	Feelings (↑), positive emotions (↑)[1], and social engagement (↑), → psychological well-being

Note: Groups vs. individual; online vs. in-person; PwD: People with Dementia; ADRD: Alheimer's disease and related dementias; QoL: Quality of Life; NPS: Neuropsychiatric Symptoms; MMMRP: Musical Memories Reminiscence Programme; CSI: Choral singing intervention; HEP: Health Education Program MTx: Music therapists; ↑Increase, ↓Decrease; = No change; EDA: Electrodermal activity; HR: Heart rate; ST: Skin temperature; RCT: Randomized controlled trial; ECD: Education on cognitive decline; GMT: Group music therapy; RCCT: Randomized clinical crossover trial.
[1] Especially pleasure.

removing duplicates and excluding those published before 2019. Of these, nine of the articles were eliminated because they were research proposals, not completed studies. An additional 35 studies were excluded for not meeting inclusion criteria. The nine studies included in this review were conducted in different countries: Australia, Canada, Ireland, Singapore, and the UK. These studies comprised one multiple case study design, three randomized control trials (RCTs), four within-subject design study (pre-post), and one phenomenological study. A summary of the studies (in chronological order) can be found in Table 1.

Participants: Diagnosis and stage

The total number of participants across the included studies was 481 which included people with dementia or with some type of cognitive difficulty, and in some cases, their family caregivers. One study also involved high school students. The types of dementia varied and included Alzheimer's disease, vascular dementia, mixed dementia and frontotemporal dementia. The stages of dementia among participants in the different studies ranged from mild to severe. It is important to note that, although participants' cognitive status and dementia severity were reported in most studies, this information was not consistently documented.

Singing as intervention

Active singing was the music intervention that was used in the various studies as it is the topic of this paper. The active singing activities included group singing, either in person or online, participation in a recreational choir, therapeutic songwriting that also incorporated singing, and an intergenerational choir. These groups either included only PwD or both PwD and their caregivers. As previously mentioned, one study also included high school students.

Methodological aspects of the intervention: Context, sample size, # of sessions, length

Of the nine studies analyzed, five recruited participants from residential care homes, one from a community arts center, two from the community, and one did not specify the source.

In all studies, singing took place in groups ranging in size from 7 to 54 participants. In studies with more than 54 participants, they were divided into smaller groups for the intervention. The number of sessions varied widely, from 1-2 sessions to weekly sessions over 2-3 seasons, although the total number of sessions was not always specified. The length of the singing sessions was more consistent across studies, with most lasting 1 hour.

Facilitators

The singing interventions were facilitated by two types of professionals including: music therapists (in 4 studies), and musicians (5 studies).

Outcomes

As mentioned in a previous section, three of the studies used a mix of quantitative and qualitative measures (Clark et al., 2020; Dowson et al., 2023; Evans et al, 2019). All studies except Lee et al., 2020, which used a phenomenological approach, included standardized measures. Five main outcome categories were identified: engagement (musical and social), cognitive function (including reminiscence), depression and positive feelings or emotions (as part of well-being), quality of life, and caregiving relationship and/or experience of caring.

Four studies measured social and/or musical engagement (Dowson et al., 2023; Evans et al., 2019; Walker et al., 2022), three measured cognitive function (including reminiscence) (Evans et al., 2019; Feng et al., 2020; Tamburry et al., 2019), five measured depression or positive feelings and emotions (Baker et al., 2022; Clark et al., 2020; Dowson et al., 2023; Reschke-Hernández el al., 2023;Tamburry et al., 2019); and three measured quality of life (QoL) (Baker et al., 2022; Clark et al., 2020; Dowson et al., 2023).

The three studies that also included family caregivers, measured caregiving relationship and/or experience of caring (Clark et al., 2020; Dowson et al., 2023; Lee et al., 2020). The study by Walker et al., (2022) also measured physiological responses such as heart rate, electrodermal activity and skin temperature. As shown in Table 1, the majority of the studies reported improvements in all the outcome measures. In two of the studies, there were not changes from pre-to-post intervention in cognitive function (Feng et al., 2020; Tamburry et al., 2019), the quality of the caregiver-patient relationship (Clark et al., 2020), and movement and engagement (Walker et al., 2022).

Qualitative data of the included studies were collected through interviews and focus groups. The main outcome categories identified were: Quality of Life (QoL), psychological well-being, cognition, engagement, activities of daily-living, and family caregiver outcomes.

Four of the studies analyzed compared singing with other type of interventions: education on cognitive decline (Feng et al., 2020), group music therapy (Baker et al., 2022), and verbal discussion (Reschke et al., 2023). The results of Feng et al. (2020) indicated that choral singing is at least as beneficial as education on cognitive decline in improving cognitive health in aging, in addition to being fun and motivating. Baker et al. (2022) compared recreational group singing with group music therapy for depression and quality of life (QoL).

The results show higher positive effects of recreational group singing in reducing symptoms of depression, with benefits lasting even after the intervention was completed. Similarly, group singing was effective in reducing neuropsychiatric symptoms and improving QoL. Reschke-Hernández et al. (2023) compared a singing-based music therapy intervention with verbal discussion on social

and emotional wellbeing (feelings and emotions) and social engagement in PwD. As predicted by the authors, singing had positive effects on feelings, emotions, and social engagement, especially for participants with moderate dementia, indicating the potential of this type of intervention to enhance psychosocial well-being.

It is important to note that the study by Walker et al. (2023) was the only one that included physiological measures. The aim of these two linked multiple-case studies was to observe the physiological responses of people at different stages of dementia during two music-based activities: a community singing group and music listening. During the community singing group, electrodermal activity (EDA) and heart rate (HR) increased, which the authors suggest indicates increased arousal and enjoyment. HR and skin temperature (ST) were higher during faster music and EDA was influenced by different musical tempos.

DISCUSSION

The importance of implementing evidence-based music interventions for people with dementia and their family caregivers to provide the best therapeutic experiences is paramount. The results of this descriptive synthesis of articles published between January 2019 and June 2024 appear to confirm the findings of previous reviews (Thompson et al., 2021) which highlight the positive impact of singing on the lives of people with dementia and their caregivers. These benefits are particularly evident in emotional well-being, including factors such as engagement, maintaining social interactions, and fostering positive feelings and emotions, all of which contribute to an improved quality of life.

Depression is one of the most common comorbidities associated with dementia (Tamburry et al., 2019). Its effects are well-documented, and when combined with dementia, it negatively impacts patient well-being and significantly reduces quality of life. Some studies indicate that people with dementia who also have depression, transition to care homes more quickly than those without depressive symptoms (Thomson et al., 2021).

It is noteworthy that three of the studies analyzed incorporated both, quantitative and qualitative data, while one study (Lee et al., 2020) utilized only qualitative data. The qualitative data offers additional context and insights into participants' perspectives, which, when combined with quantitative data, enhances the understanding of participants' experiences and the benefits from singing. However, it is important to emphasize that findings from Lee et al., 2020, were consistent with those of the studies that included quantitative data.

The current review has several limitations that should be considered when interpreting these findings. The number of studies meeting the inclusion criteria is relatively small. Additionally, the heterogeneity among the studies–regarding design, intervention type, types and stages of dementia, dosage, and professional profile of those conducting the groups–complicates the ability to draw definitive conclusions.

CONCLUSIONS

It is evident that group singing and community choirs for PwD and their caregivers are becoming increasingly popular and established across various countries as a means to promote health and well-being. Experiences that involve both PwD and their caregivers provide a unique opportunity to caregivers for shared meaningful moments and potentially transform relationship dynamics (Thompson et al., 2021).

All the studies reviewed in this paper highlight that singing, whether within a music therapy setting or as a community recreational activity, can significantly enhance the well-being of people with dementia. It achieves this by boosting I activation, enhancing mood (improving positive feelings and emotions), promoting musical and social engagement, reducing symptoms of depression, and supporting the caregiver-care recipient relationship. Additionally, singing is both enjoyable and motivating. Collectively, these factors contribute to the overall quality of life for people with dementia and their caregivers, potentially prolonging cognitive health, maintaining independence, and delaying the need for long-term care.

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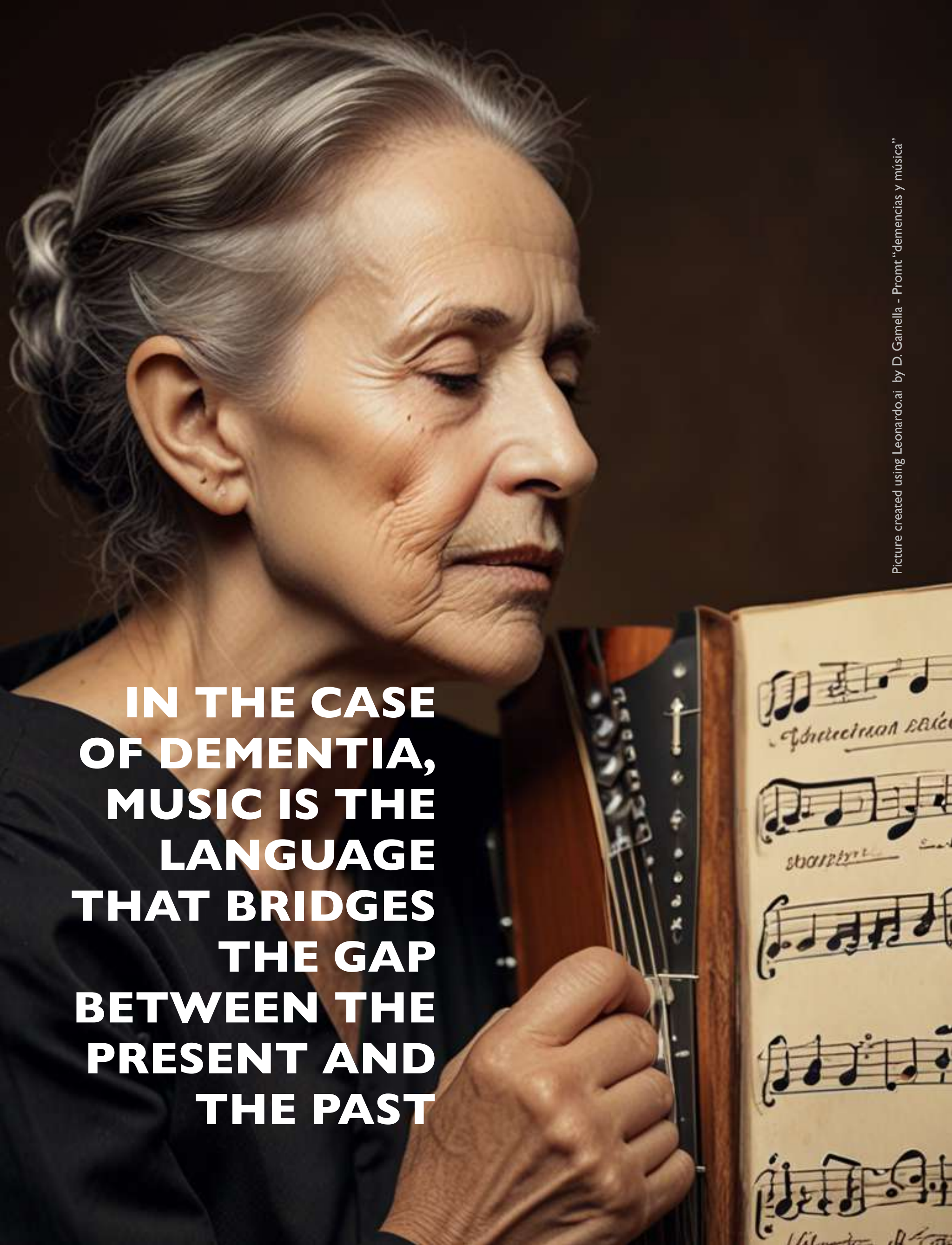

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IMPACT AND CRITICAL REVIEW OF MUSIC THERAPY ON MATERNAL AND CHILD HEALTH: BENEFITS AND CLINICAL APPLICATIONS DURING PREGNANCY, CHILDBIRTH AND POSTPARTUM

Impacto y revisión crítica de la musicoterapia en la salud materno-infantil: beneficios y aplicaciones clínicas durante el embarazo, parto y posparto

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ABSTRACT

Background. Music therapy, based on the premise that music has a positive impact on mental and physical health, has gained interest in the context of pregnancy, childbirth, and postpartum (PPD). The literature suggests that it may reduce stress, improve emotional well-being, and strengthen the mother-infant bond, but a critical review is needed to assess its efficacy at these stages. **Objective.** This study reviews and analyzes the efficacy of music therapy interventions in PPD, exploring recent advances and limitations in research. **Methodology.** A systematic search of PubMed, Cochrane Library, and Web of Science for completed randomized trials ("Trials" [Cochrane], "Clinical Trials" [Pubmed], and "Randomized Controlled Trial" [Pubmed]) published between January 2018 and December 2022. Data were analyzed for methodological quality and relevance of findings. **Results.** Five relevant trials were identified and reviewed. Findings suggest that music therapy can reduce anxiety, improve pain management, and support mother-infant bonding. However, limitations include variability in interventions, small sample sizes, and lack of standardization of outcome measures. **Conclusions.** Although music therapy shows potential in PLE, more studies with rigorous designs, standardization of interventions, and long-term evaluations are needed. Current limitations highlight the need for further research to confirm benefits and improve clinical application.

Keywords: multimodal approach, music performance, music therapy, stage anxiety.

RESUMEN

Antecedentes. La musicoterapia, basada en la premisa de que la música influye positivamente en la salud mental y física, ha ganado interés en el contexto del embarazo, parto y posparto (EPP). La literatura sugiere que puede reducir el estrés, mejorar el bienestar emocional y fortalecer el vínculo madre-hijo, pero se necesita una revisión crítica para evaluar su eficacia en estas etapas. **Objetivo.** Este estudio revisa y analiza la eficacia de las intervenciones de musicoterapia en el EPP, explorando avances recientes y limitaciones en la investigación. **Metodología.** Se realizó una búsqueda sistemática en PubMed, Cochrane Library y Web of Science para estudios aleatorizados finalizados ("Trials" [Cochrane], "Clinical Trials" [Pubmed] y "Randomized Controlled Trial" [Pubmed]) publicados entre enero de 2018 y diciembre de 2022. Se incluyeron ensayos clínicos sobre la efectividad de la musicoterapia en el EPP. Los datos fueron analizados según la calidad metodológica y relevancia de los hallazgos. **Resultados.** Cinco estudios relevantes fueron identificados y analizados. Los resultados indican que la musicoterapia puede reducir la ansiedad, mejorar el manejo del dolor y apoyar el vínculo madre-bebé. Sin embargo, las limitaciones incluyen variabilidad en las intervenciones, tamaños de muestra pequeños y falta de estandarización en las medidas de resultado. **Conclusiones.** Aunque la musicoterapia muestra potencial en el EPP, se requieren más estudios con diseños rigurosos, estandarización de intervenciones y evaluaciones a largo plazo. Las limitaciones actuales destacan la necesidad de investigaciones adicionales para confirmar los beneficios y mejorar su aplicación clínica.

Palabras clave: musicoterapia, embarazo, parto, posparto, intervención.

BACKGROUND

Although the effects of music and music therapy on humans have been extensively studied (Fernández-Company et al., 2024; Freitas et al., 2021; García-Rodríguez et al., 2023), to the best of our knowledge, its specific application in the context of pregnancy, childbirth, and postpartum (PPE) requires further evaluation. Despite previous studies suggesting potential benefits such as stress reduction and improved emotional well-being, scientific evidence conclusively supporting the efficacy of music therapy during these critical periods remains limited. This research gap underscores the need for systematic analyses to publicize existing knowledge, identify methodological weaknesses, and provide evidence-based results to optimize maternal and child health interventions.

Music therapy is based on the premise that music has the ability to positively influence mental and physical health, acting as a means to reduce stress and improve overall well-being (Bruscia, 2007). In this context, music therapy has emerged as a potentially beneficial intervention during these critical periods. Recent literature suggests that the integration of music into the therapeutic setting may offer a number of benefits, including stress reduction, improved emotional well-being, and enhanced bonding between mother and infant (Bruscia, 2007; Federico, 2005). However, despite this promising evidence, it is imperative that a critical and systematic review of current research be conducted to accurately assess the effectiveness of music therapy in PSA. This will allow for evidence-based recommendations and improved clinical application of these interventions in the context of maternal and child health.

Pregnancy, childbirth, and postpartum (PPE) are critical periods in a woman's life, marked by profound physical, emotional, and psychological changes. These phases involve not only the transition to motherhood, but also a significant adjustment to the new role, with implications for the mental and physical health of the mother and the newborn (Carrillo-Mora et al., 2021). During pregnancy, the pregnant woman experiences a series of changes that go beyond weight gain and hormonal changes; these changes also affect her emotional and psychological well-being. Research suggests that women may face significant challenges in adapting to their new identity and adjusting to changing family dynamics, which can negatively affect their mental health (Vallecampo, 2022).

Childbirth poses a number of additional challenges, as it marks the transition from intrauterine life to an extrauterine environment, involving a complex adjustment to new physical and emotional realities for both mother and child. This transition can be a source of stress and anxiety, with important implications for the well-being of both (Maldonado-Durán et al., 2008). Subsequently, the postpartum period, which lasts from the moment of delivery until several weeks later, is presented as a crucial phase for the mother's physical recovery and the establishment of an emotional bond with the baby. During this period, mothers may face emotional difficulties, including the risk of postpartum depression, highlighting the importance of adequate mental health support (Talbot & Maclennan, 2016).

The purpose of this article is to provide a comprehensive review of recent research on music therapy in PSA, evaluating the efficacy of interventions, methodologies used, and outcomes achieved. Through a systematic review of studies published between 2018 and 2022, advances in the discipline, current limitations, and recommendations for future research will be examined to provide a comprehensive and evidence-based view of the impact of music therapy in these critical phases of motherhood.

METHODOLOGY

This critical review of the literature on the efficacy of music therapy in the context of pregnancy, childbirth and postpartum is based on a rigorous and systematic methodology. Relevant and high-quality studies were selected using a comprehensive search strategy in specialized databases and with well-defined inclusion and exclusion criteria. The data analysis included a detailed evaluation of the study design, the characteristics of the music therapy interventions and the outcomes obtained, which allowed a comprehensive assessment of the available evidence in this field.

Search strategy

A comprehensive search of PubMed, Cochrane Library and Web of Science was conducted for this systematic review. The search included studies published between 2018 and 2022 that focused on the use of music therapy in the context of pregnancy, childbirth and postpartum. We included randomized clinical trials (RCTs) that evaluated the effectiveness of music therapy interventions.

We used combined search terms such as 'music therapy', 'pregnancy', 'childbirth', 'postpartum' and 'intervention'. Studies were selected based on their relevance, methodological quality and adequacy to the inclusion criteria. We excluded studies that did not provide quantitative or qualitative data on the effectiveness of the intervention and those that were not available in full text.

Inclusion and exclusion criteria

For the systematic review of the literature on the efficacy of music therapy in the context of pregnancy, childbirth and postpartum, inclusion and exclusion criteria were established to ensure the quality and relevance of the selected studies. These criteria were created with the intention of ensuring a rigorous selection of studies focused on providing an accurate and up-to-date assessment of the efficacy of music therapy during pregnancy, childbirth, and the postpartum period.

Inclusion criteria. Empirical studies published in English or Spanish were included, which provided adequate language coverage and facilitated access to a variety of relevant research. The selected studies had to evaluate the efficacy of music therapy in at least one of the phases of the female reproductive cycle: pregnancy, childbirth, or postpartum. This approach ensured that the review covered all potential applications of music therapy during these critical periods. Among the types of studies included were clinical trials. Clinical trials provide the strongest evidence of the effectiveness of interventions because of their randomized controlled design. Additionally, only articles published between January 2018 and December 2022 were included. This time frame was chosen to ensure that the studies reviewed reflect the most recent advances in music therapy research for PSA.

Exclusion criteria. Articles that were not available in full text were excluded. This decision was made to ensure that all relevant information and data necessary for critical appraisal were accessible. Studies that did not use quantitative or qualitative outcome measures were also discarded, as these methods are essential to objectively assess the effectiveness of music therapy interventions. Publications prior to 2018 were also removed in order to focus on the most recent and relevant evidence. Finally, we excluded research with non-relevant samples or without control groups, as these aspects may affect the validity and applicability of the results, limiting the ability to generalize the conclusions.

Selection process

Selected articles were reviewed in two stages: an initial review of titles and abstracts to assess relevance, and a full text review to confirm eligibility.

Results of study selection

A total of 5 clinical trials (RCTs) relevant to this review were identified and selected according to the established inclusion and exclusion criteria. These studies were assessed in detail to ensure their eligibility and methodological quality. The final selection was made after a thorough review of titles, abstracts, and full texts with the participation of two independent reviewers and resolution of disagreements by consensus or consultation with a third reviewer.

Data analysis

Data extracted included study design, sample size, characteristics of the music therapy intervention, outcome measures, and key findings. A data extraction matrix was used to organize and synthesize the information. We assessed studies for methodological quality using the Cochrane Collaboration's risk of bias assessment tool and the quality assessment tool for nonrandomized trials.

Quality assessment

The quality of the studies was assessed using several criteria, including internal validity, accuracy of outcome measures, transparency of methodology, and applicability of results. We assigned each study a high, moderate, or low-quality rating based on the presence of bias, methodological design, and sample size.

RESULTS

The systematic review of the literature on music therapy in pregnancy, childbirth, and the postpartum period revealed a number of important findings that highlight both the potential and the limitations of this intervention. The studies reviewed provide a comprehensive view of how music therapy can impact on different phases of PSA (pregnancy, birth and postpartum) and provide a basis for future research in this area. Table 1 below details the list of studies that met the inclusion criteria.

Music therapy interventions during pregnancy have been associated with a number of benefits for the mental health and emotional well-being of pregnant women. Teckenberg-Jansson et al. (2019) conducted a randomized controlled trial in which they evaluated the effects of music therapy on prenatal anxiety. Their research found that pregnant women who participated in music therapy sessions showed a significant reduction in anxiety levels compared to the control group. Music, by providing a space of relaxation and comfort, appears to play a crucial role in reducing the stress associated with pregnancy, thus improving the overall well-being of pregnant women.

In a similar study, Belloeil et al. (2020) examined the impact of music therapy on emotional well-being during pregnancy. Using a group intervention approach, the researchers found that music therapy not only reduced symptoms of anxiety and stress, but also promoted a greater sense of emotional

connection between mother and baby. This study highlights the importance of considering music therapy as a complementary tool in prenatal care to improve the emotional experience of pregnant women.

Table 1.

Music therapy (TM) during pregnancy.

Appointment	Country	Participants	Duration	Context
García-González et al. (2018)	Spain	409 pregnant women in the third trimester: 205 control and 204 intervention.	40 minutes of music application.	RCT. To evaluate the effect of TM on maternal anxiety and the possible effect of this anxiety on delivery.
Teckenberg-Jansson et al. (2019)	Finland	102 high-risk pregnant women (trimester not specified): 50 control and 52 intervention.	3 consecutive days of live music.	RCT. To assess effects of live TM on HRV (heart rate variability).
Belloeil et al. (2020)	France	151 first trimester women (*TOP: termination of pregnancy).	20 minutes of pre-operative music application.	RCT. To evaluate the effect of preoperative TM intervention on the pain of a TOP.
Catalgol y Ceber Turfan (2021)	Turkey	100 primiparous pregnant women (36, 37 and 38 weeks) aged 18 to 35 years: 50 control and 50 intervention.	20 minutes of music application.	RCT. To evaluate the effects of TM (non-stress test: NST) on maternal, fetal and neonatal outcomes.
Estrella-Juárez et al. (2022)	Spain	343 pregnant women (delivery): 104 TM intervention, 124 VR intervention and 114 control.	40 minutes, divided into two phases: the NST assessment phase and the first phase of labor.	RCT. To evaluate the effects of TM (and virtual reality: VR) on anxiety levels.

Music therapy during childbirth

The use of music therapy during childbirth has been investigated in several studies, with a focus on how music can affect pain management and overall well-being of the parturient. García-Gonzalez et al. (2018) conducted a systematic review of clinical trials evaluating the efficacy of music therapy for pain relief during childbirth. They found that music therapy significantly reduced pain perception and the need for analgesia and provided a more positive childbirth experience. Musical interventions, combined with breathing and relaxation techniques, proved effective in managing pain and stress during childbirth, offering a valuable alternative to traditional methods of analgesia.

Postpartum music therapy

The impact of music therapy on the postpartum period has been extensively researched, with a particular focus on how it may affect mental health and the mother-baby bond. Çatalgöl and Ceber Turfan (2021) conducted a study to evaluate the effects of music therapy on postpartum depression and maternal bonding. The results showed that music therapy sessions helped reduce symptoms of postpartum depression and improved the quality of mother-baby bonding. Music provided a means of emotional expression and support during the postpartum period, demonstrating its value in treating depression and promoting a positive emotional bond.

Estrella-Juárez et al. (2022) conducted a systematic review focusing on the efficacy of music therapy as an adjunctive treatment for postpartum depression. Their analysis of the available studies found that music therapy not only reduced symptoms of depression, but also facilitated a more rapid recovery of emotional well-being. Music, by providing a space for relaxation and introspection, contributed to the emotional recovery of new mothers and the strengthening of the bond with their newborns.

Limitations of the reviewed studies

Despite the promising results obtained, the review of the studies reveals several limitations that affect the generalizability of the findings. Variability in music therapy interventions, differences in methodological designs, and limited sample sizes are aspects that should be considered. The reviewed studies showed a lack of standardization in the music therapy techniques used, making it difficult to compare results across studies. In addition, many studies included small samples, which limits the robustness of the conclusions and the ability to generalize the benefits of music therapy to a larger population.

The methodological quality of some studies is also of concern. Lack of adequate control groups and heterogeneity in outcome measures affect the interpretation of results and the assessment of the effectiveness of music therapy. To

advance knowledge about the use of music therapy in PSA, it is essential to conduct research with more rigorous and standardize.

Recommendations for future research

Based on the findings and limitations of the reviewed studies, it is recommended that future research focus on standardizing music therapy interventions and implementing more robust methodological designs. Randomized clinical trials with appropriate control groups and larger sample sizes may provide a more accurate assessment of the efficacy of music therapy for PSA. In addition, evaluation of the long-term effects of music therapy and exploration of different musical approaches and techniques may contribute to a more complete understanding of how this intervention can be used effectively in the context of pregnancy, childbirth, and the postpartum period.

In conclusion, music therapy has significant potential to enhance the experience of pregnancy, childbirth, and the postpartum period. The studies reviewed suggest benefits in reducing anxiety, managing pain, and providing emotional support during the postpartum period. However, more research is needed to confirm these findings and to develop evidence-based practices that can be used effectively in perinatal care.

DISCUSSION

Critical review of recent developments

The systematic review of recent studies shows that music therapy has significant potential to improve the experience of pregnancy, childbirth and postpartum. However, it is important to consider the methodological limitations that affect the interpretation of the results. The heterogeneity of the intervention approaches and the variable quality of the studies highlight the need for more standardized and rigorous research.

The effects of music therapy on reducing anxiety during pregnancy and managing pain during childbirth are promising. The ability of music to influence the emotional and physical state of pregnant women is supported by theory and empirical evidence, but the lack of standardization of techniques and variability in study results limit the generalizability of these benefits (Teckenberg - Jansson et al., 2019; Belloeil et al., 2020).

In the postpartum period, music therapy has been shown to be effective in strengthening the mother-baby bond and reducing postpartum depression (Çatalgöl & Ceber Turfan, 2021). The possibility of using music as a tool to support mental and emotional health during this critical period is a growing area of interest. However, the lack of adequate control groups and small sample sizes in some studies affect the robustness of these findings (Estrella-Juárez et al., 2022).

Limitations and recommendations

The main limitations identified in the reviewed studies include variability in music therapy interventions, lack of standardization of outcome measures, and limited sample sizes. To overcome these limitations, studies with more rigorous methodological designs are recommended, including randomized clinical trials and longitudinal studies evaluating the long-term effects of music therapy on PSA. In addition, it is critical to develop standardized guidelines for the use of music therapy in the context of pregnancy, childbirth, and postpartum to ensure consistency of interventions and improve comparability across studies.

CONCLUSIONS

The systematic review of the literature on the use of music therapy during pregnancy, childbirth, and the postpartum period (PPE) reveals a significant potential for this intervention to support the mental and physical health of women during these critical periods. Throughout the various stages of the reproductive cycle, music emerges as a powerful tool that can influence the emotional and physical well-being of mothers, as well as strengthen the bond with their newborns. However, in order for this potential to be translated into effective and widespread clinical applications, it is necessary to consider both the positive findings and the methodological limitations that have emerged from the studies reviewed.

In the context of pregnancy, evidence suggests that music therapy may be an effective intervention for reducing anxiety and improving the emotional well-being of pregnant women. Studies such as that by Teckenberg-Jansson et al. (2019) have shown that music therapy sessions can significantly reduce prenatal anxiety levels, which is crucial given that anxiety during pregnancy is associated with adverse outcomes for both mother and baby. This finding has important practical implications, as it suggests that incorporating music therapy sessions into prenatal care could not only improve the quality of life of pregnant women, but also contribute to a healthier pregnancy. For example, women who experience high levels of anxiety during pregnancy may benefit from group music therapy sessions where music serves as a means of relaxation and stress reduction, facilitating a more positive pregnancy experience.

During childbirth, music therapy has shown benefits in pain management and anxiety reduction, which could have a significant impact on the birth experience. Research, such as that by García-González et al. (2018), has shown that music therapy can be an effective adjunct to traditional pain management interventions. In practice, this suggests that hospitals and birthing centers could integrate music therapy into their maternity care protocols, offering women the opportunity to use personalized music to reduce pain and stress during the birth process. One practical example could be the use of carefully curated playlists that accompany women through different stages of labor, adapting to their musical preferences and emotional needs.

In the postpartum period, music therapy has also proven to be a valuable intervention, especially in the prevention and treatment of postpartum depression and in strengthening the emotional bond between mother and child. The study by Çatalgöl and Ceber Turfan (2021) highlights how music can facilitate emotional expression and bonding between mother and baby, which can help alleviate the symptoms of postpartum depression. This finding has important practical implications, as it suggests that music therapy sessions can be integrated into postpartum support programs, both in clinical and community settings, to help new mothers cope with the emotional stress associated with postpartum. For example, in support groups for new mothers, the inclusion of music therapy sessions could provide a safe and supportive space to share experiences and promote emotional recovery.

Despite the promising benefits of music therapy for PSA, the review also highlighted several limitations of current research. Heterogeneity in intervention approaches, lack of standardization in techniques, and variability in outcome measures make it difficult to generalize findings. In order for music therapy to be more widely and effectively used in clinical practice, it is critical that future research addresses these limitations. Specifically, studies with more rigorous methodological designs are recommended, including randomized clinical trials with larger sample sizes and greater standardization of music therapy interventions. This will allow not only to validate the benefits of music therapy in PSA, but also to develop clinical protocols that can be implemented consistently across different maternal and child health care contexts.

In conclusion, music therapy has the potential to become a standard intervention in prenatal, perinatal, and postnatal care, offering significant benefits in reducing anxiety, managing pain, and strengthening the mother-baby bond. However, in order for this potential to be translated into evidence-based clinical practice, it is essential to continue research using more robust and standardized methodologies. Only through a rigorous and systematic approach will it be possible to optimize the use of music therapy and maximize its positive impact on the health and well-being of women and children during PSA.

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Picture created using Leonardo.ai by D. Gamella - Promt "gestación y musicoterapia"

MUSICAL ACCOMPANIMENT TO THE BIRTH PROCESS IS A HIGHLY BENEFICIAL SUPPORT FOR BOTH BABY AND MOTHER

MISOSTENIDO
REVISTA DE MUSICOTERAPIA unir

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WHAT HAPPENS WHEN MUSIC THERAPY HAPPENS: THE DYNAMICS OF MUSIC THERAPY?

¿Qué sucede cuando hacemos musicoterapia: La dinámica de la musicoterapia?

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ABSTRACT
This paper presents a bridging theory of music therapy, intended to describe the core concepts of music therapy in an intuitive fashion that is accessible to a multi-disciplinary audience. Calling for a paradigm shift in the way that music therapy is empirically validated, it highlights the difficulty with the protocolization of music therapy for the purpose of randomized control trials. Centred around the phenomenon of entrainment, it proposes a broad definition of the iso-principle and describes what happens when music therapy happens from a dynamical systems perspective. The therapeutic alliance is described analogously to the bond between participatory sense-makers, or two entrained dynamical systems and a selection of video excerpts are used to exemplify how music therapists use the broad iso-principle to entrain with their service users and lead them from one state to another.

Keywords: music therapy, dynamical systems, therapeutic alliance, iso-principle.

RESUMEN
Este artículo presenta una teoría puente de la musicoterapia, destinada a describir los conceptos básicos de la musicoterapia de una manera intuitiva que sea accesible a una audiencia multidisciplinaria. Al hacer un llamado a un cambio de paradigma en la forma en que la musicoterapia se valida empíricamente, destaca la dificultad con la protocolización de la musicoterapia orientada a ensayos controlados aleatorios. Centrado en el fenómeno del arrastre, propone una definición amplia del principio iso y describe lo que sucede cuando la musicoterapia ocurre desde una perspectiva de sistemas dinámicos. La alianza terapéutica se describe de manera análoga al vínculo entre los creadores de sentidos participativos, o dos sistemas dinámicos arrastrados, y se utiliza una selección de extractos de vídeo para ejemplificar cómo los musicoterapeutas usan el amplio principio iso para entrenar a los usuarios de sus servicios y conducirlos de un estado a otro.

Palabras clave: musicoterapia, sistemas dinámicos, alianza terapéutica, principio iso.

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BACKGROUND

Music therapy (in its modern professional incarnation) traces its origins to the aftermath of the Second World War (Davis & Hadley, 2015) and may be defined as a systematic process of intervention using musical experiences in order to help a client promote health (Bruscia, 1998 as cited in Frederiksen, 2019 p.26). Although different governing and accreditation bodies define it slightly differently around the world, common ground can be found in the 'evidence based' paradigm, the necessity of its delivery by a credentialled professional and its use of music as the primary therapeutic medium (i.e. the therapy is delivered through listening to, moving to, creating, re-creating and discussion of music and musical experiences) (Health Service Executive [Ireland], 2022; Irish Association of Creative Arts Therapists, 2024; Deutsche Musiktherapeutische Gesellschaft, 2022; British association of music therapy, 2022; American music therapy association, 2005). Music therapists work in a wide variety of

settings including schools, hospitals, care homes and private clinics and are thus often embedded in multi-disciplinary teams.

Music therapy theory

Music therapy academic theory generally instantiates in one of three flavours, indigenous, recontextualization and bridging theories (Aigen, 2005 pp. 23-28, as cited in Lauzon, 2011). Indigenous theories hold the music itself as the primary focus of analysis, solely using the academic language of music therapy, a critique of this approach is that it can prove impenetrable to other professionals in the multi-disciplinary teams in which music therapists are often embedded, as well as for policy makers (especially when these extra-professional colleagues are not musicians themselves). Recontextualization theories on the other hand, solely use the language and concepts of other disciplines to describe the music therapy process.

A critique of this approach may be that much of the information and phenomena that music therapists use to inform their practice can get lost in translation. The final flavour comes in the form of bridging theories. These theories "attempt to bridge the gap between music therapy and other disciplines using languages and concepts from music therapy and other disciplines" (Lauzon, 2011). This paper will take the form of the latter approach and rather than adopting the view of a music therapist, will attempt to utilise the transdisciplinary nature of systems science (Hieronymi, 2013) to construct a bridging theory of music therapy to behold an accessible view for a multi-disciplinary audience whilst maintaining the meaning of the core indigenous concepts and language.

The need for a paradigm shift

As an 'evidence-based' discipline, music therapy has been subjected to numerous randomized control trials (RCT's) (Vink & Bruinsma, 2003), the gold standard generally being the Cochrane reviews, of which, numerous studies have returned inconclusive results (Aalbers et al., 2017; Gold et al., 2005; Gold et al., 2006; Bradt et al., 2010; Bradt & Dileo, 2010). Some researchers have pointed out that the inconclusiveness of these studies may be due to the evidence-based paradigm, as RCT's are not applicable to the key features of dynamic psychotherapy which are subjective in nature (Shedler, 2010, 2015; Shean, 2015). Other researchers, broadly in concurrence with this view have already tried to construct theories using the language of dynamical systems (Crowe, 2003; Lauzon, 2011). However, these attempts seem to generate more confusion and jargon, as Crowe (2003) lamentingly concludes that "we can never know how and why music therapy works". Lauzon (2011), on the other hand, creates a complicated web of musical systems and musical states that seem to lack falsifiable predictions. The paradigm shift adopted by these researchers however will stand as our precedent and rationale for the coming attempt at providing an answer to a special case of Lauzons (2011) question "what happens when music happens", that being, 'what happens when music therapy happens'.

Core concepts of music therapy

Music therapy, being part of the creative arts branch of therapies, is generally considered to be psychotherapeutically oriented (De Witte et al., 2021) although other approaches do exist within the field, namely neurologic music therapy, which takes a neuroscientific approach (Thaut & Hoemberg, 2014) and educational music therapy (taking an educational approach, (Wilson, 1991). The bridging theory outlined here is an attempt to describe what happens when music therapy happens regardless of the theoretical approach. Because of this, rather than focusing on theoretical orientations within the discipline, we shall examine concepts that are present independent of any given theoretical orientation. These centre around health musicking, the therapeutic alliance and the iso-principle which will be described in detail in the next sections. One final piece of housekeeping before we continue, is to differentiate between music therapy and health musicking.

Health musicking

Health musicking is defined as "the appraisal and appropriation of the health affordances of the arena, agenda, agents, activities, and artefacts of a music practice" (Stige, 2002, p. 11) and is a derivative of Small´s (1998, p. 9) original term musicking, which is "to take part, in any capacity in a musical performance, whether by performing, by listening, by rehearsing or practicing, by providing material for performance (what is called composing), or by dancing". Although health musicking can take place in any context, when it is explicitly used by a music therapist, in a therapeutic context, we may think of it as the process of music therapy or the mechanism by which music therapy manifests (with music therapy being the overarching field).

The therapeutic alliance

The therapeutic alliance is the strongest positive indicator of outcome across the psychotherapies (De Witte et al., 2021) and may be thought of as "the specific type of relationship between the patient and therapist, which takes place in a setting oriented towards the patient's change and development" (Frederiksen, 2019, p. 23). This can be further broken down into the "personal" and "task related" alliances

(Hougaard, 1994). De Witte et al. (2021) note that "music therapy enhances therapeutic alliance and group processes through playful musical interactions, shared musical experiences, musical attunement, musical synchronicity and musical dialogue".

The iso-principle

The iso-principle is an indigenous music therapy term (Goldschmidt, 2020 p. 1) and may be considered to be a special case of entrainment (Kim et al., 2018). Entrainment in this context means "the formation of regular, predictable patterns in time and/or space through interactions within or between systems that manifest potential symmetries" (Collier & Burch, 2000). Regarded as "the heart of much current music therapy practice" (Bunt, 1994, p. 34) or "Principle Number One" (Donald & Pinson, 2012 as cited in Goldschmidt, 2020, p. 6), the Iso-principle can be described as "using one or more elements of music to meet a patient's current state, then changing said musical element(s) to lead them to a different state" (Altschuler, 1954; Heiderscheit & Madson, 2015; Yinger & Lownds, 2018 as cited in Goldschmidt, 2020, p. 1).

One of the major problems associated with this term however is the way in which it is used, as "contemporary literature indicates that its definition may have become much more than its original intent" and "the current descriptions and clinical illustrations regarding its use… are scarce" (Heiderscheit & Madsen, 2015). Goldschmidt (2020, p. 2) corroborates these findings and notes "considerable disagreement amongst scholars in 1) what bodily state is/can be modified, and 2) the specific elements of music (that) drive the intended change".

Though there are sparse empirical investigations into the iso-principle, the ones that have taken place (Starcke et al., 2021; Goldschmidt, 2020; Heiderscheit & Madsen, 2015; Lee, 2005; Shatin, 1970) report conflicting results. This may be due to the disagreement among the definitions or the difficulty in protocolizing such person-centred approaches to therapy that is common across the evidence-based therapies.

In line with our previous call for a paradigm shift, rather than attempting a randomized control trial (likely to return inconclusive results), for the remainder of this paper, we shall try to define the 'first principle of music therapy' and propose a natural mechanism for the phenomenon.

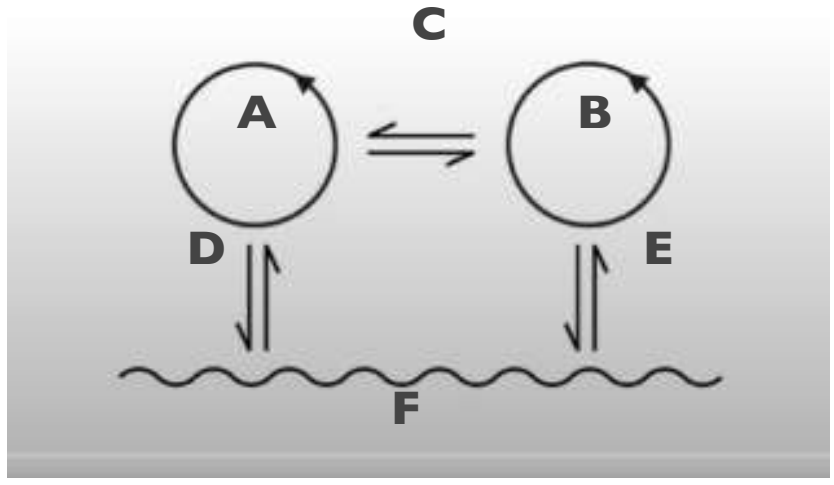
DYNAMICAL DYADS PARTICIPATORILY SENSE-MAKING

Since the publication of Varela, Thompson and Rosch's *The embodied mind* in 1991, the 4E (embodied, enactive, embedded & extended) turn in the study of cognition has gathered more and more steam (Newen et al., 2018, pp. 3-4). This work has been supported by the ecological psychology of Gibson (Lobo et al., 2018), *The extended mind* of Clark and Chalmers (1998) and more recently the participatory sense-making of De Jaegher and Di Paolo (2007). Drawing on this tradition and in particular, the theory of autopoiesis (Maturana & Varela, 1973), De Jaegher & Di Paolo (2007) describe an enactive account of social cognition through what they term "participatory sense-making".

The result of which is a symbol presented in the image (Figure 1) below. It should be stressed that one need not adopt the theoretical viewpoint from 4E cognition (mentioned above) in order to adopt our view. One may also view the symbol as any two dynamical systems interacting from say, a purely mathematical perspective or from such a psychodynamic viewpoint as two persons interacting. The key here is that the symbol, here titled participatory sense-makers, can be understood independently of one's theoretical standpoint and in that sense is transtheoretical (transtheoretical as in beyond any singular theoretical viewpoint).

Figure 1.

Participatory sense-makers.



Note: adapted from De Jaegher & Di Paolo, 2007.

'A' and 'B' in the below image, may each represent an autopoietic system, a person, or a mathematical entity (dynamical system). 'D' and 'E' may represent the two-way connection between each entity and its environment, either through perception and action or some other means of

exchange, (e.g. musical or electro-chemical). 'F' represents the larger environment into which each entity is embedded, as a cell to a body, a person to a community, or a dasein to its umwelt. Finally, 'C' may represent the interaction between the two systems. From an enactive viewpoint, it is their participatory sense-making, from a mathematical viewpoint, the entrainment of the systems, from a psychodynamic perspective, the 'special relationship' that exists between therapist and service user, also known as the therapeutic alliance.

As we turn our gaze to the special case of 'what happens when music therapy happens', we may see that when the therapist musically engages with the service user (health musicking), if done successfully, the two systems entrain (in a musical context, we may experience this as 'groove'). The more successful the entrainment, the stronger the bond between the two entities (i.e. the stronger the therapeutic alliance). If a therapist adopts an iso-principled approach, rather than immediately (to use the language of dynamical systems) forcing the service user to entrain with their (musical) state, the therapist will try and match their music to the state of the service user and once a connection has been established (the two systems entrain), the therapist subtly changes the musical interaction to either lead the service user from one state to another or enable them to regulate, express or perceive their own state.

This change may be in the degree or quality of interaction, or it may ideally lead to a sustained phase shift in the service user, moving them into a qualitatively or quantitatively different state of health. As previously mentioned, De Witte et al. (2021) note that the therapeutic alliance ('C') is strengthened "through playful musical interactions, shared musical experiences, musical attunement, musical synchronicity and musical dialogue".

As we are taking Figure 1 to be a symbol rather than an image, we must also note that it is not this or that particular music therapy entrainment system (as Lauzon [2011] attempts to taxonomize) but rather something metaphorically akin to a fractal structure which exists at multiple levels or resolutions simultaneously (something that may have led Crowe (2003) to her conclusion "we can never prove what factor in the music therapy process does or does not impact the process").

Just as music exists on the rhythmic, harmonic and timbral levels simultaneously, through the music a music therapist may entrain with their service user on a physiological, psychologic or communicative level. This means that the description can be understood from a psychodynamic viewpoint where the states being changed are qualitative (e.g. pain reduction or emotional expressiveness (Dimaio, 2010), and at the same time, from multiple other viewpoints which may be more quantitative in structure. For example, breath rate, pulse, or in a neurologic music therapy context, a quantitative shift in a person's gait (e.g. stride length) (Thaut & Rice, 2014) or ability to speak (Thaut, 2014).

One of the most comprehensive descriptions of the dynamic interaction we are utilising, is presented in "the self-organising origins of agency" by Kelso (2016). In this opinion piece, based on the theory of co-ordination dynamics (Kelso & Fuchs, 2016), Kelso (2016) describes how the agency of a baby comes into the world through interaction with it.

Through the now classical experimental paradigm of mobile conjugate reinforcement, a baby's leg is loosely tied to a mobile, the baby discovers that it can affect its environment through the movement of its leg, where "this igniting of agency has a eureka like, 'aha' effect; mathematically it corresponds to a bifurcation in a coupled dynamical system". This bifurcation or 'phase-shift' in the relationship between a baby and its environment is analogous to the type of 'phase-shift' that a music therapist may bring about in co-operation with their service user and can be in relation to how they express or experience their inner worlds or how they interact with their environments and the people in them.

Redefining the iso-principle

As the "considerable disagreement" (as noted by Heiderscheit & Madsen, 2015) within the profession on clear definitions of the iso-principle appears pervasive (with Goldschmidt (2020 pp. 10-13) counting 18 different definitions since 1944), part of the aim of our current exploration is to render a clear view of this process.

Whilst it should be noted that this has become "much more than its original intent" (Heiderscheit & Madsen, 2015), the field of music therapy and the technology that we may utilize to examine it with have also grown accordingly. In conducting his pioneering psychiatric work in the aftermath of WWII, Altschuler can hardly have foreseen the development of neurologic music therapy, the Nordoff-Robbins approach or the modern field of music therapy in its entirety. Altschulers, original definition being "the principle of using musical identical to the mood or mental tempo of the patient" (1944, p. 793 as cited in Goldschmidt, 2020) with Altschuler (1948) later adding:

> only after one has worked himself 'musically' into the

> mood or tempo of the mental patient can a shift to a different mood or tempo be made […] the mood or tempo of the music in the beginning must be in "iso" relation with the mood or tempo of the mental patient. The 'iso' principle is extended also to volume and rhythm". (p. 266, as cited in Goldschmidt, 2020)

Considering the section 2 description of the music therapy process, we may tentatively propose a broad definition of the iso-principle as thus:

> The broad iso-principle is the process of purposefully entraining with an individual in their current state through health musicking (where the entrainment may be on a physiologic, psychologic or communicative level), then changing the music (the medium through which entrainment manifests) to shift said individual from one state to another in a direction that moves them towards an idealized picture of health.

MUSIC THERAPY IN PRACTICE

Given our proposed definition of the broad iso-principle, we may now turn our gaze to some specific case examples to see if our view will explain what we observe. In each of the examples presented below, the phenomenon we are observing is 'music therapy', the process of sharing music between therapist and user "health musicking" (specifically "the appraisal and appropriation of the health affordances of the arena, agenda, agents, activities, and artefacts of a music practice" (Stige, 2002, p. 211) and the broad iso-principle as defined above.

Case study 1

Video example 1
https://www.youtube.com/watch?v=fbDKHGg9upQ

In this excerpt of a neurologic music therapy session, we see how the music therapist matches the rhythm of the music to the gait of the service user. Gradually as the service user entrains the rhythm and the "groove" develops, the therapist is able to increase the rhythm which leads to an increase in the speed, distance covered per step and stability of each step (to the point where the walking aid can be taken away). This specific technique is called rhythmic auditory stimulation (Thaut & Rice, 2014) and highlights physiological and neurological levels of entrainment through music between therapist and service user, highlighting how "Rhythm… may fruitfully be defined as an affordance for the entrainment of movement" (Cummins, 2012).

Case study 2

Video example 2
https://www.youtube.com/watch?v=NLuvEwu_dew&list=PLiMwuS3pt_NKUtRXQtLUTI6AammtG2ocZ&index=3

This excerpt of the Nordoff-Robbins music therapy approach to working with children with autism spectrum disorder (Nordoff Robbins Music Therapy, 2017) highlights how the music therapist constantly augments their playing to match the state of the service user, establishing entrainment on a social and emotional level and eventually allowing for the achievement of such goals as "accept less structure and tolerate unpredictability" (4:28-6:54) and "play classical pieces with expression" (6:54-9:10). In the former piece, the music therapist matches with Kate's state by using a piece of music that she initially brought to the session, then evolving what could have been a static piece into a "musical debate/dialogue", we see how the therapist maintains entrainment and prolongs the engagement by increasing the tension playfully upping the key with each cycle of the song. In the latter example the therapist follows Kate's cycling through different classical pieces with vastly different emotional motifs to the point where Kate can express herself through an emotional connection to and through the music. This emotional entrainment, which on one level may be ineffable, is evident to the point that a brief pause for composures sake is shared at 8:53 before returning to the piece with renewed vigour.

Case study 3

Video example 3
https://www.youtube.com/watch?v=GuFGGu1S5D0

In the first example (2:59-4:22), we see how music therapy facilitates the development of the sucking reflex in babies in a neonatal intensive care unit in much the same way that Kelso (2016) describes the development of agency. Through the use of the "pacifier activated lullaby device" (Standley et al., 2010), preterm infants who are born without a sucking reflex due to neurologic immaturity, stimulate music through non-nutritive sucking behaviour on a pacifier that has been wired to a speaker. This non-nutritive sucking then follows over to nutritive sucking which can be further re-enforced by a music therapist entraining with the baby to facilitate breathing and swallowing as seen in minute 1:00-1:40 of this other excerpt (Example video 4 https://www.youtube.com/watch?v=bwKCK3W-96E). Although the first excerpt does not include a strict example of the iso-principle (in the sense that the infant is entrained with a machine rather than a music therapist), we can still see how music facilitates the development of a

relationship between the infant and its environment which is then re-enforced (with an example of the broad iso-principle) in the second excerpt, facilitating sucking, swallowing and breathing.

DISCUSSION

A transtheoretical bridge for music therapy

This approach to describing what happens when music therapy happens may suffer from similar criticisms as highlighted by Jansen (2018) in his review of Cobussen (2017) book, "complexity and musical improvisation" which examines improvisation in music as a field phenomenon. The main criticisms raised being "although the case descriptions of improvisational artists are compelling, selection of the case examples suggests confirmation bias rather than a balanced systematic selection" and "if logic of the analysis remains too implicit, it becomes difficult to validate or falsify the claims empirically" (Jansen, 2018). In a pre-emptive rebuttal to this line of reasoning, although the author must admit that the case studies were selected to highlight the phenomenon we have described, they were meant to be illustrative rather than used as proof of ubiquity. One falsifiable prediction that we might make from our given viewpoint is from the field of co-ordination dynamics. We may hypothesise that when interpersonal co-ordination (the level of entrainment between therapist and service user) appears more pronounced, it will correlate with better therapeutic outcomes (with the reverse also being true).

CONCLUSION

This transtheoretical bridging theory of music therapy, it is hoped, will provide a means for music therapists to describe what happens when music therapy happens in a way that does not lose any of the nuance or concepts that are captured in indigenous theories yet at the same time, prove permeable and perhaps even intuitive for the multi-disciplinary teams and wide array of service users (and carers) that music therapists often find themselves working with. It may be a useful reference for continuous professional development courses for teachers, parents, nurses, speech and language, occupational or physical therapists or any individual who may find themselves working with music therapists or may like to implement some music therapy techniques into their own practice. It may stand as a pedagogic tool for the field of music therapy as it manages to build a link from the once ethereal concept of the iso-principle to a natural explanation of its mechanism through the process of entrainment. It may serve to provide a useful definition "the heart of much current music therapy practice" (Bunt, 1994, p. 34) in the broad iso-principle and ideally put to rest some of the theoretical disagreements within the field. It may provide a mutually intelligible language for music therapists to communicate what it is that they are doing when music therapy happens. Finally, this view of music therapy may shed some light on the inconclusiveness of randomized control trials as it highlights the difficulty in protocolizing how to entrain with an individual as they are in any given moment. Having generated a hypothesis, we may now open the doors to new ways of experimental investigation using the toolbox of systems theory, co-ordination dynamics and 4E cognition as a whole.

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APÉNDICE

Video example 1
https://www.youtube.com/watch?v=fbDKHGg9upQ

Video example 2
https://www.youtube.com/watch?v=NLuvEwu_dew&list=PLiMwuS3pt_NKUtRXQtLUTI6AammtG2ocZ&index=3

Video example 3
https://www.youtube.com/watch?v=GuFGGu1S5D0

Video example 4
https://www.youtube.com/watch?v=bwKCK3W-96E

WHEN MUSIC THERAPY HAPPENS, MUSIC PERMEATES EVERYTHING IT TOUCHES

Picture created using Leonardo.ai by D. Gamella - Promt "investigación y musicoterapia"

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#8,4

RECEPTIVE MUSIC THERAPY: BEYOND PASSIVITY

OPEN ACESS

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Musicoterapia receptiva: más allá de la pasividad

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ABSTRACT
Background. Terminology in music therapy has evolved, particularly in the distinction between receptive and passive music therapy. Traditionally, receptive music therapy, which focuses on listening to music, has been described as passive and can be confused with a lack of patient participation. However, recent studies have emphasized that listening to music involves deep emotional and cognitive processes, thus questioning the validity of the term passive. **Methodology.** A literature review was conducted to analyze the conceptual evolution of receptive music therapy and its implications for perception and clinical practice. In addition, studies of the therapeutic effects of music, its impact on emotional regulation, and cognitive processing during music listening were reviewed. **Results.** The review highlighted that listening to music activates brain regions associated with emotion and memory, challenging the notion of passive music therapy. Patients are actively engaged through emotional and cognitive responses. In addition, receptive music therapy was found to be more effective than active music therapy in certain contexts. **Conclusions.** The transition from the term passive to receptive in the description of music therapy best reflects the active nature of patient involvement and the therapeutic potential of music. This terminological change is essential for an accurate understanding and effective application of music therapy, improving the assessment of its therapeutic benefits and patient adherence to interventions.

Keywords: music therapy, receptive, passive, participation, intervention modality.

RESUMEN
Antecedentes. La terminología en musicoterapia ha evolucionado, concretamente en la distinción entre musicoterapia receptiva y pasiva. Tradicionalmente, la musicoterapia receptiva, centrada en la escucha de música, ha sido descrita como pasiva, pudiéndose confundir con falta de participación por parte del paciente. Sin embargo, estudios recientes han incidido en que la escucha musical involucra procesos emocionales y cognitivos profundos, cuestionando la validez del término pasivo. **Metodología.** Se realizó una revisión de la literatura para analizar la evolución conceptual de la musicoterapia receptiva y de su impacto en la percepción y práctica clínica. Adicionalmente, se examinaron estudios sobre los efectos terapéuticos de la música, su impacto en la regulación emocional, y el procesamiento cognitivo durante la escucha musical. **Resultados.** La revisión resaltó que la escucha de música activa regiones cerebrales asociadas a la emoción y la memoria, lo que desafía la concepción del término musicoterapia pasiva. Los pacientes participan activamente mediante respuestas emocionales y cognitivas. Además, se observó que la musicoterapia receptiva puede ser más efectiva que la musicoterapia activa en determinados contextos. **Conclusiones.** La transición del término pasivo a receptivo en la descripción de la musicoterapia refleja mejor la naturaleza activa de la participación del paciente y del potencial terapéutico de la música. Este cambio terminológico es esencial para asentar una comprensión precisa y materializar una aplicación efectiva de la musicoterapia, mejorando la valoración de sus beneficios terapéuticos y la adherencia de los pacientes a las intervenciones.

Palabras clave: musicoterapia, receptiva, pasiva, participación, modalidad de intervención.

BACKGROUND

In recent decades, music therapy has undergone significant advances in techniques, approaches, and the theoretical and conceptual understanding of its practice. One of the key aspects of this evolution has been the change in terminology used to describe the different modalities of intervention. In particular, the use of the term "receptive

music therapy" as opposed to the term "passive music therapy" has been the subject of debate. This distinction is not trivial, as it directly affects the perception and effectiveness of the therapeutic intervention.

The term passive music therapy has persisted in the literature (Altan & Oğuz, 2016; Kabuk et al., 2022; Lynch et al., 2021; Millett & Gooding, 2018; Montello & Coons, 1999). Receptive music therapy, which is characterized by the patient listening to music, has often been described as a passive process. To illustrate this idea, McPherson et al. (2019) use this term to refer to interventions in which patients simply listen to music without being involved in its creation or performance. In contrast, active music therapy is defined as that which involves participation in musical creation or performance.

However, the concept of passivity has been challenged in the contemporary literature. Recent research suggests that listening to music involves a complex network of neurophysiological and emotional processes, suggesting a much more active patient involvement than previously thought. In this sense, Grocke (2016) emphasizes that music not only acts as an auditory stimulus, but also mobilizes deep cognitive, emotional, and physical responses.

A critical review of the concept of "passivity" in receptive music therapy

The criticism of the term passive has already been addressed by Bruscia (1998), who suggested that receptive music therapy should not be seen as a purely passive experience. Instead, he described it as a form of active participation in which the patient interacts with the music in a deep and meaningful way. This approach recognized that listening to music can be a dynamic process involving the evocation of specific physical responses, the exploration of affective states, and the facilitation of cognitive processes such as memory and imagination.

The term passive, derived from the Latin passīvus, denotes the absence of action or intervention. In the context of a person, this adjective suggests that the individual allows others to act in his or her place or remains on the sidelines of an action. Synonyms of passive include inactive, inert, immobile, apathetic, listless, disinterested, indifferent, or carefree. On the contrary, the antonym of passive is active or participative, from the Latin actīvus, and refers to what or to whom he acts or has the ability to act, and is synonymous with dynamic, energetic, or alive (Real Academia Española [RAE], 2014).

Therefore, the term passive, which refers to something inactive or inert, does not adequately convey the therapeutic interaction that occurs during a receptive music therapy session. In reality, this process should be viewed as an active experience in which the patient, although not physically involved in the creation of the music, becomes deeply involved in an internal dialogue facilitated by the music.

From a philosophical perspective, this argument is in line with the thinking of Merleau-Ponty (2005), who argues that the term passive can be misleading because it overlooks the complexity of the patient's experience. The author sees perception as a dynamic process, not merely receptive, since perception is an organized process in which the person interprets and gives meaning to the stimuli received. Following this line of analysis, Johnson (2007) extends these arguments by pointing out that perception and aesthetic experiences, such as music, are not limited to the passive reception of sensory information but involve active participation in interpreting and assigning meaning to sensory stimuli. Therefore, in receptive music therapy, the act of listening to and experiencing music must be conceptualized as a deeply active and engaged process.

Cognitive and emotional implications of receptive music therapy

In psychology, the term passivity is often associated with a lack of engagement or activity in the cognitive process, suggesting that the person is not actively participating or effectively processing the experience (Schnitzler et al., 2021). In contrast to this view of passivity, music is precisely a dynamic stimulus that acts as an active catalyst, capable of mobilizing profound responses thanks to the fact that the person actively participates in the process, becoming emotionally and cognitively involved in the musical experience (Fernández-Company et al., 2022; Freitas et al., 2022; García-Rodríguez et al., 2023).

The brain's response to music can produce therapeutic benefits such as reduced anxiety and improved mood, suggesting an active role for responsive music therapy in therapy (Sacks, 2008). Specifically, from a neuroscience perspective, the brain actively processes music, either by listening to it or by performing it. Some studies have shown that listening to music activates brain regions associated with emotion, memory, and reward (Levitin, 2018; Mavridis, 2015; Zatorre, 2015). This suggests that responsive listening involves significant neural engagement, challenging the idea that it is a passive activity.

In practical terms, referring to the process as receptive rather than passive clarifies that the patient is not a mere observer, but an active participant in the therapeutic process

through emotional and cognitive responses to music. This change in terminology better aligns with the goals of music therapy, which often involve personal reflection (Fernández-Company et al., 2024), emotional processing (García-Rodríguez et al., 2021), and introspection (Quintin, 2019; Wigram & Gold, 2006).

In addition, recent studies have shown that receptive music therapy can achieve significant therapeutic effects more quickly than active music therapy (Atiwannapat et al., 2016), and that this modality has been shown to be effective in improving cognitive function and reducing depressive symptoms in older adults with mild cognitive impairment (Xue et al., 2023). Similarly, Tsoi et al. (2018) have also suggested that receptive music therapy may be more effective than active music therapy in certain contexts, highlighting the importance of considering this modality as a valuable and effective intervention in various clinical settings.

CONCLUSSIONS

This position paper is not intended to single anyone out or to criticize the use of terms that have long been part of the common language of music therapy. Rather, the intention is to open a constructive dialogue about how we can unify terminology so that it more accurately reflects the active and profound nature of the therapeutic interventions that are made through receptive music therapy techniques. By adopting the term receptive music therapy, we will not only organize our language in accordance with the advances that allow for the understanding of the role of the patient, but we will also help future professionals to approach their practice with a more current and effective perspective. With gratitude for the previous work of all the authors, I share this reflection, and I trust that, by unifying criteria, it will be possible to evolve for the benefit of our patients and the field of music therapy as a whole.

In my opinion, the definitive transition from the term passive to receptive would not only imply an improvement in conceptual precision, but also a way of recognizing and valuing the active involvement of the patient in music therapy and the profound therapeutic potential of music as a stimulus.

However, despite the criticisms and advances in understanding the active role of the patient in listening to music, it is striking that the term passive music therapy continues to be used by both music therapists and professionals from other disciplines. It is possible that this use persists in part because of terminological inertia or the lack of systematic updating in academic and professional training. However, I believe that terminology influences the way professionals understand and apply therapeutic interventions, and that the lack of consensus and research focused on music as a stimulus may perpetuate the existence of concepts that are not aligned with current reality.

For this reason, it is imperative that music therapy education engage in deep pedagogical work to address and clarify terminology, especially when students encounter terms such as ´passive music therapy´ or ´receptive music therapy ambiguously in past and contemporary literature.

The confusion that can be caused by the use of outdated terms underscores the importance of promoting a clear and accurate understanding of the discipline. In order to avoid misunderstandings and ensure consistent application of techniques, it is crucial that teachers emphasize the correct use of receptive music therapy, encourage critical reflection on sources that do not use this terminology, or clarify the historical context of the use of these terms. In this way, a more accurate and effective practice can be promoted that is aligned with contemporary advances in the field.

Ultimately, precision in the terminology used can have a direct impact on clinical practice and promote a more accurate understanding of receptive music therapy, helping music therapists to design more effective interventions and communicate more clearly with their patients. In addition, recognizing the patient's active participation through listening may contribute to a greater appreciation of this modality and adherence to treatment.

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THERAPEUTIC POTENTIAL IS ACTIVATED BY THE IMPACT OF MUSIC

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REVISTA DE INVESTIGACIÓN EN MUSICOTERAPIA

9

9TH ISSUE UNDER CONSTRUCTION

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