Music360

A 360 DEGREES PERSPECTIVE ON THE VALUE OF MUSIC



Deliverable 1.1

< A framework to quantify and qualify the value of music – version 1 >



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Introduction

This section presents the approach to measuring value in Music360, the objectives set according to the project proposal, and the structure of the document.

The concept of value

Value represents, from a business viewpoint, the utility a buyer receives from an offering and its features (Meehan et al., 2011). This utility can be economic and intangible, the former represents the price/value for money (Sweeney & Soutar, 2001), while the latter is individualistic and, thus, more customers' needs must be considered to fix a price and value proposition able to capture value (Meehan et al., 2011; Osterwalder & Pigneur, 2010).

Objectives of this deliverable

The **description of D1** in the project's proposal indicates that it will involve a conceptual framework:

- ★ To measure the monetary and non-monetary value of music,
- ★ in a quantitative and qualitative way,
- ★ firmly founded in economic and social theory,
- ★ that be multi-stakeholder: it will define the value of music for various stakeholders such as creative entities, music user, and policy makers,
- ★ Also, will include the methods and techniques to measure the various rubrics.

Therefore, the general objective and the specific objectives of deliverable D1 have been set as follows:

The **general objective** is to present the conceptual framework defined in the project Music360 to measure the monetary and non-monetary value of music.

To reach the general objective, four **specific objectives** are set as follows:

- O1. To analyse the literature related to measuring value both in a general sense and focused on music.
- O2. To develop a framework supported by the literature review which includes the types of values to involve and scales to measure these values.
- O3. To organise the cases analysed in the literature in a multidimensional model which involves values, venues, environment, and stakeholders.
- O4. To connect the multidimensional model with the living labs proposed in the WP6.

Structure of this document

This document is organised into eleven sections. After this introduction section, the second section comprises a review of the dimensions of music that appear in the literature, including the types of values. Section 3 refers to stakeholders analysed by previous studies, while sections 4 to 8 focus on each type of value and the main ideas in the literature related to them. Section 9 centres on the framework proposed in this D1, which connects customers' values with outputs such as customers' behaviour and performance of companies in the music ecosystem. Section 10 presents the Music Value

Matrix, a matrix that connects dimensions to organise cases from the literature review into four groups. This matrix and the framework will be a support for living labs selection in WP6. Finally, Section 11 presents the main conclusions of the deliverable.

Dimensions to measure the value of music

Analysing the value of music requires to consider all the dimensions that might be involved, which would include the environment where the music is played, the technology, the venue, if music is the main purpose of the venue or a secondary element, and the values of music by stakeholder. Taking into account that music is a multidimensional phenomenon, it is important to recognize that several of these dimensions are intimately linked to various music values. The next sections explore these dimensions.

Recorded vs live music

From the perspective of the music industry, which is the focus of interest of the Music360 project, there are two fundamental dimensions linked to the production and distribution of music that Pizzolitto (2023) explains as follow:

- (a) the production and distribution of **recorded music** through physical and digital support networks, as guided by record companies; and
- (b) the production and distribution of **live music**, which is controlled by world-famous artists but is characterized by many minor professional musicians, sound technicians, and other workers.

Related to this, a systematic literature review of the most recent papers discussing the numerous connections between music, business, and management (Pizzolitto, 2023) states that at present there are, among others, two main research themes in the field (that are related to the way in which music can be valuated):

- Digitally revolution and music industry: have things changed?
- Live music events and performance: a renovated and segmented phenomenon.

In this sense, Pizzolitto (2023) concludes that "music comprises a dynamic, complex, and chaotic environment in which futuristic management styles and co-creation, co-innovation, and post co-creation logics should be considered in planning and operationalizing strategies at every level of competition. Although the digital revolution has transformed many aspects of the music business and management, several issues continue to limit its evolution. [...] in the future, a considerably relevant role will be played by events, festivals, and concerts whereby innovative managerial styles can overcome the complex conditions of minor artists and labels and allow them to flourish."

In addition, we must consider two more pairs of dimensions linked to the commented that, as will be analysed later, are related to the way in which music is valued.

Outdoor vs indoor music venues

On the one hand, regarding the venues, we can differentiate between **outdoor and indoor music venues**.

Outdoor and indoor music venues offer distinct experiences for performers and audiences due to variations in ambiance, acoustics, logistics, and overall atmosphere that are, logically, much more controllable indoor than outdoor. That is important in terms of the effects of the music. In any case, as Oakes & Warnaby (2011) state "although most existing studies of music in service or retail contexts have involved background music in indoor environments, it is acknowledged that music is capable of

transforming perceptions of any space, regardless of whether it is passively heard as a prerecorded servicescape element or actively listened to as a live concert performance. The concept of heterogeneity (drawn from the services marketing literature) provides useful theoretical grounding to link and discriminate between live, pre-recorded, indoor, and outdoor music. Live concerts are high in heterogeneity due to the inevitable unpredictability of live performance, whereas pre-recorded servicescape music is low in heterogeneity."

Background vs foreground music

On the other hand, we are referring to **background music** and **foreground music**, which serve distinct purposes within various contexts, and their differences mainly lie in their intended roles and levels of prominence.

As Young (2007) states, *background music* functions primarily to support narrative and expressive content. With the advent of recording, the role of background music expanded, with almost-unnoticed music accompanying a shopping trip, creating a specific mood, and, some believe, predisposing a listener toward making purchases and being part of the passive user experience.

Foreground music, by contrast, maintains the primary emphasis on the actual sound heard by the listener. Foreground music requires a more aware approach to listening, an open-minded imaginative attitude that involves the listener in actively completing the experience. This attentive listening is expected in most concert halls or outdoor live music and was also the assumed model for high-end home stereo systems, where the best site for listening is a comfortable chair placed midway between two speakers. It is assumed that foreground listening is the primary activity taking place in each of these cases.

Types of values in music

To measure value in music, studies use three main literature backgrounds as support: the Total Economic Value (TEV) framework, the Theory of Consumption Values (TCV), and the previous literature focused on music.

Types of values from the Total Economic Value approach

The **Total Economic Value** (TEV) approach differentiates between use and non-use value, and it is a cost-benefit method. TEV aims to measure benefits beyond market values, which are related to externalities. Frey (2003, 2019) applied this approach to measure value of cultural goods and services, and Andersson et al. (2012a) used TEV to measure use and non-value of music festival visitors and local residents. The values included in the TEV approach, and its description are presented in Table 1. This approach allows to measure the value of a music event for both participants and residents in the city.

Table 1. Values in TEV applied to music events

Types of values	Description
Use value	
Direct use value	Value related to the direct expenses of visitors within the festival area (the entrance fee).
Indirect use value	Value related to the indirect expenses of visitors but not within the festival area (hotels, transport costs, meals).
Option value	Value is related to the guarantee that people could attend a festival in the future, even if they do not participate at the present time.
Non-use value	
Bequest value	Value for residents related to the provision of culture and entertainment for younger residents.
Existence value	Value for residents related to the effect of the festival on the image and development of the city or town.

Source: Frey (2019), Andersson et al. (2012a)

Types of values from the Theory of Consumption Values

The **Theory of Consumption Values** (TCV) is defined by Sheth et al. (1991) and considers five values which influence consumer choice behaviour: functional value, conditional value, social value, emotional value, and epistemic value. Some values of this theory are present in several studies analysing values of music, although they do not cite Sheth's model.

Table 2. Values in the Theory of Consumption Values

Types of values	Description
Functional value	Value is related to the functional, utilitarian and physical attributes of a
	product or service acquired.
Social value	Value is related to the association of a product or service acquired with
	stereotyped demographic, socioeconomic, and cultural-ethnic groups.
Emotional value	Value is related to the association of a product or service acquired with
	specific feelings (emotional responses).
Epistemic value	Value is related to the association of a product or service acquired with
	curiosity, novelty, and satisfying a desire for knowledge.
Conditional value	Value is related to the association of a product or service acquired with
	the presence of antecedent physical or social contingencies (specific
	situation or circumstances).

Source: Sheth et al. (1991)

Sweeney & Soutar (2001) use TCV to analyse willingness to pay for item in retails. They define a 19-items scale which involves emotional and social values, and functional value (divided into two values named quality/performance and price/value for money). The quality/performance value is related to the perceived quality and expected performance of the product, while the price/value for money type is related to the product's reduction of its perceived short-term and longer-term costs. In contrast to Sheth et al. (1991), Sweeney & Soutar (2001) consider that the distinct types of values are not

independent and define multidimensional constructs for the four values. The values defined by Sweeney & Soutar (2001) are also frequently used in papers analysing the value of music.

Turel et al. (2010) also use the TCV to conduct an analysis of values related to the use of ringtones in mobile phones. They include social value and value-for-money as Sweeney & Soutar (2001) and add two more values named visual/musical appeal and playfulness. The **visual/musical appeal** refers to value related to aesthetic elements of the good analysed, while **playfulness** is the value related to engagement, and allows users to gain two additional values, *escapism* (from the daily tasks) and *enjoyment* (emotional gain). They say that most of the values are independent, thus, values might be correlated to some extent.

TCV has been applied recently to measure value in examples related to music. Yoon et al. (2021) study values that explain users' intention to watch online TV clips and use the five types of values defined by Sheth et al. (1991). Besides, Saha et al. (2023) use functional, social and emotional values to analyse satisfaction with music festivals.

Types of value from the literature about music

Literature focused on music offers an extensive application of different types of values to measure events attendance and the effects of music on customers' behaviour. In this section, Levinson (2014) is used as the main reference as he offers a complete classification of values of music, summarized in Table 3 and explained afterwards. Additional references are provided in the subsequent sections centred on measuring every type of value.

Table 3. Values of music by Levinson

Types of values	Description
Intrinsic vs instrumental	Intrinsic: value of engagement with music for its own sake.
values	<i>Instrumental</i> : value of music to some good beyond that residing in the very engagement with music.
For an individual vs for a	For an individual: private value of music.
group/ community	For a group: public value of music.
Artistic vs non-artistic	Artistic: Value that music has as music because it is an art. This value is
values	considered both intrinsic and instrumental.
	Non-artistic: Value of music beyond its artistic value. This value is considered
	as instrumental.
Artistic values	Intrinsic & artistic: aesthetic value, experiential value, and hedonic value.
	Instrumental & artistic: symbolic value, self-affirmation value, idiosyncratic
	value, mood-enhancement value, and accompaniment value.
Non-artistic values	Economic value: music as a commodity.
	Practical value: social value, entertainment value, therapeutic value,
	distraction value, relaxation value, mnemonic-improvement value, mobility-
	enhancement value, seduction-facilitating value.
	Not purely practical: cognitive value, ethical value.

Source: Levinson (2014)

The first classification given by Levinson (2014) differentiates between **intrinsic values of music** and **instrumental values of music**. This differentiation has normally served public authorities to justify the public policies for supporting arts and culture by implying that instrumental value is a set of positive effects (e.g. economic growth, mental health, urban regeneration and civic pride) (Behr, Brennan, and Cloonan, 2016a).

Secondly, he differentiates between the value of music for an individual and the value of music for a group or community (Levinson, 2014). These categories can be explained by the difference between **private values and public values** cited in the report elaborated by Deloitte Access Economics (2011) to explain "The economic, social and cultural contribution of venue-based live music in Victoria". In the report, they use four main categories to illustrate the difference between private and public values of music: culture, community, quality of the environment, and health and social wellbeing:

- "Private values are those experienced by individuals directly involved in the 'live music transaction' such as performers and patrons whereas public values are those experienced by the broader community. Public values will in many cases reflect the accumulation of private values in which case it is difficult to classify these values as purely private or public in nature.
- Public values are shared by the individuals who attend or are involved in live music performances. This means that individual community members cannot be excluded from the enjoyment of these values (non-excludable) and the feeling of wellbeing generated in one person does not impact the amount of wellbeing felt by another (non-rivalrous). Though this public good nature cannot be effectively captured by markets, it does not diminish the justification these values provide for future support of the live music industry."

Thirdly, Levinson (2014) distinguishes between the **artistic value** and the **non-artistic value** of music. It is important to point out that for this author, the **artistic value of music**, "includes its intrinsic value, but also arguably certain of its instrumental values", but **all non-artistic** values are instrumental. Regarding the **artistic values of music**, Levinson includes influence value, originality value, and accomplishment value as values appreciable for those who have an understanding engagement with the specific music work. But the largest part of music's artistic value is **music's aesthetic value**, that is the value that music has as an object of aesthetic appreciation and which can be roughly equated with its intrinsic value for listeners (Levinson 2014).

Close related to the aesthetic value of music, the author talks about different values, linked to the forms and qualities of music and experiences when perceiving and contemplating music (e.g. experiential value, hedonic value). In addition, the author identifies more artistic values, most of them instrumental: symbolic value (related to emotions, moods, attitudes, and other states of mind or spirit); self-affirmation value (music as a reflector of self and a definer of identity); idiosyncratic value (the way some music speaks to someone in a completely individual way, resonating with his or her specific memories, associations, history, and physiology); mood-enhancement value (a marked potential that music possesses for quickly bringing about a lightening of spirits); accompaniment value (as facilitator of other activities, such as religious ritual, military parade, aerobic exercise, or dance in all its forms).

Regarding the non-artistic values, the most obvious one is the **economic value** when considering music "as a commodity, a service, or a skill" (Levinson, 2014). But for the author **social value**, "is probably the most important of its extra-artistic values. Music is of undeniable value as a sort of social glue and agent of solidarity, helping to create, maintain, and strengthen a sense of community". Taylor (2015)

gets the same conclusion after analysing the Irish traditional music sessions. In any case, it seems that **economic and social values emerge as two of the most relevant classes of music values**. In addition, as we know that some of the artistic values of music can be instrumental values, those values related to self-affirmation, or identity (idiosyncratic), among others, could be included as social values.

Among all these non-artistic values, there is another very important value universally recognized since ancient times: **its therapeutic value**. The American Music Therapy Association (2005) defines Music Therapy as "the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Music therapy interventions can address a variety of healthcare and educational goals: promote wellness, manage stress, alleviate pain, express feelings and more". This definition emphasises the importance of music and its therapeutic value. Music has therapeutic properties and can exert a positive influence on physiological and psychological responses in people (Murrock, 2016). Musical interventions are proposed as an important contribution to nursing and health care due to their multiple and multidimensional positive effects on people (Gallagher, 2011).

Some of the artistic and non-artistic values defined by Levinson (2014) and linked to moods, attitudes, states of mind and spirit, emotions in general, have similar effects. Thus, they might be equivalent to the **emotional value** defined by Sheth et al. (1991) in the TCV.

Regarding aesthetic value, Levinson (2014) considers it in intrinsic-artistic values and other authors categorise it as **cultural value** (Van der Hoeven & Hitters, 2019; Van der Hoeven et al., 2021). For Behr, Brennan, and Cloonan (2016a) intrinsic value is extremely difficult to quantify, and they state that "while individual expressions of value are hard to fit into more pragmatic language — this can be ameliorated with a shift of emphasis towards the experiences of participants, away from a conception of 'value' as an abstract good contained within live music to a greater or lesser degree. In the end, rather than trying to quantify intrinsic value, it may be more fruitful to seek to understand how various actors perceive it; in other words, how people have perceptions and beliefs about the intrinsic value of music". In this sense, these authors also define the intrinsic value of music as a kind of cultural value. Additionally, Levinson (2014) includes in his analysis other artistic values that fit on this category such as, for example, experiential value and hedonic value.

Summary of types of values

To summarise the main groups of values in music obtained from the literature review, they are organised into four main categories in Table 4. For each category, the description and equivalence of values in previous works are provided.

Table 4. Main categories of values according to literature

Types of values	Description	Equivalent values in theories
Shared values		
Cultural value	Value is related to the artistic qualities of live music, the meanings expressed through the performance of an artist,	Functional and Epistemic values defined by Sheth et al. (1991). Quality/performance, type of Functional
	creativity as reflected in a rich diversity of genres, and artistic experimentation	value defined by Sweeney & Soutar (2001).

Types of values	Description	Equivalent values in theories
	(Behr et al. 2016b, Van der Hoeven and Hitters, 2019)	Visual/musical appeal defined by Turel et al. (2010). Intrinsic & artistic values defined by Levinson (2014).
Social value	Value is related to the contribution of music to the social relationships between people (van der Hoeven et al., 2021b).	Social value defined by Sheth et al. (1991). Social value defined by Levinson (2014).
Economic value	Value is related to the financial benefits and the relevance of music in monetary terms (van der Hoeven et al., 2022).	Price/value for money, type of Functional value defined by Sweeney & Soutar (2001). Economic value defined by Levinson (2014).
Individual values		
Emotional/ Therapeutic value	Value is related to the profound impact that music can have on the emotions and subjective experiences of individuals (Cowen et al., 2020), including its therapeutic value (Rodriguez-Rodriguez et al., 2023).	Emotional value defined by Sheth et al. (1991). Playfulness value (escapism and enjoyment) by Turel et al. (2010). Therapeutic value and related values (distraction value, relaxation value, moodenhancement) defined by Levinson (2014).

Source: various authors

Stakeholders: value, for whom?

Although the literature reviewed tends to analyse music value from a customer perspective, some works incorporate values associated with other **stakeholders**. As van der Hoeven et al. (2022) say, the music industry is composed of a network of actors that are interconnected, creating an ecology of music. However, the values among actors might differ and even turn into negative values in some circumstances. In their work, they add an additional value, the spatial value as the relationship between live music and the city.

Among the actors analysed in the music literature besides end customers (i.e. music listeners, events visitors), are the artists (van der Hoeven et al., 2022), the residents in a city or town (Andersson et al., 2012a), the cities (van der Hoeven and Hitters, 2020; van der Hoeven et al., 2021), the venues and festivals (van der Hoeven et al., 2022; Ouazzani et al., 2022), streaming platforms (Ouazzani et al., 2022), and retailers (Hracs & Jansson, 2020). When Levison (2014) talks about the value of music for individuals, he includes individual listeners, performers and composers.

From a business point of view, other **stakeholders** can be included in the music industry to define its value chain and ecosystem. UNESCO (2022) has recently proposed the music streaming value chain including creators, labels and publishers, distributors, rights organizations, public sector and intergovernmental bodies and users/consumers. Figure 1 shows the music ecosystem defined for the Music360 project by Wieringa and Gordijn (2023), while Figure 2 offers a zoom on the value chain. The ecosystem picture gives the general service-provision structure of the ecosystem; the supply chain shows who delivers what to whom.

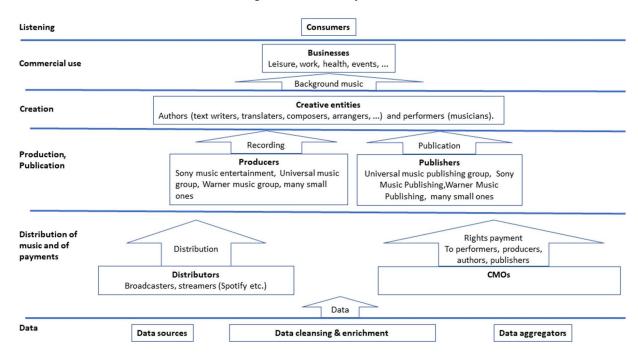


Figure 1. Music ecosystem

Source: Wieringa and Gordijn (2023)

Activity Stakeholders Creation Artist, Composer, Songwriter, Nonfeatured artist and production staff € Publishing companies **Production &** Production Author's companies (Labels) **Publishing** rights societies Data € companies Distribution Distribution Exhibition (venues, TVs. companies (streaming radio) services) Listening & commercial Audiences Locations (customers, (cities, businesses towns) hospitals)

Figure 2. Music value chain

Source: Adapted from UNESCO (2022) and Wieringa and Gordijn (2023)

Levison (2014) also considers more actors when he differentiates between the value of music for an individual and the value of music for a group or community, although he connects the idea of group with music genres. Regarding this idea, he differentiates between the value of music as a whole and the value that attaches to individual pieces or occasions of music. In this context, some music values, for example the social value of music "provides a clear example of the divergence between a value of music in general and the comparative value of an individual piece of music. Let us understand the social value of music as consisting centrally in the opportunity that music affords to bring people together in a public context for shared experience, interaction, coordination, and mutual affirmation. So understood, social value does not serve to any extent as a differentiating value of individual pieces or occasions of music, since it is possessed by virtually all pieces or occasions of music and yet remains a value of music generally" (Levison, 2014). As we will see later, this is relevant when proposing formulas for the measurement of the different values of music.

Measuring Cultural Value of music

This section presents a review of the cultural value and the items defined in the papers analysed. To organise the information, the music value chain in Figure 2 is also considered. Table 5 shows the different values analysed and afterwards the most important results are explained.

Table 5. Cultural value of music

Stakeholder	Authors	Product/ sector	Types of cultural value	Method & Items
Artist	Van der Hoeven et al. (2022)	Live music	Opportunity to perform, enjoyment	Interviews; then, thematic analysis
Venues	Van der Hoeven et al. (2022)	Live music	Symbolic value, artistic performance, entertainment	Interviews; thematic analysis
Cities	Van der Hoeven and Hitters (2020); van der Hoeven et al. (2021); Van der Hoeven et al. (2022)	Live music	Aesthetic experience, symbolic and narrative value, musical creativity, talent development, and cultural vibrancy	Van der Hoeven et al. (2022): interviews; thematic analysis
Local residents	Andersson et al. (2012a)	Festival	Option value, bequest value	Survey
Audiences	Chen et al. (2017)	Streaming platform	Functional, experiential, instrumental	Survey (7 items, 9 items, 8 items)
	Heredia-Carroza et al. (2021)	Flamenco	Cognitive, aesthetic,	Interviews
	Krause et al. (2021)	Listening to music	Appreciation, cognitive, narrative, purpose, study	Survey (2 open questions)
	Mulder & Hitters (2021)	Pop concerts and festivals	Artistic, setting	Survey (9 items, 6 items)
	Ouazzani et al. (2022)	Opera in an opera house	Epistemic, functional	Survey (7 items)
	Saha et al. (2023)	Festival	Functional	Survey (4 items)

Source: various

Although Krause et al. (2021) find that, in general, in listening to music cultural value is more important than social value, the other papers analysed in Table 5 indicate that the most important values depend on the stakeholders and venues studied.

Regarding the stakeholders, some differences are found about what value is more important. For example, Van der Hoeven et al. (2022) find that for some artists, the cultural value is more important than the economic value, while for others the two values can go hand in hand. For the cities, they find that the most important value is not the cultural but the social, economic and spatial. For commercial developers, the most important is the economic value.

With respect to venues/products analysed, differences are found between values. For example, Mulder & Hitters (2021) find that cultural value is more important in concerts than in festivals.

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However, Saha et al. (2023) find that social and emotional value are more important than cultural value.

Measuring Social Value of music

This section presents a review of the social value and the items defined in the papers analysed. To organise the information from the analysis, the music value chain in Figure 2 is also considered besides the literature analysed. Table 6 shows the different values analysed in the reviewed papers. After the table, the most important results from the values analysed are explained.

Table 6. Social value of music

Stakeholder	Authors	Product/ sector	Types of social value	Method & Items
Artist	Van der Hoeven et al. (2022)	Live music	Recognition, interaction with audience, network of peers	Interviews; then, thematic analysis
Venues	Van der Hoeven et al. (2022)	Live music	Social bonding	Interviews; thematic analysis
Cities	Van der Hoeven and Hitters (2020); van der Hoeven et al. (2021); Van der Hoeven et al. (2022)	Live music	Social capital, public engagement, sense of identity	Van der Hoeven et al. (2022): interviews; thematic analysis.
Audiences	Chen et al. (2017)	Streaming platform	Psychosocial benefit	Survey (6 items)
	Krause et al. (2021)	Listening to music	Identity	Survey (2 open questions)
	Mulder & Hitters (2021)	Pop concerts and festivals	Personal (status), social	Survey (3 items, 5 items)
	Saha et al. (2023)	Festival	Social value	Survey (4 items)

Source: various

As it is explained for the measuring of cultural value, when listening to music is studied in a general sense, Krause et al. (2021) find that cultural value is more important than social value. However, in the rest of the papers in which the social value is analysed (Table 6), differences are obtained depending on stakeholders and the venues or products involved.

Regarding the stakeholders, some differences are found about what value is more important. For example, Van der Hoeven et al. (2022) find that for cities, the most important value is not the cultural but the social, economic and spatial.

With respect to venues/products analysed, Mulder & Hitters (2021) find that social value is more important in festivals than in concerts. Also, Saha et al. (2023) explain that in festivals social value is more important than cultural value.

Measuring Therapeutic Value of music

Music therapy is a form of expressive arts therapy that uses music to address physical, emotional, cognitive, and social needs of individuals (Dunphy, 2014). The therapeutic values are diverse and can have positive effects on various aspects of a person's well-being. One of the positive effects is the integration of music as a complementary adjuvant to medical treatments. It helps patients and caregivers manage some of the physical, emotional, social, and spiritual needs that arise with illness or hospitalization (Bernatzky et al., 2011).

In this section, the existing literature is reviewed to analyse the significance of music therapy as a supportive element in diverse medical treatments administered within hospital settings. The constructive impacts of music therapy within hospitals and its connection to enhancing the health of patients, caregivers, and healthcare professionals are regarded as highly valuable. These advantageous aspects will be collectively referred to as *values* since they address various dimensions of well-being.

Table 7 and 8 present the types of values considered in the literature. In Table 7 its description is provided and in Table 8 they are organized according to the types of pathologies to which they contribute and the positive therapeutic benefits provided by music therapy. There are selected 23 papers that refer to studies conducted in European countries: 6 in Spain, 4 in Germany, 4 in the Netherlands, 2 in Italy, 2 in UK, 1 in Denmark, 1 in Finland, 1 in Hungary, 1 in Norway, and 1 in Sweden.

Table 7. Therapeutic value of music. Values and descriptions

Type of value	Description	Authors
Psychological value	Value is related to the range of positive effects on individuals' mental and emotional wellbeing.	Holmes et al. (2006), Burrai et al. (2014), Auge et al. (2015), Warth et al. (2016), Rodríguez et al. (2017), Ramirez et al. (2018), Toccafondi et al. (2018), Van der Heijden et al. (2018), Bro et al. (2019), Teckenberg-Jansson et al. (2019), Serrano Soliva et al. (2020), Odell Miller (2021), Van der Wald-Huisman et al. (2021), Madso et al. (2022), Wijk et al. (2022).
Quality of life value	Value is related to the ability to enhance the quality of life across various populations and contexts.	Holmes et al. (2006), Warth et al. (2015), Warth et al. (2016), Rodríguez et al. (2017), Ramirez et al. (2018), Toccafondi et al. (2018), Van der Heijden et al. (2018), Van Dokkum et al. (2020), Kobus et al. (2021a), Odell Miller (2021), Madso et al. (2022), Serrano Soliva et al. (2022), Wijk et al. (2022), Mata Ferro et al. (2023).
Cognitive development value	Value is related to the positive effects on cognitive development across various age groups and populations.	Holmes et al. (2006), Odell Miller (2021), Madso et al. (2022), Wijk et al. (2022).
Physiological value	Value is related to the positive effects on various physiological aspects of humans, contributing to overall health and well-being.	Burrai et al. (2014), Auge et al. (2015), Warth et al. (2016), Ramirez et al. (2018), Van Dokkum et al. (2020), Kobus et al. (2021b), Meder et al. (2021), Odell Miller (2021), Span et al. (2021), Van der Wald-Huisman et al. (2021), Mata Ferro et al. (2023).

Source: various

Table 8. Therapeutic value of music. Values, pathologies and benefits from music

Type of value	Pathologies	Therapeutic benefits obtained
Psychological value	Burnt patients, cancer, cognitive impairment, haemodialysis, palliative care, pregnant women, and surgery.	 Coping and Resilience. Emotional Expression and Regulation. Enhanced Mood and Positive Affect. Stress Reduction and Relaxation.
Quality of life value	Burnt patients, cancer, cognitive impairment, haemodialysis, newborn ICU, paediatric ICU, palliative care.	Emotional Well-Being.Pain Management.Relaxation.
Cognitive development value	Cognitive impairment.	Memory Enhancement.Neurological Plasticity.
Physiological value	Cancer, cognitive impairment, newborn ICU, paediatric ICU, surgery, palliative care.	 Cardiovascular Health. Endocrine System Modulation. Prenatal and Neonatal Health. Respiratory Function.

Source: various

The results shed light on the use of live music therapy in hospitals to improve various emotional aspects, such as psychological, related with quality of life, cognitive and even some physiological aspects related to different pathologies or situations and, to the extent possible, alleviate their symptoms. The findings described in these studies demonstrate the value of the benefits provided by music therapy at emotional level, being psychological, of live quality, cognitive and physiological sublevels. Finally, it is concluded that the positive values they provide, without any side effects, are always well-received not only by patients of all ages but also by their caregivers and even hospital staff, as they help create a more pleasant and humanized hospital environment.

Measuring Behavioural and Emotional Value of music

In this section, the behavioural and emotional value of music is discussed, in the context of a retail environment. Contrary to the previously mentioned categories of value, such as social and cultural, this value concentrates on the effect of music on the individual.

People constantly encounter overwhelming sensory input in most environments, but especially in retail. Those in the service and retail industries greatly value making the shopping experience as beneficial as possible for all people involved. Because of this, a great deal of research has been (and is being) conducted on the ideal "servicescape". The servicescape, defined as the physical setting and surroundings that impact customers and employee is a crucial element of this, as many individual elements come together to contribute the overall customer experience (Bitner, 1992). Specifically, background music has been shown to affect customer behaviour due to its' many different properties present in music, such as volume, tempo, and familiarity amongst many others (see Figure 3 for an overview of this). Knowledge of these effects is particularly useful to retailers, as they may be able to use this information to alter the servicescape and give customers a pleasant shopping experience. By improving this experience, they may be able to ensure atmospheric fit with the rest of the store and successfully reflect their ideal brand image.

There are two key groups exposed to background music: **consumers**, and **instore employees**. However, as already identified in Bitner (1992), the effect on employee behaviour is seldom investigated, with most research focusing only on customer experience. This is unfortunate as the employee experience is significantly related to a successful customer experience, as customers are exposed to staff on a recurring basis and have the capability to regularly influence their behaviour. In Wolter, Bock, Mackey, Xu, and Smith's 2019 original empirical research, they establish that in companies with significant employee-customer interaction, employee satisfaction trajectories (growth patterns over time) strongly influence customer satisfaction. In addition, the trajectories also influence re-patronage intentions for frequent customers.

When examining music as the chosen condition, it is particularly useful to studying employees, as employees are constantly and continuously exposed to background music, unlike consumers who are only exposed to this music for short periods at a time and can leave the environment at any moment (Skandrani, Ben Dahmane Mouelhi & Malek; 2011). Inspired by the unfortunate gap in research on this topic and how valuable it is in understanding environment-user relationships, we aim to further examine the effect of background music on how employees affect customer behaviour. Specifically, we by looking at the interaction of customer and employee behaviour, as the two groups have been shown to influence each other. The groups are uniquely different and although they are both exposed to the same stimuli, this may lead to varied behavioural results. Their distinct behavioural responses may interact with each other to produce wholly new results than expected.

Background music has both direct and indirect effects on **consumer behaviour**, with affect and cognition mediators and moderators influencing the indirect relationship. Affect is defined according to Mehrabian and Russel's pleasure, arousal, and dominance dimensions (P-A-D), (Mehrabian & Russell, 1974). Cognition refers to higher-order cognitive responses based on consumers' associations with music that is played that influences their perception of the store's attributes.

Research on the effects of music on consumer behaviour can be divided into two categories: (1) research on the absence/presence of background music, and (2) research on the impact of music

properties. The presence of background music is significantly and positively related to pleasure, satisfaction, and behavioural intentions. They believe this relationship is moderated by both substantive and methodological influences (Roschk, Loureiro, & Breitsohl, 2017). To further specify these behavioural intentions, atmospheric fit was seen to be a moderator between the relationship of the store's background music and customer response. Here, presence of music shows that presence of such music has been seen to increase the amount of money spent by customers (Areni & Kim, 1993). Exploring an extra dimension to this, the presence/absent of "pleasant" music is shown to have a significant effect on overall sales due to the relationship being mediated by mental depletion, as well as being moderated by both time of the day, and day of the week (Ahlbom, Roggeveen, Grewal, & Nordfalt, 2022).

When looking at genres and properties of the music, atmospheric fit between the store and background music is suggested as a mediator for multiple customer behaviours, including overall higher levels of sales and number of specific items sold (Areni & Kim, 1993; (North, Hargreaves, & McKendrick, 1999) (Jacob, Gueguen, Boulbry, & Sami, 2009); (Biswas, Lund, & Szocs, 2019)). Volume moderates the relationship with atmospheric fit, increasing positive effects and misfit increasing negative effects (Beverland, Lim, Morrison, & Terziovski, 2006); (Witt C. L., 2008). Executive attention, defined as, "the ability to manage what we pay attention to", has been seen as a moderator when music has either vocals in it or is instrumental. In consumers with a low working memory capacity, vocal music leads to a decrease in both cognitive and attitudinal outcomes, with the main negative response being lower purchase intention (Kang & Lakshmanan, 2017).

Little research has been done on **music-induced employee behaviour**, one of which is a small qualitative study where 13 employees are interviewed, where it was found that relationships between the sales force team influences employees' reactions (Skandrani, Ben Dahmane Mouelhi, & Malek, 2011). They suggest that music should be congruent with the moment of day, non-repetitive, and should suit employees' tastes. The interviews also suggest that music helps break routine, and disguises background noise. Music influenced their emotional responses, with many describing feelings of arousal or relaxation depending on the music played, and how their behavioural differed according to the task performed. Cognitive responses were also reported to be affected, with decreased time perception helping time pass faster for employees, which they in turn believe provides a positive energy transfer to both their fellow team-mates, as well as customer purchase intention. The two main behavioural responses reported were "motivation and stimulation", which can cause stress in some. Continuous exposure to music, as well as being exposed to a forced music schedule as a moderator, seemed to generate boredom and monotony in employees (Skandrani, Ben Dahmane Mouelhi & Malek, 2011).

In an in-store experiment conducted in Filipa K stores, it was established that when music is chosen by employees themselves, there was a negative effect of a significant decrease in sales of women's clothing (Daunfeldt, Moradi, Rudholm, & Öberg, 2021). Interviews with employees reveal that other employees music choices where not the only issue, but also tempo and repetition if it does not correlated to the tasks they are expected to perform. This process is seemingly mediated by the tiredness and mood of the employees involved. However, employees also attempted to regularly adjust the music to appeal to customers (e.g. playing "nonstress music on a rainy day" (Daunfeldt, Moradi, Rudholm, & Öberg, 2021).

Consumer behaviour in relation to their **interactions** with store employees has also been investigated. It was shown that background music with a positive valence had an indirect effect on consumer behaviour by increasing time spent in-store (Vida, Obadia, & Kunz; 2007). This relationship was shown to be mediated by the customer's positive evaluative judgement of both the store and the personnel. Dubé & Morin (2001), show that varying pleasure intensity of the store's background music indirectly positively influences customers' store evaluation, as well as strengthening the relationship between this store evaluation and sales personnel. Similarly, Kniffin et al., (2007) finds that music conveying a "happy mood" had an indirect positive effect on the relationship between customers and employees. When mediated by a higher mood, happy music increases co-operative behaviour, as well as strengthening the bond between customers and employees. However, Chebat & Vaillant (2001) found that when exposed to soothing music with a low level of arousal, customers' attitude towards employees & global assessment of the store is heavily affected, due to the moderation of increased cognitive weight caused by depth of information processing.

These results show that background music plays a significant effect on the affect, cognition, and behaviour of (1) customers, (2) employees, and (3) the interaction between the two, which make up the behavioural value of music in a retail context.

Measuring Economic Value of music

Music is an important part of the servicescape and has an influence on both customers and employee behaviour. Presence of instore background music has been shown to have a significant (and mostly positive) direct effect on consumer behaviour, which clearly shows an inherent **economic value** (Yalch & Spangenberg, 1990). Research includes Garlin & Ownes' 2006 meta-analytic review of the topic reveals that differences in background music, including tempo, volume, genre and others, have resulted in **financial gains** such as sales, patronage, and evaluation as well as others. A decade later, Roschk's (2017) meta-analysis confirms that these financial gains are achieved when music has a positive behavioural and cognitive impact on consumers.

The effects on revenue, sales, time perception, store evaluation, attraction/detraction, and many other actions have a directly affect the financial status of both the consumer and the seller (Yalch & Spangenberg, 1990; Areni & Kim, 1993; Kang & Lakshmanan, 2017).

Shih, Huang & Chiang (2012) examine lyric presence which showed a greater effect on attention, as well as a significant decrease in performance score between a baseline without music and when listening to music containing lyrics. When mediated by positive affect, which enhances customers' perception of product quality and store attitude, famous music increases buying intention, and enhanced perception and evaluation of brand quality (Petruzzellis, Chebat, & Palumbo, 2018). Customers' evaluative judgement of both store offering and sales personnel acts as a mediator between music valence and time spent shopping (Vida, Obadia, & Kunz, 2007).

These actions also have an economic effect on employees, as their music-induced feelings and thoughts may have an impact on their motivation, time perception, and task performance (Skandrani, Ben Dahmane Mouelhi, & Malek, 2011). In addition to this, the interaction between employees and customers can even affect customer purchase intention, time spent in-store and sales amongst others (Vida, Obadia, & Kunz, 2007; Skandrani, Ben Dahmane Mouelhi, & Malek, 2011; Daunfeldt, Moradi, Rudholm, & Öberg, 2021). This has an overwhelming effect on **stakeholders** as music as a stimulus can affect overall economic results.

Through examining existing literature, it is evident that background music has an inherent economic value, through the behavioural affect and cognition felt by both consumers and employees. Both the behavioural and economic results of music found in this literature study is condensed in Figure 3.

CxE Interaction Affect Moderators time of day day of week

Figure 3. Affective, behavioural and economic effects of background music on customers and employees in a retail setting

Summary of the framework

After analysing the types of values obtained from the literature review, Table 9 presents a summary of the values that are crucial to each stakeholder in the value chain (Figure 2), while Figure 4 shows the main research questions that might be answered in the living labs (WP6). It is evident that literature focuses on stakeholders for which authors can evaluate various types of values. However, when a stakeholder does not appear directly in the literature, it can be inferred that values for audiences and their behaviour may be value for stakeholders such as labels, publishing companies, and authors' rights societies. Table 9 makes this assumption for stakeholders for which only the economic value is considered. Regarding the research questions, arrows in Figure 5 indicate relationships between variables that can be analysed through data collected in the living labs.

Table 9. Values by stakeholder

Activities related to music	Stakeholder	Values	
Creation	Artist	Cultural, social, economic	
Production & Publishing	Production companies (labels)	Economic	
	Publishing companies	Economic	
	Authors' rights societies	Economic	
Distribution	Distribution companies	Economic	
	Exhibition	Economic	
Listening (customers and	Audiences (customers, retail,	Cultural, social,	
commercial use)	hospitals, etc.)	therapeutic/emotional, economic	
	Locations (cities, towns)	Cultural, social, economic	

Source: own elaboration

RQ5 **ECONOMIC CULTURAL** VALUES VALUES RQ1 RQ4 **BUSINESS &** SOCIAL RQ3 OTHER STAKEHOLDERS RQ6 **VALUES** RQ2 THERAPEUTIC CUSTOMER RO4. Do non-economic /EMOTIONAL **BEHAVIOUR** values influence othe stakeholders values? VALUES RQ5. Does economic value influence other stakeholders values? RO1. Do non-economic values influence economic value? RQ2. Do non-economic values influence customer behaviour? RQ6. Does customer behaviour influence other stakeholders values? RQ3. Does economic value influence customer

Figure 4. Research questions proposed

Source: own elaboration

behaviour?

The Music Value Matrix

The revision of the literature about measuring value in music reveals that it is multidimensional task, and dimensions can involve types of values, stakeholders, venues, and environment, among others. Figure 5 presents the first version of the Music Value Matrix, which tries to organise the cases found in the subsequent literature review to a two-dimensional diagram based on the music environment and the type of venue.

INDOOR venue The Music Value Matrix v1 The Matrix is used to do a premise-value classification based on background/foreground music and BACKGROUND music indoor/outdoor venue. www **GROUP A** Group A Premises or events' areas that are indoor and music environment is Values analysed: Values analysed: background. Examples: restaurants, retail, supermarkets, hospitals, clinics, offices, cultural, social, cultural, social, emotional, economic? emotional, economic? GROUP B Premises or events' areas that are outdoor and music environment is background. Examples: local celebrations, street party FOREGROUND music GROUP C Premises or events' areas that are outdoor and music environment is Group D Group C foreground, Examples: music festivals, concerts, Values analysed: Values analysed: **GROUP D** cultural, social, cultural, social. emotional, economic? emotional, economic? Premises or events' areas that are indoor and music environment is foreground. Examples: opera house, auditorium, clubs. Other dimensions: Music granularity (song, genre, list); Live/Recorded music

Figure 5. Music Value Matrix, version 1

Source: own elaboration

Four groups of premises or events' areas are defined in the matrix, A to D, for which the following literature review allows to include the location in the matrix of specific examples. Table 10 shows in which group would be located every paper analysed. Although the purpose of the Music360 project is background music, Groups A and B, the literature involves studies found for the four groups. Groups A and B in the matrix will be the centre for cases to select in living labs to cover enough alternatives.

The four groups in the matrix: Dimensions from the literature

Does the type of venue influence the value of music? According to Michel et al. (2017) the same design of in-store music has diverse effects depending on the service setting (restaurants, supermarkets, banks...). And Mulder & Hitters (2021) differentiate the effects of outdoor live music in festivals and concerts.

Moreover, for Levinson (2014) we could distinguish value to listeners from value to performers from value to composers, although listener value takes priority over the others because, at the end, all of them are listeners. Even genres can be valued differently by performers, such as Bull and Scharff (2021) demonstrate for classical music and labour positions. For example, being a soloist is perceived as the

most prestigious. However, in the case of Flamenco, Heredia-Carroza et al. (2021) don't find differences between spectators and experts for "feelings" value ("ability to produce emotions," "generate reflection in spectator," "ability to feel flamenco," and "make others feel flamenco").

In general, it is said that sensory elements, such as background music, non-consciously influence behaviours (Biswas, 2019). Moreover, during daily activities, emotion is strongly related to most people's primary motives for listening to music indoors or outdoors (Juslin & Laukka, 2004; Lonsdale & North, 2011). In contrary, the impact of other disturbing noises could be more significant than music, as Hynes and Manson (2016) notice in some supermarkets in UK. Also, Han et al. (2022) perform some experiments to differentiate pleasant sounds, such as music, water or birds, and disturbing noises. And Krause et al. (2021), for a group of students in Australia determine that reasons for not listening to music are related to the interference with activities that required focus or concentration, by environmental context, affective responses, music engagement and a preference for silence or other auditory stimuli.

Literature agrees on the necessity of congruence between background music and product (GEMA, 2023; Jacob et al., 2009; Jain & Bagdare, 2010; Kauppinen-Räisänen et al., 2020; North et al., 2016; Toldos et al., 2019) what also highlights the importance of a selection of music based on systematic customer research rather than on employees' personal tastes (Vida et al., 2007).

For adding information to the matrix, we have performed another literature search using Scopus as database with the keywords "value AND music", limiting the results from 2009 and selecting other specific keywords, which results in 723 records (Figure 6). This figure helps us to observe different factors that have been studied around the value of music. Paying attention to its cultural and social dimensions, we can observe some elements such as gender, memory, popular music, or festivals.

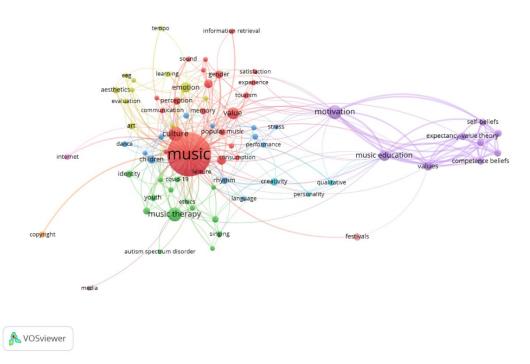


Figure 6. Music, value, and other keywords from the literature

Source: own elaboration with VOSviewer (Van Eck & Waltman, 2020).

Some authors, such as Van der Hoeven and Hitters (2019), define cultural and social values. In this case, they understand **social value** as the contribution of (live music) to the social relationships between people, a sense of belonging and collective identity. And **cultural value** as the contribution to the artistic qualities of (live) music, the symbolic meanings and creativity (diversity of genres and artistic experimentation).

In the case of indoor background music (**Group A**), the literature provides different factors that should be considered in the retail sector, although some of them are not empirically confirmed because, depending on the study, the results have been opposite.

Regarding cultural value, North et al. (2016) stress the influence of language, from an experiment conducted with undergraduate university students from the UK. And, regarding the content of the music, Spangenberg et al. (2005) confirm in North America that consumers' evaluations are more favourable when the Christmas scent is in the presence of Christmas music.

From the point of view of social value, the reasons for listening to music may change as people grow older. Music is particularly important for adolescents and young adults, but less important for participants aged over 30 (Lonsdale & North, 2011). For North et al. (2016), hearing a specific genre of music activates related concepts in memory, which influences the memory for, perception of, and choice of products.

Besides, for some authors, gender can be influenced in a different manner. Andersson et al. (2012b), in the case of retailing in Sweden, discover that females prefer slow-tempo music. And Herter et al. (2014) find that positive emotions in the retail environment affect the shopping experience in university bookshops more for men, while negative emotions affect it more for women. But return intentions have no difference. Conversely, Jha and Singh (2013) find, despite the gender, the same effect of background music on the shopping experience for a big store in India.

Finally, Srivastava (2013) explains how music could influence the repeat visits of consumers and can generate extra crowd to a Hypermarket in India due to word-of-mouth publicity.

In the case of outdoor venues, the literature considers foreground music (**Group C**), but not background music (**Group B**). Music festivals, concerts and urban live music in general are included in this group of studies, but we should highlight that, in general, they analyse the whole experience of the music venue.

Urban live music has been studied by Van der Hoeven in various works and for different countries. More than cultural and social value, he provides the concept of spatial value. For Van der Hoeven and Hitters (2020), the **spatial value** is the relationship between live music and the city, and it is composed by three dimensions: performing (how a city is physically used to stage concerts and create musical pathways); redeveloping (how live music makes and regenerates the space); and narrating (live music as part of the stories told about cities). And that is because, if the principal actors are concerned with cultural values, local governments expect to generate social, spatial, and economic values (Van der Hoeven et al., 2022).

Andersson et al. (2012a) compare the value for visitors and for residents. In this case, they take the music festival Way Out West (WOW) in Sweden as a case study. The festival includes rock, electronic and hip-hop music. The city has had a positive experience for many years as visitors go home with their memories expanding a positive image of it. And for the part of the local community, it has communicated a positive social image of a profitable and environmental-friendly festival.

Saha et al. (2023) analyse an annual rock music festival in Norway and, among others, examine the social value of the music festival translated in: social approval from others, feel acceptable to others, gain popularity among friends and family, and be recognized by other people. However, in this case visitors do not seek social recognition or approval from others, what they prefer is to spend time with family, friends and/or other visitors that share their interests.

For live pop music in The Netherlands, Mulder & Hitters (2021) distinguish festivals, that people visit for social and personal reasons (known group and/or external socialisation, atmosphere), in line to Saha et al. (2023), and concerts, that people attend for artistic and user experience reasons (new music or live versions of existing material).

Another social aspect to consider is visitors' intent to repeat attendance and engage in positive word-of-mouth recommendation. Kruger and Saayman (2017) refer to it for a jazz festival in South Africa and demonstrate that music festivals have the potential, not only to create recognition of a specific music genre, but also to encourage the sharing of experiences.

In general, Van der Hoeven et al (2021; 2022) observe that there is a lack of holistic works that put together the views from musicians, industry, academia and policy makers to integrate economic, cultural and social values, as well as long-term strategies to achieve a sustainable development (Van der Hoeven & Hitters, 2023).

Finally, indoor venues with foreground music (**Group D**) are related to opera, festivals or concerts in theatres (Behr et al., 2016b) or streaming services (Chen et al., 2017; Bridge, 2023; Gallarza et al., 2023; Ouazzani et al., 2022) or pubs (Whiting, 2021).

In this kind of venue, Behr et al (2016b) stress that audiences in UK think not only about the music (artist or genre), but also about the place due to its intimacy, character and uniqueness. However, when they are virtual venues the socialization value decreases (Gallarza et al, 2023).

In the case of small local venues, Whiting (2021) goes further and enhances their cultural and social value in Australia for musicians and listeners, as social hubs that contribute to the foundation of a city's live music ecology. The same could be said around record shops. In Sweden, Hracs and Jansson (2020) explain that these record shops also stage a variety of events and experiences: live shows, artist visits, record signings, and live DJ sets.

Another type of value is introduced by Ouazzani et al (2022), who add **epistemic value** in the case of streaming opera, considering that it is watched by opera lovers to increase their knowledge on opera performances. This type of value could be also related to the online music participation of music learning groups during the global pandemic crisis. In the case of a cathedral choir in the UK, Bridge (2023) proves its positive results not only in the learning process, but also in social capital and connectedness, sense of belonging, pride, affinity and prestige.

Anyway, more and more we notice that people are listening to music in their own spaces through music platforms, and specially through mobile devices like smartphones (Jiang et al, 2021). Besides, they can join digital spaces that create new social values (Allington et al., 2015).

Table 10. Dimensions from the literature and group in the matrix

Author	Sample	Venue	Matrix
Abbasi et al (2019)	436 videogame consumers (teen students)	Universities/college (Malaysia)	Α
Andersson et al (2012b)	150; 400 consumers	Home electronics retail store (Sweden) & large supermarket store	Α
Aylott and Mitchell (1999)	29 focus groups (239 respondents)	Grocery of Sunderland city (UK)	Α
Badgaiyan and Verma (2015)	508 respondents	Malls in capital city (India)	Α
Biswas (2019). Intro to Special Issue	23 consumers (22–34 years)	Retailing (Germany)	Α
Cheng et al (2022)	509 participants	Virtual Museum (Taiwan)	Α
Daunfeldt et al (2021)	4626 observations	Fashion stores (Stockholm)	Α
Franjković et al (2022)	226 respondents	Large retail grocery stores (Poland)	Α
GEMA (2023)	Literature review	Stores	Α
Herter et al (2015)	200 participants	Book store (unclear location)	Α
Hynes and Manson (2016)	37 customers and 8 staff/managers	2 supermarkets in Birmingham (UK)	Α
Jacob et al (2009); North et al	120 customers; Around 400	Flower shop (France); Experiment in	Α
(2016)	undergraduate university students	research rooms (UK)	
Jain and Bagdare (2010)	Literature review	Retail stores	Α
Jha and Singh (2013)	Consumers	Big store (India)	Α
Juslin and Laukka (2004);	141 music listeners; Undergraduate	Daily activities (Sweden); Daily	Α
Lonsdale and North (2011)	students	activities (UK)	
Kauppinen-Räisänen, Mühlbacher & Taishoff (2020)	98 informants (average age of 35. Mainly women)	Luxury stores (Monaco)	А
Kemp et al (2011)	Performing rights organizations	Small business and retailers (US and India)	Α
Liu et al (2022)	800 participants	Online advertisement (MTurk, Amazon)	А
Michel et al (2017)	Literature review	In-store (supermarkets, bars, banks)	Α
Price (2010), Hwang and Oh (2020)	200 participants;51 males and 197 females	e-retailing; Undergraduate university students (US)	Α
Spangenberg, Grohmann & Sprott (2005)	130 undergraduate students	Mock retail store/lab (North America)	Α
Srivastava (2013)	Customers	Hypermarkets (India)	Α
Toldos et al (2019)	241 shoppers	Apparel store (Mexico)	Α
Vida, Obadia and Kunz (2007)	332 shoppers, mean age of 31.4 years	High-end Supermarket (EU)	Α
Andersson et al (2012a)	719 Festival visitors and 648 local residents	Music festival (Sweden)	С
Kruger& Saayman (2017)	311 visitors	Jazz festival (South Africa)	С
Mulder & Hitters (2021)	1131 participants	Live music (festival and concert) (The Netherlands)	С
Van der Hoeven & Hitters (2019)	Literature review	Urban live music (different countries)	С
Van der Hoeven & Hitters (2020)	Policymakers, festival organizers and venue owners	Urban live music stages	С
Van der Hoeven et al (2021)	Literature review	Live music (models)	С
Van der Hoeven et al (2021)	21 Musicians, 14 chief executives of	Pop urban live music (The	С
van der moeven et di (2022)	venues & festivals	Netherlands)	

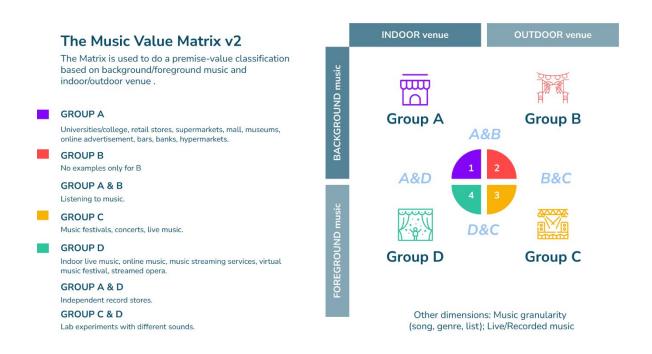
Author	Sample	Venue	Matrix
Van der Hoeven & Hitters	Literature review	Impact of urban live music	С
(2023)		on social relationships	
Behr et al (2016b)	Not defined, 6 venues x 900 pax	Indoors live music (UK)	D
Bridge (2023)	72 Choirs/music participants	Online music for education (UK)	D
Chen et al (2017)	463 participants	Music streaming services (Taiwan)	D
Gallarza et al (2023)	246 attendees	Virtual Music Festival	D
Ouazzani et al (2022)	213 viewers	Streamed Opera	D
Whiting (2021)	34 participants	Small live music venues (Australia)	D
Juslin and Laukka (2004)	141 listeners (trained and untrained)	Listening to music (Sweden)	A+B
Hracs and Jansson (2020)	10 owners/clerks and 10 key	Independent record stores	A+D
	informants of marketplace (industry,	(Stockholm)	
	streaming, labels, venues, radio)		
Han et al (2022)	30 participants	Lab experiment with different sounds (China)	C+D

Source: own elaboration

Classifying cases through the Music Value Matrix

The analysis in Table 10 is used to review the Value Matrix for music and include the cases analysed by the literature. It indicates that there are 24 examples for Group A, 8 examples for Group C, 6 examples for Group D, 1 example that can be assigned to both groups A and B, 1 case that is both in groups A and D, and 1 case that is both in groups C and D. The result of the matrix revised is presented in Figure 7.

Figure 7. Music Value Matrix, version 2



Source: own elaboration

Matching the framework and the matrix (Table 11), we can observe which literature gaps could be considered, both for the project and for future works.

Table 11. Values by group found in the literature

Group	Cultural value	Social value	Therapeutic value	Emotional value	Economic value
Α	\checkmark	$\sqrt{}$	\checkmark	$\sqrt{}$	$\sqrt{}$
В	X^1	X	X	$\sqrt{}$	X
С	$\sqrt{}$	$\sqrt{}$	X	$\sqrt{}$	X
D	$\sqrt{}$	$\sqrt{}$	\checkmark	$\sqrt{}$	$\sqrt{}$

¹Only 1 work A+B

Source: own elaboration

Conclusions

This deliverable D1 has presented an analysis of the literature related to measuring the value of music, and the main conclusions obtained are the next six.

The first conclusion is that classifications of value used nowadays to measure music value follows theories that were defined for goods different to music, like the Theory of Consumption Value (Sheth et al., 1991). These theories have evolved until conforming an extensive list of items that can be used to measure value. This implies a challenge as every main type of value (economic, social, therapeutic, emotional, and economic) is composed of many others.

The second conclusion is that music analysis needs a multidimensional approach, because other dimensions are linked to the types of values, and those dimensions are related to the listener experience (outdoor/indoor venues, background/foreground music). This multidimensionality amplifies the challenges for measuring music value.

The third conclusion is that music industry is composed of a network of actors that are interconnected, creating an ecosystem of music (van der Hoeven et al., 2022). However, the review conducted indicates that it is not easy to determine the most important value for each stakeholder as the results depends on the stakeholder and venues studied. For example, some studies find that the cultural value is more important than social value (Mulder & Hitters, 2021), while others find the opposite (Saha et al., 2023).

The fourth conclusion is about the therapeutical value and the results of the literature review indicate that music can be a complementary adjuvant to medical treatments, offering psychological and physiological value in the cases of cancer, haemodialysis, paediatric ICU, and palliative care.

The fifth conclusion refers to the link between emotional value and background music. Use of products and services are a daily need and usually are obtained from a physical retailer/service provider. Within those physical stores, background music is largely prominent and is constantly influencing listeners, and therefore we are constantly exposed to its behavioural value through our own actions. The results of the review show that background music affects behaviour directly, or through the means of affect (feeling) or thinking (cognition), and that this behaviour plays a significant effect on (1) customers, (2) employees, and (3) the interaction between the two. These elements make up the behavioural value of music in a retail context. This behavioural value contributes greatly to various retail servicescapes, which in turn better individuals' shopping experience and employees' working experience, as well as their encounters with each other.

Behavioural value has a direct influence on economic value, as many behavioural responses result in financial gains or losses for stakeholders (retailer). These background music-induced behaviours include time spent shopping, purchase intention, and amount and selection of products bought, amongst many others. Various types of background music result in financial outcomes directly, and through affect and cognition, attributing an economic value to said music.

The last conclusion is that the analyses conducted in the deliverable, through the Music Value Matrix, indicates the lack of studies related to some of the groups defined in the matrix, like the groups formed by background music in outdoor venues. Therefore, besides the gap found, it is observed that values related to these events need further analyses to cover the gap detected. Results from this deliverable are the bases for selecting the cases in the WP6 (living labs).

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