Music360

A 360 DEGREES PERSPECTIVE ON THE VALUE OF MUSIC

Deliverable 1.2

< A framework to quantify and qualify the value of music – version 2 >

Disclaimer

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Introduction

This deliverable presents the second version of D1 (D1.2) after receiving the feedback for D1.1 by Project Officer and Monitors in the First Project Review, and after conducting the living labs. Thus, the content in D1.1 is organised and upgraded to design a framework to measure monetary and non-monetary value of music following some steps, including conceptual model, measuring and analysis methods.

Objectives of the deliverable D1.2

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 design a process to measure the value of music, which involves a conceptual model, measures and analysis.

O2. To propose the conceptual model which measure the monetary and non-monetary value of music, firmly founded in economic and social theory, and multi-stakeholder.

O3. To evaluate methods to measure rubrics of value.

O4. To evaluate methods to analyse value data and desired outputs.

Structure of the document

This document is organised into ten sections. After this introduction section, sections 2 to 8 present the framework to measure music value, and six steps defined to organise the measurement. Section 2 is dedicated to the framework, while section 3 explains the first step, about stakeholders to focus on the analysis. Section 4 centres on second step, including the venues and a matrix to classify them. Section 5 focus on third step about types of values according to literature. Section 6 includes the conceptual model (step 4), while section 7 studies the methods to measure values (step 5) and section 8 the methods to analyse data about values. Section 9 present practical experience measuring music value in the living labs in Spain and the Netherlands, and section 10 includes the main conclusions for this deliverable.

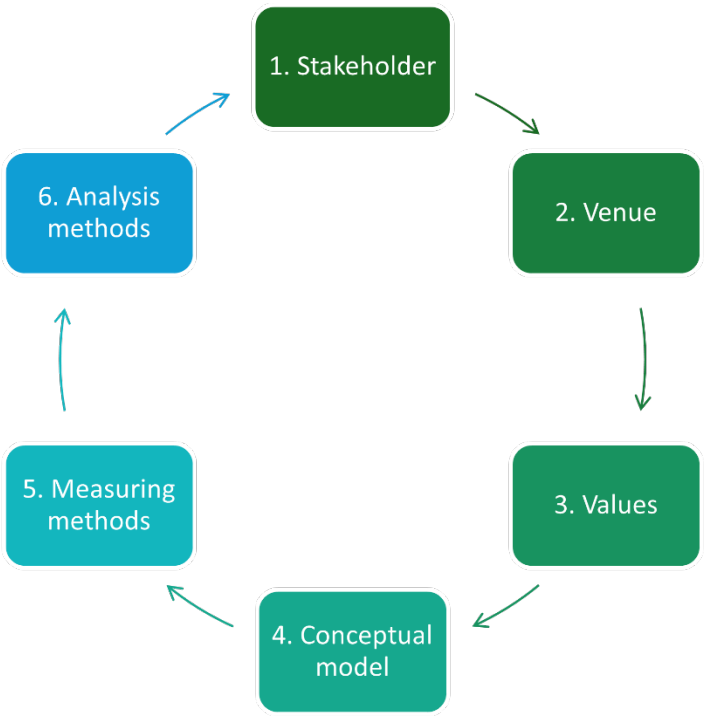
Framework to measure music value

Analysing the value of music requires considering all the dimensions that might be involved, such as the stakeholders involved in an event, the venue analysed, the environment of the event where music is played, whether music is the main purpose of the venue or a secondary element, and the values of music for stakeholders. Considering that music is a multidimensional phenomenon, it is important to recognize that music values are intimately linked to the rest of dimensions.

Figure 1 presents the different steps defined to measure value. The three first steps incorporate the different dimensions which are important to define the conceptual model: the types of music values (monetary and non-monetary) based on stakeholders and the venue analysed. Step 4, the conceptual model, will incorporate these dimensions besides outputs such as customers behaviour and revenue of stakeholders managing the venues. Other variables in the conceptual model might be those which mediate and/or moderate the relationship between music values and outputs. The conceptual model would state hypothesis which will be evaluated through steps 5 and 6.

The fifth step consists of describing the methods to collect information about music values, outputs and mediators/moderators. The methods selected can be qualitative and quantitative. The sixth step involves the methods to analyse information collected in step 5.

Figure 1. Framework to measure music value



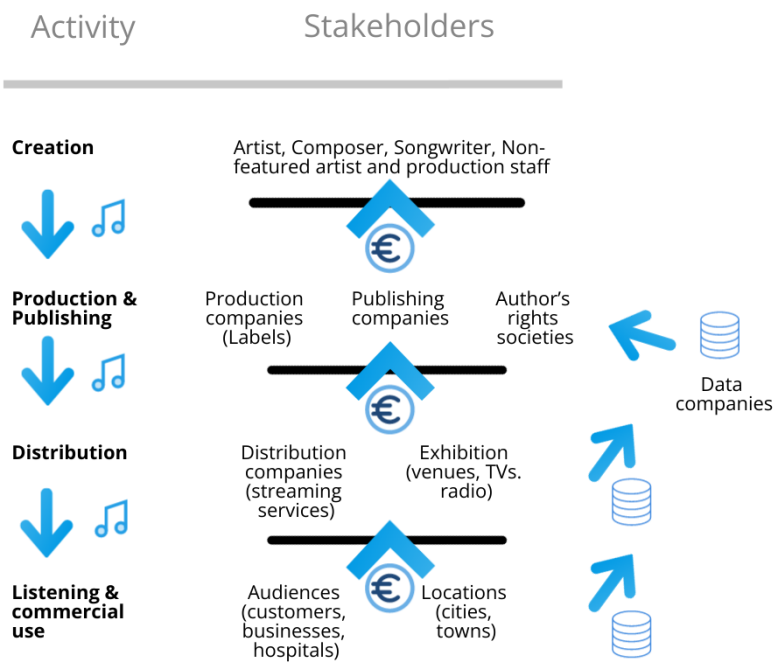
Source: Own elaboration

Step 1. Selecting stakeholders to analyse

The first step to measure music value consists of selecting the stakeholders who will be considered in the analysis. Although the literature examined 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.

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 2 offers the value chain in the music industry considered for the Music360 project in D1.1., where the supply chain shows who delivers what to whom.

Figure 2. Music value chain



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

Among the actors analysed in the music literature besides end customers (i.e. music listeners adn 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.

The focus of literature on audiences (customers, retails, hospitals, etc.), destinations and artists might be explained by the number of cases available for quantitative analysis and the variety of values that

can be evaluated for these stakeholders in contrast to other stakeholders. Table 1 indicates the values which can be analysed according to the literature review, and in some stakeholders, the value to analyse is just the economic. In step 3, each of these values are explained.

Table 1. 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 commercial use)	Audiences (customers, retail, hospitals, etc.)	Cultural, social, therapeutic/emotional, economic
	Locations (cities, towns)	Cultural, social, economic

Source: Own elaboration

Step 2. Selecting the venue to analyse

Considering the type of venue is crucial as the experience is different according to the literature analysed. This different experience results, for example, in that the core literature about music in retails differs from the core literature of festivals. Retails tend to be indoor venues while festivals usually are celebrated in outdoor venues.

The type of music can also affect the environment of a venue, thus, modulating the experience in that venue. For example, background and foreground music create different environments in a venue, as well as recorded and live music do. These features add further dimensions to the analysis which can influence both music values and impact on customer behaviour and venues revenue.

Outdoor vs 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 indoors than outdoors. 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*."

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):

- Digital 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."*

Background vs foreground music

Background music and foreground music 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.

The Music Value Matrix

The Music Value Matrix is developed in this project to organise events based on two dimensions specified in this second step: indoor/outdoor venues and background/foreground music. These two

dimensions combined create four groups of venues shown in Figure 3, defined as Group A. Group B, Group C and Group D.

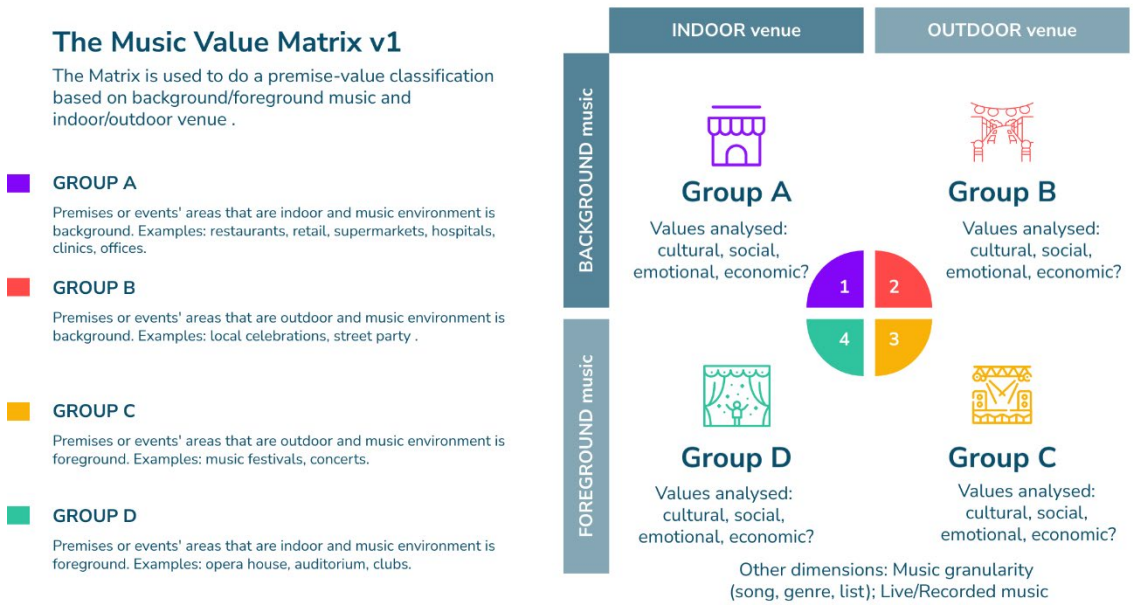
A literature review is conducted to distinguish the location in the matrix of specific examples. Table 2 shows in which group would be located every paper analysed. Although the purpose of the Music360 project is background music, Groups A and B, the literature involves studies found for the four groups. Groups A and B in the matrix are the centre for cases 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) do not 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").

Figure 3. Music Value Matrix, version 1



Source: own elaboration

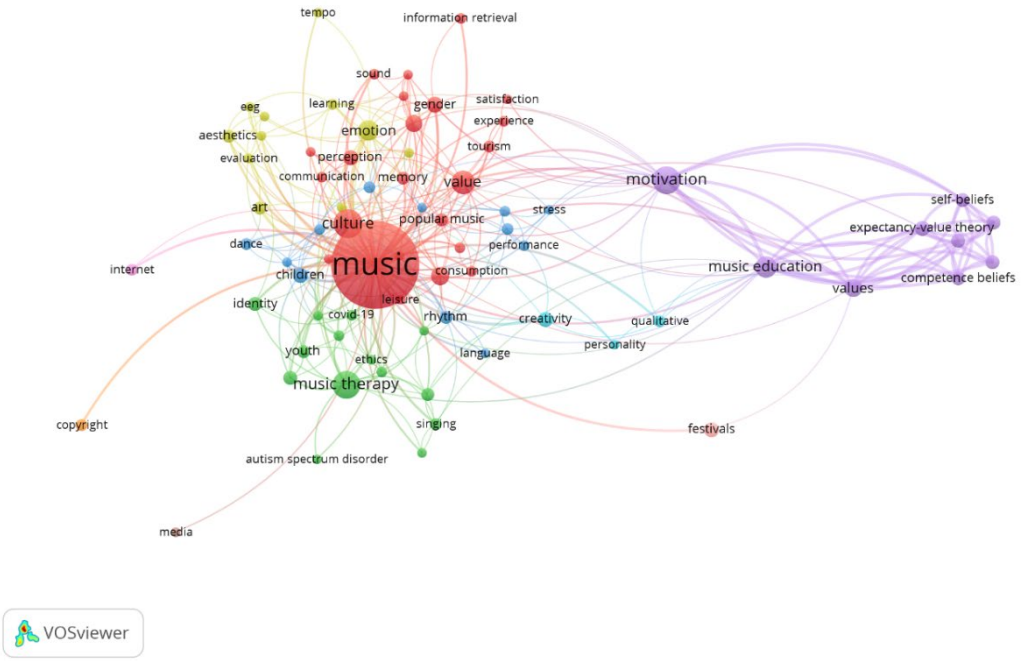
In general, it is said that sensory elements, such as background music, non-consciously influence behaviours (Biswas, 2019). Moreover, during daily activities, emotion is strongly related to most

people's primary motives for listening to music indoors or outdoors (Juslin & Laukka, 2004; Lonsdale & North, 2011). In contrast, 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) which also highlights the importance of a selection of music based on systematic customer research rather than on employees' personal tastes (Vida et al., 2007).

To add 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 4). 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 4. 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 especially 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 2. 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)	A
Andersson et al (2012b)	150; 400 consumers	Home electronics retail store (Sweden) & large supermarket store	A
Aylott and Mitchell (1999)	29 focus groups (239 respondents)	Grocery of Sunderland city (UK)	A
Badgaiyan and Verma (2015)	508 respondents	Malls in capital city (India)	A
Biswas (2019). Intro to Special Issue	23 consumers (22–34 years)	Retailing (Germany)	A
Cheng et al (2022)	509 participants	Virtual Museum (Taiwan)	A
Daunfeldt et al (2021)	4626 observations	Fashion stores (Stockholm)	A
Franjković et al (2022)	226 respondents	Large retail grocery stores (Poland)	A
GEMA (2023)	Literature review	Stores	A
Herter et al (2015)	200 participants	Book store (unclear location)	A
Hynes and Manson (2016)	37 customers and 8 staff/managers	2 supermarkets in Birmingham (UK)	A
Jacob et al (2009); North et al (2016)	120 customers; Around 400 undergraduate university students	Flower shop (France); Experiment in research rooms (UK)	A
Jain and Bagdare (2010)	Literature review	Retail stores	A
Jha and Singh (2013)	Consumers	Big store (India)	A
Juslin and Laukka (2004); Lonsdale and North (2011)	141 music listeners; Undergraduate students	Daily activities (Sweden); Daily activities (UK)	A
Kauppinen-Räisänen, Mühlbacher & Taishoff (2020)	98 informants (average age of 35. Mainly women)	Luxury stores (Monaco)	A
Kemp et al (2011)	Performing rights organizations	Small business and retailers (US and India)	A
Liu et al (2022)	800 participants	Online advertisement (MTurk, Amazon)	A
Michel et al (2017)	Literature review	In-store (supermarkets, bars, banks…)	A
Price (2010), Hwang and Oh (2020)	200 participants;51 males and 197 females	e-retailing; Undergraduate university students (US)	A
Spangenberg, Grohmann & Sprott (2005)	130 undergraduate students	Mock retail store/lab (North America)	A
Srivastava (2013)	Customers	Hypermarkets (India)	A
Toldos et al (2019)	241 shoppers	Apparel store (Mexico)	A
Vida, Obadia and Kunz (2007)	332 shoppers, mean age of 31.4 years	High-end Supermarket (EU)	A
Andersson et al (2012a)	719 Festival visitors and 648 local residents	Music festival (Sweden)	C
Kruger& Saayman (2017)	311 visitors	Jazz festival (South Africa)	C
Mulder & Hitters (2021)	1131 participants	Live music (festival and concert) (The Netherlands)	C
Van der Hoeven & Hitters (2019)	Literature review	Urban live music (different countries)	C
Van der Hoeven & Hitters (2020)	Policymakers, festival organizers and venue owners	Urban live music stages	C
Van der Hoeven et al (2021)	Literature review	Live music (models)	C
Van der Hoeven et al (2022)	21 Musicians, 14 chief executives of venues & festivals	Pop urban live music (The Netherlands)	C

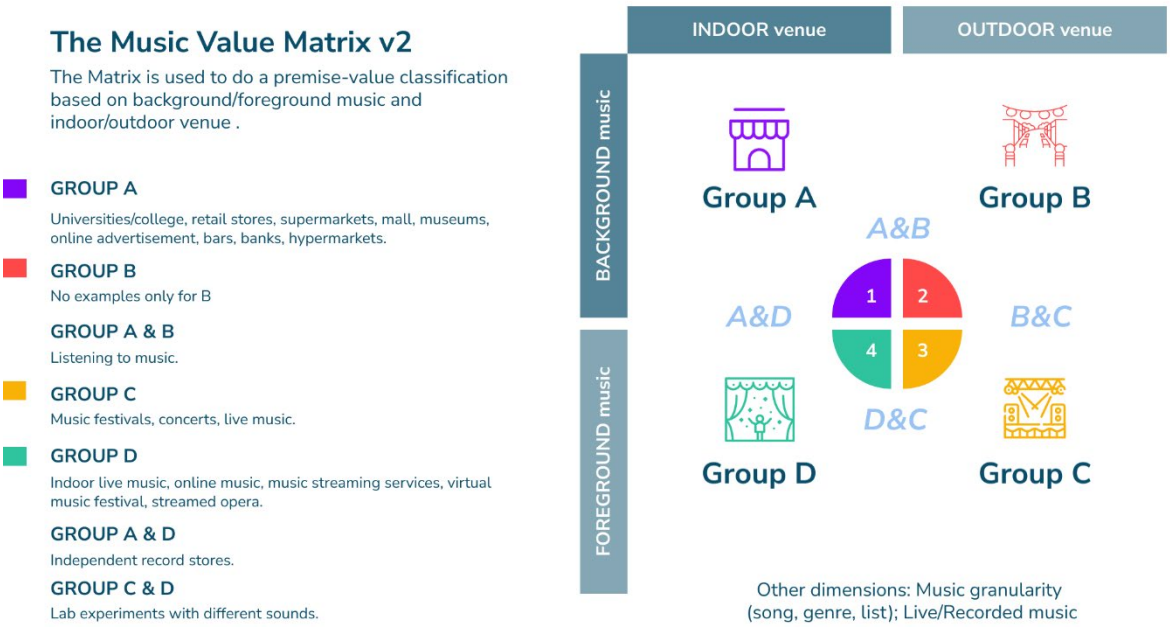
Author	Sample	Venue	Matrix
Van der Hoeven & Hitters (2023)	Literature review	Impact of urban live music on social relationships	C
Behr et al (2016b)	Not defined, 6 venues x 900 pax	Indoors live music (UK)	D
Bridge (2023)	72 Choirs/music participants	Online music for education (UK)	D
Chen et al (2017)	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 informants of marketplace (industry, streaming, labels, venues, radio)	Independent record stores (Stockholm)	A+D
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 3 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 5.

Figure 5. Music Value Matrix, version 2



Source: Own elaboration

Matching the framework and the matrix (Table 3), we can observe which literature gaps could be considered, both for the project and for future works. The ethical value of music, incorporated in this second version of D1, is also a dimension with few studies found in the literature review.

Table 3. Values by group found in the literature

Group	Cultural value	Social value	Therapeutic value	Emotional value	Economic value
A	√	√	√	√	√
B	X[1]	X	X	√	X
C	√	√	X	√	X
D	√	√	√	√	√

[1] Only 1 work A+B

Source: own elaboration

Step 3. Selecting music values to analyse

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).

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 4. This approach allows measuring the value of a music event for both participants and residents in the city.

Table 4. 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).

Types of values	Description
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 (Table 5). Some values of this theory are present in several studies analysing values of music, although they do not cite Sheth's model.

Table 5. 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 items 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 6 and explained afterwards. Additional references are provided in the subsequent sections centred on measuring every type of value.

Table 6. Values of music by Levinson

Types of values	Description
Intrinsic vs instrumental values	*Intrinsic*: value of engagement with music for its own sake. *Instrumental*: value of music to some good beyond that residing in the very engagement with music.
For an individual vs for a group/ community	*For an individual:* private value of music. *For a group:* public value of music.
Artistic vs non-artistic values	*Artistic*: Value that music has as music because it is an art. This value is 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).

Closely 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.

Ethical value

Levinson (2014) considers ethical value as a non-artistic and not-purely-practical type of value. Literature related to music has contemplated ethics both as a dimension and as output. When studies include ethics as a dimension, they evaluate the impact of customers minds on purchasing behaviour, while when ethics is included as an output, studies try to compare how other dimensions result in ethical or unethical behaviour. Analysing literature, we found different examples which infer some ethical values about music, such as stakeholders (artists) guaranteeing a positive behaviour for children, moral content of lyrics, listeners who accept paying for music to support music and musicians and taking into consideration that context influences moral evaluation of music. Table 7 shows these examples and names are assigned which meet the description obtained from the works analysed.

Table 7. Ethical values

Types of values	Description	Authors
Ethicality	Paying for music, artists receive their share of revenues.	Weijters et al. (2014)

Social support	Support small and local music and musicians.	Green et al. (2016)
Legality	Paying for music through legal channels.	Weijters et al. (2014); Green et al. (2016)
Positive behaviour	Exhibit a positive behaviour for children.	Green et al. (2016)
Moral significance	Separate moral evaluation to a piece of music and to the uses to which it is put. Therefore, the same music or piece of music can have different moral significance in different contexts.	Higgins (2023)
Moral values	Moral valence of the lyrics of songs, that is, moral content.	Preniqi et al. (2023)

Source: various authors

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 8. For each category, the description and equivalence of values in previous works are provided.

Table 8. 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, creativity as reflected in a rich diversity of genres, and artistic experimentation (Behr et al., 2016b; Van der Hoeven and Hitters, 2019)	Functional and Epistemic values defined by Sheth et al. (1991). Quality/performance, type of Functional value defined by Sweeney & Soutar (2001). 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).
Ethical value	Value is related to the moral content of lyrics in songs, behaviour exhibited to children, paying for music to support artists and local music, and use legal channels for paying (Weijters et al., 2014; Green et al., 2016; Higgins, 2023; Preniqi et al., 2023).	Not purely practical values by Levinson (2014) (in non-artistic values).
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		

Types of values	Description	Equivalent values in theories
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, mood-enhancement) defined by Levinson (2014).

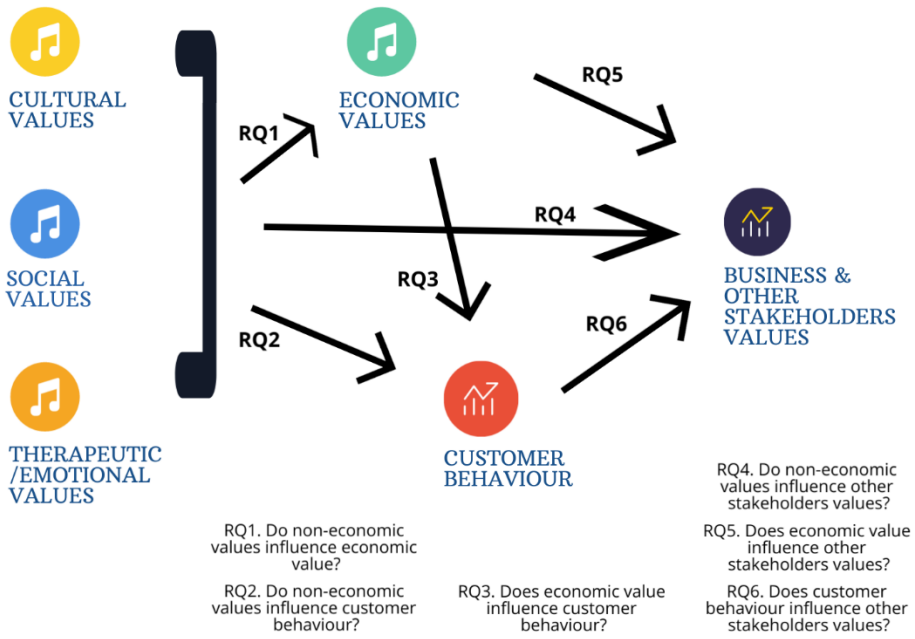
Source: various authors

Step 4. Conceptual model to measure music value

After analysing the types of values obtained from the literature review, Figure 6 shows the main research questions that might be answered in the living labs (WP6) and future research. Arrows in Figure 6 indicate relationships between variables that can be analysed. The conceptual model can be expressed as hypotheses for each research question:

- H1 (RQ1). Non-monetary values (cultural, social, ethical, emotional/therapeutical) will positively influence economic values. This hypothesis means that customers will consider non-monetary values when they ponder economic values of an event or purchasing in a retail (costs, price, convenience).
- H2 (RQ2). Non-monetary values (cultural, social, ethical, emotional/therapeutic) will positively influence customer behaviour. This hypothesis means that customers will consider non-monetary values when they deliberate about purchasing (in a store or an event).
- H3 (RQ3). Monetary values (costs, price, convenience) will positively influence customer behaviour. This hypothesis means that customers will consider monetary values when they deliberate about purchasing (in a store or an event).
- H4 (RQ4). Non-monetary values (cultural, social, ethical, emotional/therapeutic) will positively influence revenue stream of venues. This hypothesis means that revenue of venues (in groups A and B) will depend on customers evaluation of non-monetary values of music and other features in the experience.
- H5 (RQ5). Monetary values (costs, price, convenience) will positively influence revenue stream of venues. This hypothesis means that revenue of venues (in groups A and B) will depend on customers evaluation of monetary values of music and other features in the experience.
- H6 (RQ6). Customer behaviour will positively influence revenue stream of venues. This hypothesis means that revenue of venues (in groups A and B) will depend on customers behaviour (intention to purchase).

Figure 6. Research questions proposed



Source: own elaboration

What are the answers that need more research to advance in the literature related to the impacts of music values from a commercial point of view?

Answers to RQ1 and RQ2. As value measurement tends to be centred on experiences, music items are hidden in dimensions which measure specific values but are not a variable found in the results of models. Therefore, although it appears in some studies, few give results which allow understanding the impact of music in customer behaviour. Living labs in Torrent (Valencia, Spain) try to cover this gap (See Section Practical experience after living labs, Spanish report).

Answers to RQ4, RQ5 and RQ6. As it was stated in step 1, literature tend to focus on audiences (customers, retail, hospitals, etc.), destinations and artists. Besides, the relationships among stakeholders are rarely considered in conceptual models found in the literature review. This results in customer behaviour being the output in models but there is no consideration about how other stakeholders might influence the relationship between values and customer behaviour. Also, due to difficulties to access retail data, there are few studies focus on the impact of music values on revenue stream of venues (RQ4, RQ5 and RQ6). Living lab in the Netherlands tries to cover this gap (See Section Practical experience after living labs, Dutch report).

Answers with qualitative methods. Literature measuring values tend to use quantitative methods while qualitative methods could offer additional information which might be used to understand more intensely how music influences commercial decisions of customers in venues. Living labs in Supermarket (Valencia, Spain) tries to cover this gap (See Section Practical experience after living labs, Spanish report).

Step 5. Methods to measure music value

This section about the methods to measure music value centres on the description about:

- how data can be collected, through qualitative and quantitative methods,
- what items can be selected to obtain information depending on type of value, stakeholder and venue or product

Qualitative vs quantitative methods to collect data

Qualitative methods such as interviews and focus groups are used in the literature review to extend the information collected and when the number of cases available to analyse is small. Tables 9 to 11 indicates the methods used in the works analysed and the dominance of quantitative methods like surveys in the measurement of values of music.

Quantitative methods, surveys, are used when number of answers obtained is high. Tables 9 to 11 indicates that literature about measuring values is abundant, although it is more focused on events and total experience and sometimes items need to be adapted to collect data just for music.

In qualitative methods, a questionnaire to obtain information would be necessary, while in quantitative methods, items would be defined previously to conduct surveys. Items are organised into dimensions which usually include around four items.

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 9 shows the different values analysed, the methods, and afterwards the most important results are explained.

Table 9. 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 9 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. 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 10 shows the different values analysed in the reviewed papers, the methods used to obtain information and number of items or questions defined. After the table, the most important results from the values analysed are explained.

Table 10. 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	Live music	Social capital, public engagement, sense of identity	Van der Hoeven et al. (2022): interviews; thematic analysis.

	Hoeven et al. (2021); Van der Hoeven et al. (2022)			
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 measurement 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 10), 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 11 and 12 present the types of values considered in the literature. In Table 11 its description is provided and in Table 12 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 the UK, 1 in Denmark, 1 in Finland, 1 in Hungary, 1 in Norway, and 1 in Sweden.

Table 11. 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 well-being.	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 12. 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 Ethical Value of music

Table 13 shows the different ethical values analysed in the reviewed papers, the methods used to obtain information and number of items or questions defined. After the table, the most important results from the values analysed are explained. Studies are centred in audiences' opinions collected through interviews in three cases and the last is centred on analysing lyrics of music that people say they like most.

Table 13. Ethical value of music

Stakeholder	Authors	Product/ sector	Types of ethical value	Method & Items
Audiences	Weijters et al. (2014)	Music in general	Ethicality	Interviews
	Green et al. (2016)	Music in general	Social support, legality, positive behaviour	Interviews
	Preniqi et al. (2023)	Music in general	Moral value	Survey; Topic modelling of lyrics content

Source: various

There are few studies which analyse ethical value with methods that offer items as in the rest of values. The papers found are more qualitative and work with text from interviews or lyrics of songs. For example, Weijters et al. (2014) results are from content analysis, and they find that participants link ethical/unethical behaviour to artists receive/do not receive their share of revenues. Also, that participants prefer legal and ethical alternatives which guarantee artists revenues. Green et al. (2016) analyse information from interviews with music customers and create codes with opinions which indicate some types of ethical values but results refer to content analysis of people's opinions. For example, "engaging in positive behaviour for children" is an activity related to participants who dislike music videos they do not consider appropriate for children. Preniqi et al. (2023) find that moral values are better predicted when both lyrics and audio elements are considered. Also, they find that people with high binding values "express more instinctively their moral values through their musical choices". They consider moral foundations in their analysis the topics about care, fairness, loyalty, authority and purity.

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 7 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 study 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 look 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/absence 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).

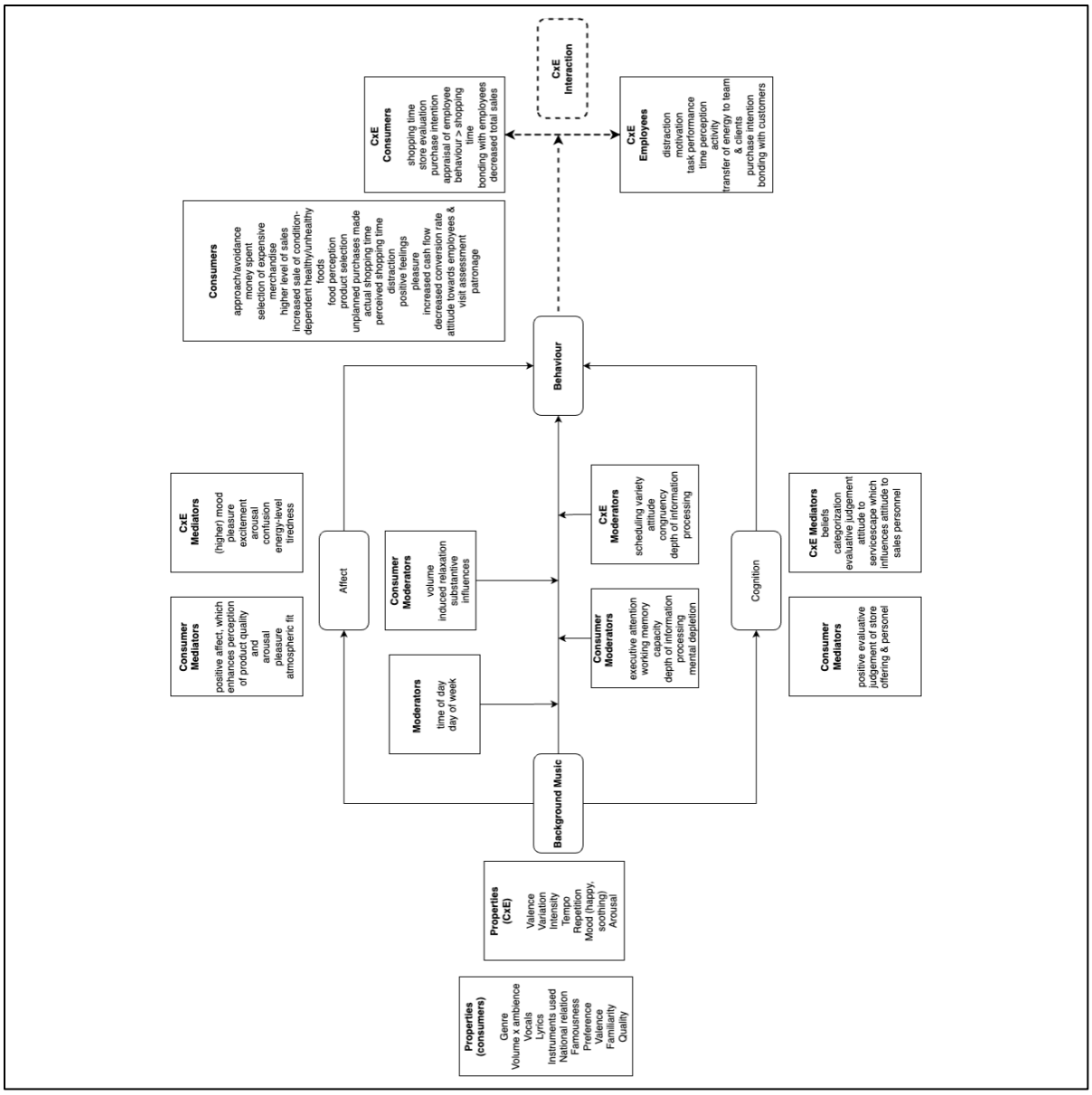
Shih, Huang & Chiang (2012) examine lyric presence which showed a greater effect on attention, as well as a significant decrease in performance score between a baseline without music and when listening to music containing lyrics. When mediated by positive affect, which enhances customers' perception 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 7.

Figure 7. Affective, behavioural and economic effects of background music on customers and employees in a retail setting



Step 6. Methods to analyse music value

This section includes examples of qualitative and quantitative methods detected in the literature review to analyse data about music value.

Examples of **qualitative analysis** of information that has been collected through interviews are included in Table 14. These examples are based on studies focused on festivals, and include methods such as content analysis, thematic analysis, discourse analysis, and descriptive phenomenological. These methods can find descriptions about attendants' experience that cannot be considered in surveys.

Table 14. Qualitative methods to analyse music value data

Authors	Values	Sample	Method to collect data	Method to analyse data
Packer & Ballantyne (2011)	Social, emotional	10 + 100	Interviews	Descriptive phenomenological
Kinnunen and Haahti (2015)	Cultural, social, economic, emotional	1,434 (931 describe, 23 interviewed, 51 write stories)	Open questions survey (Descriptions), interviews, empathy-based stories	Discourse analysis
Hoksbergen and Insch (2016)	Functional, social, emotional, cultural	16	Interviews	Thematic analysis
Szmigin et al. (2017)	Social	84	Interviews	Thematic analysis
Jackson et al. (2018)	Social, emotional	10	Interviews	Descriptive phenomenological
Neuhofer et al. (2020)	Emotional, social	31	Interviews	Thematic analysis
Wood and Kinnunen (2020)	Cultural, social	264	Open questions survey	Thematic analysis
Skandalis et al. (2024)	Cultural	25 + 15	Ethnography, Interviews	Thematic analysis

Source: various

Through these methods to analyse text, authors in Table 14 find that young obtained social (relationships, social integration, attendance) and emotional (escape, well-being) values (Packer & Ballantyne, 2011). These studies also indicate that attendants to festivals say that music is important in their experience but also from other cultural values, besides social and emotional values (Szmigin et al., 2017; Jackson et al., 2018). The combination of music and other values (cultural and social) create

a sense of authenticity (Szmigin et al., 2017). Neuhofer et al. (2020) find that music creates immersive environments although social and emotional values induce transformation. Wood and Kinnunen (2020) results say that social value is more important than music in memorable experiences of assistants to festivals, and collective emotional experiences are needed to create long-term value for assistants.

Examples of **quantitative analysis** of data obtained through surveys are included in Table 15. Methods include regression analysis, Principal Component Analysis, Structural Equation Modelling (SEM) and Qualitative Comparative Analysis (QCA).

Table 15. Quantitative methods to analyse music value data

Authors	Values	Sample	Method to collect data	Method to analyse data
Retail				
Andersson et al. (2012b)	Emotional (pleasure/arousal)	550	Survey	ANOVA, Multiple regression analysis
Badgaiyan and Verma (2015)	Economic, social, emotional, cultural (music)	508	Survey	Structural Equation Modelling (SEM)
Toldos et al. (2019)	Cultural (language)	241	Survey	ANOVA, Mediation analysis
Festival				
Mulder and Hitters (2021)	Cultural, social, emotional	1131	Survey	Principal Components Analysis (PCA)
Gallarza et al. (2023)	Economic, emotional, social, cultural	4 + 246	Focus group + Survey	Partial Least Squares (PLS SEM)
Saha et al. (2023)	Cultural, social, emotional, functional	881	Survey	Structural Equation Modelling (SEM) + Qualitative Comparative Analysis (QCA)
Hospital				
Bradt et al. (2015)	Therapeutical	31	Interviews	Mixed methods: thematic analysis + Wilcoxon rank sum tests/ paired t tests
Fallek et al. (2020)	Therapeutical	150	Observation	Multiple regression modeling

Source: various

Results in retail examples indicate that music influences purchases, although the type of retail influences the impact and direction of effect (Andersson et al., 2012b). Language of songs also influences purchases (Toldos et al., 2019). Emotional values relate to outputs like impulsive buying (Badgaiyan and Verma, 2015), which is influenced by music and other situational variables, like store environment and friendly store employees.

Results in festivals indicate that social and emotional are the most important values, while cultural values are more important in concerts (Mulder and Hitters, 2021). Saha et al. (2023) also find social and emotional values in festival as important dimensions. However, Gallarza et al. (2023) find no impact of social value, but music content and emotional value are relevant for attendants.

Results in hospital examples also indicate positive influence of music in patients (Bradt et al., 2015; Fallek et al., 2020).

Practical experience after living labs

This section presents two reports with the experience of measuring music values in the living labs conducted by the two universities in Spain and the Netherlands. The reports include information about values measured, methods to measure these values and outputs selected, and methods to analyse data of these values. Deliverable 6.5 (National Living Labs) includes extended description of all the living labs conducted in the Music360 Project.

Spanish Report. Music Cultural And Social Values For Customers In Indoor And Outdoor Venues

Three living labs in Spain are presented here as examples of methods used to measure music value: the supermarket is an indoor venue, while the other two examples are celebrated in outdoor environments. Core literature for supermarket living lab is extracted from retail literature, while festivals literature is the core source for the two other examples.

Supermarket

Method to collect data

The method used to collect data is semi-structured interviews with customers through a questionnaire based on literature and focused on social and cultural values of background music in the supermarket. The experiment was performed in three sessions in 2023 and 2024. This living lab focuses on questions RQ1, RQ2, RQ4 and RQ6 of Figure 6.

Method to analyse data & Main results

Information was analysed using ATLASti software. The content analysis was structured based on music genre, sound quality, volume, musical preferences, song characteristics, influence of background music, other noises, emotional impact of music, social and cultural impact, and economic impact (competitive advantage, buying more products).

Main results indicate that customers shop more quickly or slowly depending on tempo of the music, they like the music in the supermarket, in quality and volume, although they also say music did not disturb them and most of the participants did not pay attention to music. Customers indicated that shopping with music was relaxing. They also consider that music did not influence how much they spend, but impulsive purchasing is made in special times like Christmas. Language in music and decade were features that motivated customers to shop.

Recommendations

Recommendations for retail include: a) consider the age of customers, as this influences genres of music and language they prefer in songs, b) how much time customers are in the supermarket will influence the quantity of products they purchase, and c) it is important to consider other factors in the analysis, like price, colours, and noise, because experience include more factors than music.

Festival of Moors and Christians

Method to collect data

The method used to collect data is a survey with 27 questions to analysed cultural, social, emotional and economic values, but different questions for event and music. Sample used in the analysis include 180 answers. The survey was available online from the end of July 2023 to the first week of September and was distributed among participants in the event. This living lab focuses on questions RQ2 of Figure 6.

Method to analyse data & Main results

First methods to analyse data collected in this living lab are descriptive, using Spearman correlations and Kendall's Tau b among items defined in the questions of the survey. Then, the Mann-Whitney U and the Kruskal-Wallis tests are used to find differences for sex and generations variables in relation to the intention to repeat.

The main result is that intention to repeat is correlated to cultural values for event and music items, and it is correlated to emotional values for music items. Social values correlation to intention to repeat is not clear. In addition, the two non-parametric tests indicate no significant difference in the intention to repeat based on sex and generations.

Recommendations

Recommendation for destinations which organise cultural festivals like the Moors and Christians parade is that cultural and emotional are important values for participants' intention to repeat the next year, and music is important in both values.

Street party

Method to collect data

The method used to collect data is a survey with 25 questions to analysed cultural, social, emotional and economic values, but different questions for event and music. Sample used in the analysis include 160 answers. The survey was available online during end of July 2023 to first week of September and was distributed among participants in the event. This living lab focuses on questions RQ2 of Figure 6.

Method to analyse data & Main results

First methods to analyse data collected are descriptive, using Spearman correlations and Kendall's Tau b among items defined in the questions of the survey. Then, the Mann-Whitney U and the Kruskal-Wallis tests are used to find differences for sex and generations variables in relation to the intention to repeat.

The main result is that intention to repeat is correlated to cultural, social and emotional values, for both event and music items. However, there are more music items than event items in cultural and emotional values, while there are more event items in the social values. In addition, the two non-parametric tests indicate no significant difference in the intention to repeat based on sex and generations.

Recommendations

Recommendation for destinations which organise cultural events like a street party is that all the three values are important for participants' intention to repeat the next year, and music is important in cultural, social and emotional values.

Dutch Report. The Impact of Background Music on Employees, Consumers and Their Interactions

To better understand how music influences the work environment, employee-consumer interactions, and a retailer's sales, we examined its effects on both employees and turnover. Specifically, we focused on the tempo of the music (high vs. low) and whether employees had the option to choose the music themselves (choice vs. no choice). This study was conducted in a chain of stores across the Netherlands. We collected data through i) a survey distributed to employees, and ii) sales outcomes provided by the retailer. In the following sections, we will present an overview of the measures used, summarize the key findings, and discuss the relevance of the chosen metrics.

The Effect of Music on Employees

Measures

Employees were sent a questionnaire at the beginning of the study, and at the end of the study. The questionnaire consists of questions about job satisfaction, job autonomy, music perception, and customer orientation. A copy of the questionnaire can be found in the appendix.

Employees were asked questions about their job satisfaction (e.g., "Would you recommend your job to a friend who is looking for one?"), job autonomy (e.g., "My colleagues and I are free to determine

how we do our work"), their customer orientation (e.g., "I always try to find out what a customer needs"), and customer-facing behavior (e.g., "I interact well with customers in our store"). Moreover, employees were asked some questions about how they felt during the past months at work ('affect'; angry - calm; nervous - at ease), as well as some questions about their perception of the music played in stores. All scales were created or translated into Dutch to ensure employee understanding of the questionnaire.

Analysis & Results

The effects of high (vs. slow) tempo as well as choice (vs. no choice) of playlist on job satisfaction, autonomy, quality of customer interaction, customer-oriented behavior, affect, and music-related perceptions are tested using univariate ANOVAs.

High (vs. low) tempo music has several positive effects on employees and their perceptions of the store music. Specifically, high tempo music increases employees' affect compared to low tempo. Employees also find the music more pleasant when it is high tempo, as well as when they choose it themselves rather than when it is selected for them. Additionally, high tempo music is believed to have a more positive impact on employees' mood and is experienced as more energetic than low tempo music. Finally, high tempo music is generally seen as a better fit for the retailer compared to low tempo music.

While music tempo does not influence employees' perceived autonomy at work, their ability to choose the music does. Surprisingly, employees who can choose the music report lower autonomy compared to those who are given no choice. Further analysis shows that perceived autonomy decreases especially when employees select songs from a low-tempo playlist, as opposed to a high-tempo one.

Beyond the above effects that music tempo and choice have on employees, some of the variable measured in this study reveal no effects. As such, neither the tempo of the music played nor whether employees have a choice regarding the playlists affects their general job satisfaction. Moreover, neither the quality of client interaction nor customer-oriented behavior is affected by tempo or the ability to choose the music. Finally, the extent to which employees are aware of the music does not differ based on the music's tempo or the employee's ability to choose the music.

Measurement Improvements

Although music positively affected employee mood, no effect on employee-reported behavioral interaction was found in this study. One possible explanation is that employees may have responded in a socially desirable way, wanting to appear as 'good' employees and consistently reporting positive scores on customer interactions. To reduce the influence of social desirability in future studies, researchers could ask employees not about their own interactions with customers but rather about the interactions they observe between other employees and customers, which may provide a more objective measure.

Moreover, a possible reason employees felt less autonomous when choosing from low tempo playlists could be the lack of variation between the playlists in this condition, making the choice feel less meaningful. Future studies should explore this further by asking employees more detailed questions about their perceptions of the playlists, including their perceived variety and how they felt about making the choice. For instance, it is also possible that when given a choice, employees may experience

regret, leading to less positive feelings about the songs played. These potential explanations require further investigation.

The Effect of Music on Sales

Measure

Six additional variables were provided by the retailer to identify the effect of music on sales-related variables. Specifically, we received insights into the stores' turnover, Member Sales Participation (MSP; defined as the total sales made by a store), Average Transaction Value (ATV; defined as the average amount of sales per customer), conversion, Customer Love Score (CLS; a customer satisfaction store), and Net Promoter Score (NPS; the difference score of customers who would promote as opposed to derogate the retailer).

Analyses & Results

Regression analyses are performed with the sales-related variables as dependent variables, the music conditions as independent variables (i.e., tempo, choice) while controlling for the store type (e.g., premium, local). The analysis reveals that low tempo has a positive effect on MSP as well as conversion.

All other variables remain unaffected by music; no significant effect is found for turnover when the tempo is changed. This is also the case for employee choice. Similarly, tempo and choice show no effect on ATV, NPS, and CLS.

Measurement Improvements

While music did not significantly increase sales across all measured variables, it may still influence the way consumers purchase products. To gain deeper insights, future studies could track purchase frequency, as customers may make more frequent, smaller purchases depending on the ambiance created by the music. Additionally, measuring the time customers spend in stores could reveal whether certain music conditions encourage longer visits, which may impact purchasing behavior. Another potential variable to explore is return rate, as slower music may promote more thoughtful shopping decisions, leading to fewer product returns.

Conclusion of the Dutch Report

This initial field study revealed several interesting insights into the impact of music on both employees and store performance. Notably, although low tempo music increased some sales-related variables, high tempo music had many positive effects on employees, enhancing their mood, energy levels, and overall perception of the store environment. However, the option for employees to choose the music backfired in some cases, particularly when selecting from low-tempo playlists, as it led to reduced feelings of autonomy.

These findings inspire key improvements for future studies. Specifically, greater attention should be paid to how music choices are structured, ensuring meaningful variation in playlists. Additionally, focusing on alternative measures such as purchase frequency, customer dwell time, and return rates could offer deeper insights into how music affects consumer behavior. By refining the variables we

measure and exploring new areas, future research can more accurately capture the subtle ways in which music influences both employees and customers in retail settings.

Finally, in addition to employee and store-level sales data, we propose that individual customer data would provide additional important insights. Understanding which and how many products customers purchase, as well as whether and how often they return products would provide valuable information of the effect of music in stores.

Conclusions

This deliverable D1.2 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 follow 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 depend 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 basis for selecting the cases in the WP6 (living labs).

Experience from living labs indicate that events and stakeholders influence the type of value they feel more important. Also, that different stakeholders evaluate music in a dissimilar manner depending on the venue. In the indoor venues analysed for background music (Group A), customers usually prefer music which relax them (retail and supermarket) while employees prefer higher tempo to work (retail). In outdoor venues and background music (Group B), like a cultural festival, when visual entertainment is substantially remarkable, event features influence more loyalty than music. However, a street party would be near the intersection of B&C groups, thus, music becomes more important than event features. Further research might analyse differences related to recorded and live music in order to detect if position of events is only in group A and B or if it occurs in the intersection of A-D and B-C, close to the impact of foreground music.

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References

Abbasi, A.Z., Ting, D.H., Hlavacs, H., Costa, L.V. & Veloso, A.I. (2019). An empirical validation of consumer video game engagement: A playful-consumption experience approach. *Entertainment Computing*, 29: 43-55,10.1016/j.entcom.2018.12.002.

Agres, K. R., Dash, A., & Chua, P. (2023). Affect Machine-Classical: a novel system for generating affective classical music. *Frontiers in Psychology*, (14), 1158172.

Ahlbom, C. P., Roggeveen, A. L., Grewal, D., & Nordfalt, J. (2022). Understanding How Music Influences Shopping on Weekdays and Weekends. *Journal of Marketing Research*.

Allington, D., Dueck, B. & Jordanous, A., (2015). Networks of value in electronic music: SoundCloud, London, and the importance of place. *Cultural Trends*, 24(3): 211-222, DOI: 10.1080/09548963.2015.1066073

American Music Therapy Association, 2005. https://www.musictherapy.org/about/musictherapy/ *(Consulted 2-1-24)*

Andersson, T.D., Armbrecht, J. & Lundberg, E. (2012a). Estimating Use and Non-use Values of a Music Festival. *Scandinavian Journal of Hospitality and Tourism*, 12(3): 215-231, DOI: 10.1080/15022250.2012.725276

Andersson, P.K., Kristensson, P., Wästlund, E. and Gustafsson, A. (2012b). Let the music play or not: The influence of background music on consumer behavior. *Journal of Retailing and Consumer Services*, 19(6): 553-560. DOI: 10.1016/j.jretconser.2012.06.010

Areni, C. S., & Kim, D. (1993). The influence of background music on shopping behavior: classical versus top-forty music in a wine store. ACR North American Advances.

Aylott, R. and Mitchell, V.W. (1999). An exploratory study of grocery shopping stressors. *British Food Journal*, 101 (9), 683-700. DOI: 10.1108/00070709910288883

Badgaiyan, A.J., and Verma, A. (2015). Does urge to buy impulsively differ from impulsive buying behaviour? Assessing the impact of situational factors. *Journal of Retailing and Consumer Services*, 22, 145-157. DOI: 10.1016/j.jretconser.2014.10.002

Bakker, I. V. (2014). Pleasure, arousal, dominance: Mehrabian and Russell revisited. *Current Psychology*, 405-421.

Beverland, M., Lim, E. A., Morrison, M., & Terziovski, M. (2006). In-store music and consumer-brand relationships: Relational tranformation following experiences of (mis)fit. 59(9), 982-989.

Behr, A., Brennan, M. & Cloonan, M. (2016a). Cultural value and cultural policy: some evidence from the world of live music. *International Journal of Cultural Policy*, 22(3): 403-418. DOI: 10.1080/10286632.2014.987668

Behr, A., et al., (2016b). Live concert performance: an ecological approach. *Rock Music Studies*, 3 (1): 5–23.

Bernatzky, G., Presch, M., Anderson, M., & Panksepp, J. (2011). Emotional foundations of music as a non-pharmacological pain management tool in modern medicine. *Neuroscience & Biobehavioral Reviews*, *35*(9): 1989-1999.

Biswas, D. (2019). Sensory Aspects of Retailing: Theoretical and Practical Implications. *Journal of Retailing*, 95(4): 111-115. DOI: 10.1016/j.jretai.2019.12.001

Biswas, D., Lund, K., & Szocs, C. (2019). Sounds like a healthy retail atmospheric strategy: effects of ambient music and background noise on food sales. *Journal of the Academy of Marketing Science*, 37-55.

Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of marketing*, 56(2): 57-71.

Bless, H. C. (1996). Mood and the use of scripts: Does a happy mood really lead to mindlessness?. *Journal of personality and social psychology*, 71(4): 665., 665.

Bradt, J., Potvin, N., Kesslick, A., Shim, M., Radl, D., Schriver, E., ... & Komarnicky-Kocher, L. T. (2015). The impact of music therapy versus music medicine on psychological outcomes and pain in cancer patients: a mixed methods study. Supportive Care in Cancer, 23, 1261-1271.

Bridge, S.K. (2023). The social value of music during the COVID-19 pandemic: exploring the benefits of online music participation for social capital, education, belonging and wellbeing. *Journal of Beliefs & Values*. DOI: 10.1080/13617672.2023.2263723

Bro, M. L., Johansen, C., Vuust, P., Enggaard, L., Himmelstrup, B., Mourits-Andersen, T., ... & Gram, J. (2019). Effects of live music during chemotherapy in lymphoma patients: a randomized, controlled, multi-center trial. *Supportive care in cancer*, *27*, 3887-3896.

Bull, A., & Scharff, C. (2021). Classical music as genre: Hierarchies of value within freelance classical musicians' discourses. *European Journal of Cultural Studies*, 24(3): 673-689. DOI: 10.1177/13675494211006094

Burrai, F., Micheluzzi, V., & Bugani, V. (2014). Effects of live sax music on various physiological parameters, pain level, and mood level in cancer patients: a randomized controlled trial. *Holistic nursing practice*, *28*(5): 301-311.

Chebat, J. C., Chebat, C. G., & Vaillant, D. (2001). Environmental background music and in-store selling. *Journal of Business Research*, 54(2): 115-123. Chen, Y.M., Liu, H.H. and Chiu, Y.C. (2017). Customer benefits and

value creation in streaming services marketing: a managerial cognitive capability approach. *Psycholy & Marketing*, 34: 1101–1108. DOI: 10.1002/mar.21050

Chen, D., et al. (2022). How background music of shopping sites affects consumers during festival season. *Cognitive Computation and Systems*, 4(2), 165–176. DOI: 10.1049/ccs2.12044

Clarke, E., DeNora, T., & Vuoskoski, J. (2015). Music, empathy and cultural understanding. *Physics of life reviews*, 15, 61-88.

Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences of the United States of America*, *117*(4): 1924–1934. https://doi.org/10.1073/PNAS.1910704117/SUPPL_FILE/PNAS.1910704117.SM01.MP4

Dash, A., & Agres, K. R. (2023). AI-Based Affective Music Generation Systems: A Review of Methods, and Challenges. ACM, 2301.06890.

Daunfeldt, S. O., Moradi, J., Rudholm, N., & Öberg, C. (2021). Effects of employees' opportunities to influence in-store music on sales: Evidence from a field experiment. *Journal of Retailing and Consumer Services*, 59, 102417.

Deloitte Access Economics. (2011). *Economic, Social and Cultural Contribution of Live Music in Victoria*. Deloitte.

Denizet-Lewis, B. (2006). The man behind Abercrombie & Fitch: Mike Jeffries turned a moribund company into a multibillion-dollar brand by selling youth, sex and casual superiority. Not bad for a 61-year-old in flip-flops. Salon. Retrieved August 11, 2023.

Dubé, L., & Morin, S. (2001). Background music pleasure and store evaluation: intensity effects and psychological mechanisms. *Journal of business Research*, 54(2): 107-113.

Dunphy, K. (2014). The effectiveness of expressive arts therapies: A review of the literature. *Psychotherapy and counselling journal of Australia*, *2*(1).

Fallek, R., Corey, K., Qamar, A., Vernisie, S. N., Hoberman, A., Selwyn, P. A., ... & Lounsbury, D. W. (2020). Soothing the heart with music: A feasibility study of a bedside music therapy intervention for critically ill patients in an urban hospital setting. Palliative & Supportive Care, 18(1), 47-54.

Ferreira, D. C., & Oliveira-Castro, J. M. (2011). Effects of background music on consumer behaviour: behavioural account of the consumer setting. *The Service Industries Journal:* 2571-2585.

Fiegel, A., Meullenet, J. F., Harrington, R. J., Humble, R., & Seo, H. S. (2014). Background music genre can modulate flavor pleasantness and overall impression of food stimuli. *Appetite*, 144-152.

Frey, B.S. (2003) Arts & Economics. Analysis & Cultural Policy. Springer Berlin, Heidelberg.

Frey, B.S. (2019) The Social Value of Art. SpringerBriefs in Economics, 15-20. Springer, Cham, https://doi.org/10.1007/978-3-030-15748-7_2

Gallagher, M. (2011). Evaluating a protocol to train hospice staff in administering individualized music. *International Journal of Palliative Nursing*, 17(4): 195-201.

Gallarza, M.G., Tubillejas-Andrés, B. & Samartin, K. (2023). Consumer value of virtual music festivals. *International Journal of Consumer Studies*, 47(5): 2012–2030. DOI: 10.1111/ijcs.12978

Garlin, F. V., & Owen, K. (2006). Setting the tone with the tune- A meta-analytic review of the effects of background music in retail settings. *Journal of business research*, 59(6): 755-764.\

GEMA (2023). The influence of in-store music on sales at the stationary point of sale. MUSIK IST UNS WAS WERT, www.gema.de

Graakjær, N. J. (2012). Dance in the store: on the use and production of music in Abercrombie & Fitch. *Critical discourse studies*, 9(4): 393-406.

Green, T., Sinclair, G., & Tinson, J. (2016) Do they Know it's CSR at all? An Exploration of Socially Responsible Music Consumption. Journal of Business Ethics, 138, 231-246.

Han, Z., Kang, J. and Meng, Q. (2022). The effect of foreground and background of soundscape sequence on emotion in urban open spaces. *Applied Acoustics*, 199: 109039. DOI: 10.1016/j.apacoust.2022.109039.

Haugtvedt, C. P., Herr, P. M., & Kardes, F. R. (2018). Handbook of Consumer Psychology. Routledge.

Heredia-Carroza, J., Palma Martos, L., & Aguado, L. F. (2021). How to Measure Intangible Cultural Heritage Value? The Case of Flamenco in Spain. *Empirical Studies of the Arts*, 39(2): 149-170. DOI: 10.1177/0276237420907865

Herter, M., dos Santos, C.P., and Costa, D. (2014). "Man, I Shop Like a Woman!" Effects of Gender and Emotions on Consumer Shopping Outcomes and Perceptions of Retail Environments. Developments in Marketing Science: Proceedings of the Academy of Marketing Science, p. 34. DOI: 10.1007/978-3-319-10951-0_19

Higgins, K. (2023) Ethics and music. In: Harold, J. (ed.) The Oxford Handbook of Ethics and Art. Oxford University Press, New York. Chap. 16, p. 408-423.

Hoksbergen, E. & Insch, A. (2016) Facebook as a platform for co-creating music festival experiences: The case of New Zealand's Rhythm and Vines New Year's Eve festival. International Journal of Event and Festival Management, 7(2): 84-99.

Holmes, C., Knights, A., Dean, C., Hodkinson, S., & Hopkins, V. (2006). Keep music live: music and the alleviation of apathy in dementia subjects. International Psychogeriatrics, 18(4): 623-630.

Hong, J. W., Fischer, K., Ha, Y., & Zeng, Y. (2022). Human, I wrote a song for you- an experiment testing the influence of machines' attributes on the AI-composed music evaluation. Computers in Human Behavior, 131: 107239.

Hracs, B.J., & Jansson, J. (2020). Death by streaming or vinyl revival? Exploring the spatial dynamics and value-creating strategies of independent record shops in Stockholm. Journal of Consumer Culture, 20(4): 478-497. DOI: 10.1177/1469540517745703

Hwang, A. H. (2020). Interacting with background music engages E-Customers more: The impact of interactive music on consumer perception and behavioral intention. Journal of Retailing and Consumer Services, 101928.

Hynes, N. and Manson, S. (2016). The sound of silence: Why music in supermarkets is just a distraction. Journal of Retailing and Consumer Services, 28: 171-178. DOI: 10.1016/j.jretconser.2015.10.001

Jackson, C., Vaughan, D.R., & Brown, L. (2018) Discovering lived experiences through descriptive phenomenology. International Journal of Contemporary Hospitality Management, 30(11): 3309-3325.

Jacob, C., Guéguen, N., Boulbry, G. and Sami, S. (2009). 'Love is in the air': Congruence between background music and goods in a florist. International Review of Retail, Distribution and Consumer Research, 19(1): 75-79. DOI: 10.1080/09593960902781334

Jain, R. and Bagdare, S. (2010). Music and consumption experience: A review. International Journal of Retail and Distribution Management, 39 (4): 289-302. DOI: 10.1108/09590551111117554

Jha, S. and Singh, B. (2013). Impact of ambient music and affability of salespersons on consumer behavior in a real retail setting with emphasis on gender difference. Indian Journal of Marketing, 43 (4): 5-11. DOI: 10.17010/ijom/2013/v43/i4/36373

Jiang, M., Lin, L., Zhang, W., Zhuang, W., Jin, M. and Lin, Y. (2021). A Study on the Influencing Factors of Mobile Digital Music Selection in Subhealthy People Based on Perceived Value Theory. Wireless Communications and Mobile Computing, 5547044. DOI: 10.1155/2021/5547044

Juslin, P.N. & Laukka, P. (2004). Expression, Perception, and Induction of Musical Emotions: A Review and a Questionnaire Study of Everyday Listening, Journal of New Music Research, 33(3): 217-238. DOI: 10.1080/0929821042000317813

Kang, E., & Lakshmanan, A. (2017). Role of executive attention in consumer learning with background music. Journal of Consumer Psychology, 35-48.

Kauppinen-Räisänen, H., Mühlbacher, H. & Taishoff, M. (2020). Exploring consumers' subjective shopping experiences in directly operated luxury brand stores. Journal of Retailing and Consumer Services, 57(102251). DOI: 10.1016/j.jretconser.2020.102251

Kinnunen, M. & Haahti, A. (2015) Visitor discourses on experiences: reasons for festival success and failure. International Journal of Event and Festival Management, 6(3): 251-268.

Kniffin, K. M., Yan, J., Wansink, B., & Schulze, W. D. (2017). The sound of cooperation: Musical influences on cooperative behavior. Journal of organizational behavior, 38(3): 372-390.

Kobus, S., Diezel, M., Dewan, M. V., Huening, B., Dathe, A. K., Felderhoff-Mueser, U., & Bruns, N. (2021). Music therapy is effective during sleep in preterm infants. International Journal of Environmental Research and Public Health, 18(16): 8245.

Kobus, S., Diezel, M., Huening, B., Dewan, M. V., Felderhoff-Mueser, U., & Bruns, N. (2021). Parents' Perception of Family-Centered Music Therapy with Stable Preterm Infants. International Journal of Environmental Research and Public Health, 18(23): 12813.

Krause, A.E., Glasser, S., & Osborne, M. (2021). Augmenting Function with Value: An Exploration of Reasons to Engage and Disengage from Music Listening. Music & Science, 4. DOI: 10.1177/20592043211022535

Kruger, M. and Saayman, M. (2017). Segmenting beyond behavioural intentions: Fine tuning music festival visitors' music appreciation. International Journal of Event and Festival Management, 8(2): 204-223. https://doi.org/10.1108/IJEFM-09-2016-0064

Levinson, J. (2014). Values of Music. In, Handbook of the Economics of Art and Culture (Editor(s): Victor A. Ginsburgh, David Throsby), Cahpter 5, Volume 2, 101-117. Elsevier. DOI: 10.1016/B978-0-444-53776-8.00005-2

Liu, G., Abolhasani, M. and Hang, H. (2022). Disentangling effects of subjective and objective characteristics of advertising music. European Journal of Marketing, 56(4): 1153-1183. DOI: 10.1108/EJM-01-2021-0017

Lonsdale, A.J. and North, A.C. (2011), Why do we listen to music? A uses and gratifications analysis. British Journal of Psychology, 102: 108-134. DOI: 10.1348/000712610X506831

Madsø, K. G., Molde, H., Hynninen, K. M., & Nordhus, I. H. (2022). Observing music Therapy in dementia: Repeated single-case studies assessing well-being and sociable interaction. Clinical Gerontologist, 45(4): 968-982.

Mata Ferro, M., Pegueroles, A. F., Lorenzo, R. F., Roy, M. Á. S., Forner, O. R., Jurado, C. M. E., ... & Alcaraz, A. B. (2023). The effect of a live music therapy intervention on critically ill paediatric patients in the intensive care unit: A quasi-experimental pretest–posttest study. Australian Critical Care.

McGee, R. W. (2023). Using Artificial Intelligence (AI) to Compose a Musical Score for a Taekwondo Tournament Routine: A ChatGPT Experiment.

Meder, U., Tarjanyi, E., Kovacs, K., Szakmar, E., Cseko, A. J., Hazay, T., ... & Jermendy, A. (2021). Cerebral oxygenation in preterm infants during maternal singing combined with skin-to-skin care. Pediatric Research, 90(4): 809-814.

Meehan, J. M., Simonetto, M. G., Montan, L., & Goodin, C. A. (2011). What is value and why is it so difficult to measure? Pricing and profitability management: A practical guide for business leaders. John Wiley & Sons (Asia) Pte. Ltd.

Mehrabian, A., & Russell, J. A. (1974). The basic emotional impact of environments. Perceptual and Motor Skills, 38(1): 283-301.

Michel, A., Baumann, C. & Gayer, L. (2017). Thank you for the music – or not? The effects of in-store music in service settings. Journal of Retailing and Consumer Services, 36: 21-32. DOI: 10.1016/j.jretconser.2016.12.008

Mulder, M. & Hitters, E. (2021). Visiting pop concerts and festivals: measuring the value of an integrated live music motivation scale. Cultural Trends, 30(4): 355-375. DOI: 10.1080/09548963.2021.1916738

Murrock, C. J. (2016). Concept analysis: Music therapy. Research and theory for nursing practice, 30(1), 44.

Neuhofer, B., Celuch, K., & To, T.L. (2020) Experience design and the dimensions of transformative festival experiences. International Journal of Contemporary Hospitality Management, 32(9): 2881-2901.

North, A. C., Hargreaves, D. J., & McKendrick, J. (1999). The influence of in-store music on wine selections. Journal of Applied psychology, 84(2), 271.

North, A.C., Sheridan, L.P. and Areni, C.S. (2016). Music Congruity Effects on Product Memory, Perception, and Choice. Journal of Retailing, 92(1): 83-95. DOI: 10.1016/j.jretai.2015.06.001

Oakes, S., & Warnaby, G. (2011). Conceptualizing the management and consumption of live music in urban space. Marketing Theory, 11(4): 405–418. https://doi.org/10.1177/1470593111418798

Odell-Miller, H. (2021). Embedding music and music therapy in care pathways for people with dementia in the 21st Century—A position paper. Music & Science, 4, 20592043211020424.

Osterwalder, A., & Pigneur, Y. (2010). Business model generation: a handbook for visionaries, game changers, and challengers. John Wiley & Sons.

Ouazzani, Y., Calderón-García, H. & Tubillejas-Andrés, B. (2022). Opera streaming: perceived value as an explanatory factor for loyalty and intention to attend an opera in an opera house. Journal of Marketing Management, 39(5-6): 414-442. DOI: 10.1080/0267257X.2022.2105936

Packer, J., & Ballantyne, J. (2011). The impact of music festival attendance on young people's psychological and social well-being. Psychology of Music, 39(2): 164-181.

Petruzzellis, L., Chebat, J. C., & Palumbo, A. (2018). Paradoxical effects of famous in retail venues. Journal of Consumer Behaviour.

Pham, M. T. (2008). The Lexicon and Grammar of Affect as Information in Consumer Decision Making. Social psychology of consumer behavior.

Pizzolitto, E. (2023). Music in business and management studies: a systematic literature review and research agenda. Management Review Quarterly 2023, 1–34. https://doi.org/10.1007/S11301-023-00339-3

Preniqi V, Kalimeri K, Saitis C (2023) Soundscapes of morality: Linking music preferences and moral values through lyrics and audio. PLoS ONE, 18(11): e0294402.

Ramirez, R., Planas, J., Escude, N., Mercade, J., & Farriols, C. (2018). EEG-based analysis of the emotional effect of music therapy on palliative care cancer patients. Frontiers in psychology, 9, 254.

Rodgers, W., Yeung, F., Odino, C., & Degby, W. Y. (2021). Artificial intelligence-driven music biometrics influencing customers' retail buying behavior. Journal of Business Research, 126, 491-414.

Rodríguez, P. R., Barba, M. S., & del Barco Morillo, E. (2017). Investigación en musicoterapia sobre la relajación, estado emocional y reducción del dolor en el enfermo oncológico/Research in music therapy on relaxation, emotional states and pain reduction in oncology patients. Revista de Investigación en Musicoterapia, 1, 32-47.

Rodríguez-Rodríguez, R. C., Noreña-Peña, A., Chafer-Bixquert, T., De Dios, J. G., Gutiérrez García, A. I., & Solano Ruiz, C. (2023). The Value of Music Therapy in the Expression of Emotions in Children with Cancer. European Journal of Cancer Care, 2023. https://doi.org/10.1155/2023/2910350

Roschk, H., Loureiro, S. M., & Breitsohl, J. (2017). Calibrating 30 years of experimental research: a meta-analysis of the atmospheric effects of music, scent, and color. Journal of retailing, 93(2): 228-240.

Saha, P., Nath, A. and Sit, K.J. (2023), Re-examining the roles of experience quality at festivals: a comparative analysis using SEM and fsQCA. International Journal of Contemporary Hospitality Management, 35(5): 1802-1823. DOI: 10.1108/IJCHM-03-2022-0408

Serrano Soliva, M., & Carrascosa López, C. (2020). Hemodiálisis musical para mejorar la ansiedad y depresión. ITAMAR (Online), (6), 302–316. http://hdl.handle.net/10251/163278

Serrano Soliva, M., Salvador, I. R., Testal, A. G., López, C. C., Ramón, R. O., Coca, J. V., & Maset, R. G. (2022). Estudio de intervención para comprobar el efecto de la música clásica en directo durante hemodiálisis sobre la calidad de vida de pacientes con enfermedad renal crónica. Nefrología, 42(5): 559-567.

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. Journal of business research, 22(2): 159-170.

Shih, Y. N., Huang, R. H., & Chiang, H. Y. (2012). Background music: Effects on affect performance. Work, 42(4): 573- 578.

Skandalis, A., Banister, E., & Byrom, J. (2024). Spatial Authenticity and Extraordinary Experiences: Music Festivals and the Everyday Nature of Tourism Destinations. Journal of Travel Research, 63(2), 357-370.

Skandrani, H., Ben Dahmane Mouelhi, N., & Malek, F. (2011). Effect of store atmospherics on employees' reactions. International Journal of Retail & Distribution Management, 39(1): 51-67.

Span, L. C., van Dokkum, N. H., Ravensbergen, A. G., Bos, A. F., & Jaschke, A. C. (2021). Combining kangaroo care and live-performed music therapy: Effects on physiological stability and neurological functioning in extremely and very preterm infants. International Journal of Environmental Research and Public Health, 18(12): 6580.

Spangenberg, E. R., Grohmann, B., & Sprott, D. E. (2005). It's beginning to smell (and sound) a lot like Christmas: the interactive effects of ambient scent and music in a retail setting. Journal of Business Research, 58(11): 1583-1589.

Srivastava, R.K. (2013). Role of music on perceived price in retail stores. Indian Journal of Marketing, 43(3): 14-23. DOI: 10.17010/ijom/2013/v43/i3/36367

Sun, D., Wang, H., & Xiong, J. (2023). Would You Like to Listen to My Music, My Friend? An Experiment on AI Musicians. International Journal of Human-Computer Interaction, 1, 11.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. Journal of retailing, 77(2): 203-220.

Szmigin, I., Bengry-Howell A., Morey, Y., Griffin, C., & Riley, S. (2017). Socio-spatial authenticity at co-created music festivals, Annals of Tourism Research, 63, 1-11.

Taylor, T. D. (2015). World Music, Value, and Memory. In Speaking in Tongues (pp. 103–118). https://doi.org/10.1515/9783839432242-007/XML

Teckenberg-Jansson, P., Turunen, S., Pölkki, T., Lauri-Haikala, M. J., Lipsanen, J., Henelius, A., ... & Huotilainen, M. (2019). Effects of live music therapy on heart rate variability and self-reported stress and anxiety among hospitalized pregnant women: A randomized controlled trial. Nordic Journal of Music Therapy, 28(1): 7-26.

Tigre Moure, F., & Maw, C. (2021). Artificial intelligence became Beethoven: how do listeners and music professionals perceive artificially composed music? Journal of Consumer Markteting, 38(1): 137-146.

Toccafondi, A., Bonacchi, A., Mambrini, A., Miccinesi, G., Prosseda, R., & Cantore, M. (2018). Live music intervention for cancer inpatients: The Music Givers format. Palliative & Supportive Care, 16(6): 777-784.

Toldos, M.P., González, E.M. and Motyka, S. (2019). Exploring international atmospherics: The impact on shopping behaviors based on the language of the lyrics of music played in global apparel retailers' stores. International Journal of Retail and Distribution Management, 47(4): 368-383. DOI: 10.1108/IJRDM-12-2017-0297

Turel, O., Serenko, A., & Bontis, N. (2010). User acceptance of hedonic digital artifacts: A theory of consumption values perspective. Information & management, 47(1): 53-59.

UNESCO. (2022). Revenue distribution and transformation in the music streaming value chain. United Nations Educational, Scientific and Cultural Organization.

Van der Heijden, M. J., Jeekel, J., Rode, H., Cox, S., van Rosmalen, J., Hunink, M. G., & van Dijk, M. (2018). Can live music therapy reduce distress and pain in children with burns after wound care procedures? A randomized controlled trial. Burns, 44(4): 823-833.

Van der Hoeven, A., & Hitters, E. (2019). The social and cultural values of live music: Sustaining urban live music ecologies. Cities, 90, 263–271.

Van der Hoeven, A., & Hitters, E. (2020). The spatial value of live music: Performing, (re)developing and narrating urban spaces. Geoforum, 117, 154-164.

Van der Hoeven, A., & Hitters, E. (2023). Live music and the New Urban Agenda: Social, economic, environmental and spatial sustainability in live music ecologies. City, Culture and Society, 32, 1–10.

Van der Hoeven, A., Behr, A., Hamilton, C., Mulder, M., & Rozbicka, P. (2021). 1-2-3-4! Measuring the values of live music: methods, models and motivations. Arts and the Market, 11(2): 147,166.

Van der Hoeven, A., Everts, R., Mulder, M., Berkers, P., Hitters, E., & Rutten, P. (2022). Valuing value in urban live music ecologies: Negotiating the impact of live music in the Netherlands. Journal of Cultural Economy, 15(2): 216–231.

Van der Wal-Huisman, H., Heineman, E., & van Leeuwen, B. L. (2021). Live bedside music in daily clinical practice of a surgical hospital ward among older patients: A controlled study design of an innovative practice. Journal of Geriatric Oncology, 12(6): 960-963.

Van Dokkum, N. H., Jaschke, A. C., Ravensbergen, A. G., Reijneveld, S. A., Hakvoort, L., De Kroon, M. L., & Bos, A. F. (2020). Feasibility of live-performed music therapy for extremely and very preterm infants in a tertiary NICU. Frontiers in Pediatrics, 665.

Van Eck, N. J. and Waltman, L. (2020), VOSviewer Manual version 1.6.14. Universiteit Leiden. Retrieved from https://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.14.pdf

Vida, I., Obadia, C. and Kunz, M. (2007). The Effects of Background Music on Consumer Responses in a High-end Supermarket. The International Review of Retail, Distribution and Consumer Research, 17(5): 469-482. DOI: 10.1080/09593960701631532

Warth, M., Kessler, J., Hillecke, T. K., & Bardenheuer, H. J. (2016). Trajectories of terminally ill patients' cardiovascular response to receptive music therapy in palliative care. Journal of pain and symptom management, 52(2): 196-204.

Warth, M., Keßler, J., Hillecke, T. K., & Bardenheuer, H. J. (2015). Music therapy in palliative care: A randomized controlled trial to evaluate effects on relaxation. Deutsches Ärzteblatt International, 112(46): 788.

Weijters, B., Goedertier, F. & Verstreken, S. (2014) Online Music Consumption in Today's Technological Context: Putting the Influence of Ethics in Perspective. Journal of Business Ethics, 124, 537–550.

Whiting, S. (2021). The Value of Small Live Music Venues: Alternative Forms of Capital and Niche Spaces of Cultural Production. Cultural Sociology, 15(4): 558-578. DOI: 10.1177/17499755211021307

Wieringa, R. & Gordijn, J. (2023) National Music Ecosystem Models. Deliverable 6.3. Music360 project, 360 Degrees Perspective on the Value of Music.

Wijk, H., Neziraj, M., Nilsson, Å., & Ung, E. J. (2022). Exploring the use of music as an intervention for older people living in nursing homes. Nursing older people, 34(5).

Witt, C. L. (2008). Turn down the noise. Advances in Neonatal Care, 8(3) 137-138.

Wolter, J. S., Bock, D., Mackey, J., Xu, P., & Smith, J. S. (2019). Employee satisfaction trajectories and their effect on customer satisfaction and repatronage intentions. Journal of the Academy of Marketing Science, 47, 815-836

Wood, E.H. & Kinnunen, M. (2020) Emotion, memory and re-collective value: shared festival experiences. International Journal of Contemporary Hospitality Management, 32(3): 1275-1298.

Yalch, R. F., & Spangenberg, E. R. (2000). The effects of music in a retail setting on real and perceived shopping times. Journal of Business Research.

Yalch, R., & Spangenberg, E. (1990). Effects of store music on shopping behavior. Journal of Consumer Marketing

Yoon, S. H., Kim, H. W., & Kankanhalli, A. (2021). What makes people watch online TV clips? An empirical investigation of survey data and viewing logs. International Journal of Information Management, 59, 102329.

Young, G. (2007). Background / Foreground Music: Listening at Festivals. World Literature Today, 81(6), 41–44. https://www.jstor.org/stable/40159541