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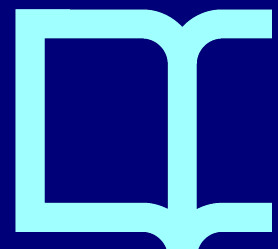
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# **AN EMOTIONAL PERSPECTIVE OF MUSIC FESTIVAL EXPERIENCE EVALUATION: A NEW MODEL OF EMOTIONAL ANALYSIS.**

## **Abstract**

### *Purpose*

The aim of this paper is to test a new proposal of a model to analyse emotional outcomes in relation to the key factors constituting the experience of a music festival.

### *Design/methodology/approach*

This article first examines how emotions and intangible impacts are conceptualized and analysed by different disciplines; secondly, it exposes the relevance of musical emotions and the contextual elements in the generation of the music festival experience; it then proposes a new model to assess the emotional impacts of music festivals, named the Emotional Impact of Music Festivals (EIMF). Finally, it shows the test of the model through quantitative and qualitative analysis.

### *Findings*

The findings reveal that perceived emotions in the music festival context should be based on the definition of musical emotions. At the same time, the model combines the different sources of emotions taken from validated tools in multiple academic disciplines. The new proposal enables the emotional outcome of the music festival experience to be identified and helps to understand the weight of its main elements.

### *Practical implications*

The new proposed model facilitates the research on music festivals and illuminates the key role of music when organizing festivals to enhance attendee experience. Finally, it reveals the main elements required to obtain an intense emotional outcome in these types of events.

### *Originality*

The study expands the different scales and model proposals in live events and combines existent musical emotion models from the psychological perspective with theoretical models from the intangible impact evaluation. It shows a genuine test for a theoretical

model that can be further developed. Finally, it shows how the new tool EIMF can help music festival organizers to understand the weight of the constituting factors of festival experience and the results in applied studies.

## **Introduction**

Event studies have long required psychological research to analyse the event experience. As presented by Getz (2007) and widely analysed in Benckendorff and Pearce (2012), these experiences can be understood from a psychological perspective by identifying the role of motivations, past experiences, emotions, cognition experiences, the personality of attendees, identity theories and role theories. These psychological points of analysis help to illuminate the experience of attendees, organizers or even performers. In the present analysis we focus on the recognition of emotions in music festivals as one of the key elements for designing these event experiences. We propose a new methodology to comprehend the emotional outcome that a live music experience may produce in attendees. This model could help to understand the complexity of live music experiences from an affective perspective and how these might be related to circumstantial elements of music festivals.

## **Models, trends and definitions in the evaluation of music events**

Music plays the central role in the music festival experience. As demonstrated by Packer and Ballantyne (2011), attendees seek to enjoy music or a live music performance in a social context, with a special atmosphere. Thus, an analysis focused on musical emotions can help to construct a precise approach to evaluate the key element of the experience and to understand what is relevant in the experience in a live music event.

From an empirical perspective, the recognition of emotions provoked by music can be divided into three main approaches of understanding: the dimensional, the discrete and the domain-specific. The first, considers emotions as a “set of underlying dimensions that are bipolar and consists of valence (pleasantness-unpleasantness) and arousal or activation” (Lundqvist et al., 2009 summarising Green & Salovey, 1999; Russell, 1980; Watson & Tellegen, 1985). The second, considers the existence of several basic emotions (Buck, 1988; Ekman, 1992; Izard, 1971) or a set of specific discrete terms that might be activated through different mechanisms and processes (Izard, 1991; LeDoux, 1996;

Scherer & Zentner, 2001). The third, domain-specific, refers to the ability to express these emotions on a scale of different terms specifically generated for each domain or field of research (Zentner, et al., 2008).

Understanding that the dimensional approach, whether it is formed of two or three variables, generates relevant data, recent studies have confirmed the convenience of discrete emotion recognition for empirical studies. MacGregor and Müllensiefen (2019) verified the consistency of the use of a list of discrete emotions in music and the validation in which music communicates basic emotions. However, the classical discrete point of view, which considers that all sets of emotions can be derived from certain core emotions (Ekman, 1992), has proven insufficient in the case of music-elicited emotions (Scherer & Zentner, 2001; Scherer, 2004; Zentner, et al., 2008). The richness of aesthetic emotions needs a wide range of emotions and must be complemented from the perspective of the musical experience, or in other words, it requires a domain-specific recognition of these emotions. As Frijda and Sundararajan (2007) recommend, there is a need to refine the comprehension of these emotions and it requires an adaptation. This adaptation might be understood in the context of the domain-specific scale developed by Zentner et al. (2008). A consistent and integrative analysis which considered the features of music listening.

#### *A domain-specific understanding of emotions for music: Geneva Emotional Music Scales (GEMS)*

Zentner et al. (2008) study consisted in four quantitative and qualitative studies resulting in three domain-specific scales of emotions called the Geneva Emotional Music Scales (GEMS). The three first studies served to narrow a previous list of 515 terms related to emotions and music taken from different sources. The results converged into a scale of 40 terms through 801 questionnaires, but the evidence also suggested that affect aroused by music could be empirically differentiated into several subunits. More specifically, they found that a 33-term model might also be representative of the emotions elicited in the musical experience; moreover, these emotions could be labelled with nine emotional factors fitting the data. Finally, the fourth study validated the use of the GEMS scale over other approaches, including the discrete and dimensional scales, to measure emotion recognition in music. These emotions were presented in the following table with the specific terms used in the GEMS-40 and other versions of GEMS-33 to help define each global emotion (GEMS-9) and resulted from their empirical analysis.

Table I. GEMS terms in the different scales.

<b>GEMS-9 Terms</b>	<b>GEMS-33 Terms</b>	<b>GEMS-40 Terms</b>
Wonder	Allured, filled with wonder, moved, admiring	Happy, filled with wonder, dazzled, allured, moved
Transcendence	Fascinated, overwhelmed, thrills, feeling of transcendence	Inspired, thrills, feeling of transcendence and spirituality
Power	Energetic, triumphant, fiery, strong	Triumphant, energetic, strong, fiery, heroic
Tenderness	Mellowed, tender, affectionate, in love	In love, sensual, affectionate, tender, mellowed.
Nostalgia	Sentimental, dreamy, nostalgic, melancholic.	Sentimental, dreamy, melancholic, nostalgic
Peacefulness	Calm, serene, soothed, meditative	Calm, relaxed, serene, soothed, meditative.
Joyful activation	Joyful, animated, bouncy, amused	Stimulated, joyful, animated, feel like dancing, amused
Sadness	Sad, tearful	Sad, sorrowful
Tension	Tense, agitated, irritated	Agitated, nervous, tense, impatient, irritated.

Source: Zentner et al. (2008)

Using a refined list, these emotions describe the music-elicited emotions to the listener, specifically generated and evaluated in the context of music. Moreover, Zentner et al. (2008) proved the validity of the scale in live performances, therefore it is applicable to the analysis of emotions in a live performance. However, the applicability of these scales can be furthered in other realms, the GEMS scales have been used in different studies analysing music-induced emotions in different fields of application. Recently, Talamini et al. (2022) used the list to analyse music-elicited emotions in relation to emotional pictures, while Oberländer et al. (2019) applied emotion recognition to assess how individuals with cochlear implants perceive emotions in music as a straightforward way to identify the emotions. In general, these previous analyses used the GEMS-9 and demonstrated the validity of the use of the scales in the recognition of felt emotions within the experience of music. The GEMS-9 scale is useful and effective for musical emotion recognition. But, when considering the experience of the attendee in the context of live music events, there are relevant elements which require further consideration.

### *Measurement of emotions at live events*

Different academic perspectives have introduced multiple attempts to analyse the emotions implied in live events. Mehrabian and Russell (1974) proposed the three-dimensional categories Pleasure-Arousal-Dominance (PAD), which describe emotional states from a dimensional approach. Izard (1980) proposed that there are 10 essential emotions involving facial recognition that were specifically used in the Differential Emotional Scale (DES) in 30 items. Plutchik (1962, 1980) developed his theory of emotions in which personality is a mixture of eight ‘prototypic emotions’, which further condensed into the Emotions Profile Index (EPI) as a tool to assess human personality. The EPI is a test consisting of 10 terms that form paired items. His wheel of emotions is traditionally used to recognize the basic emotions from psycho-evolutionary theory, or even more, to design event experiences (Laird, 1989; Ioannidis, 2004) or product experiences (Ramírez, 2014; Guthrie, et al. 2021).

Richins (1997) proposed the Consumption Emotion Set (CES) with a list of 11 emotions describing the consumer experience. These emotions as defined by Richins consist of “directly experienced emotions that result from the consumption of products”. These perspectives were considering emotions in a generalist way and were applied in multiple contexts, for instance, the features being looked at to analyse the consumer or touristic experience (Richins, 1997); the different manifestations of personality (Fossum & Barret, 2000); and, the assessment of monkey behaviour (Martau, Caine & Candland, 1985). Wood and Moss (2015) and Wood (2015) applied the Richins scale and presented a conceptual model of emotions measured before, during and after a live music event. This list of diverse contexts introduced new insights and perspectives, although at times they were generalist and too broad for the specific considerations of aesthetic musical emotions. Furthermore, these studies excluded the key role of music presented in the events as a main source of the analysis of the origin of emotions. As stated by Richins: “They exclude vicarious (or ‘aesthetic’) emotions associated with artistic works such as books, plays, and movies or that may be induced by advertising. The arts can invoke the entire range of emotion, and an instrument that covers this broad range would be unwieldy and inefficient in measuring emotions associated with other consumer products” (Richins, 1997, p. 130). Therefore, they excluded what it is central to a live music event.

In the perspective of cultural event experiences, Lee and Kyle (2013) developed the Festival Consumption Emotions scale, based on previous literature on emotions. This

scale describes the emotions experienced during a festival and contains four main elements: love, joy, surprise and negative. Their scale has served in different studies to understand the emotional outcome of the experience in different contexts such as sporting events (Song, Kim and Choe, 2019) and was applied in the recent work of Rodríguez-Campo et al. (2019) in regard to music festivals. Similarly, Woosnam and Aleshinloye (2018) developed and applied the Emotional Solidarity Scale (ESS) to evaluate the emotional solidarity between tourists and the residents of the local community in cultural events. They proved the existence of positive emotions such as joy or love; however, and as in the preceding models, the application in the context did not contemplate any adaptation considering that in music festivals, music plays a central role.

These previous analyses proved the capacity of scales to measure the emotional outcome of the live experience of events from the consumers' perspective. However, these studies limited the evaluation of experience in the interest of marketing strategies, tourism development or only aid for the organizers, consequently diminishing the effect of the music itself.

## **The need for a new emotional evaluation centred on the value of cultural events**

Based on the following reasons, a new proposal is required with the aim of assessing the emotional outcome of music festivals as perceived by participants from an integrative aesthetic perspective

1. Faulkner et al. (1999) justified in their cluster analysis that one of the three main motivations for going to live music events was enjoying the artists' performance. From another perspective, Gelder and Robinson (2009) stated that music is one of the primary motives for attending a music festival. These conclusions would indicate that it is the music itself that generates the strongest feelings. Moreover, Packer and Ballantyne (2011) defined music as the common ground for the different elements constituting the music festival experience. Consequently, understanding the emotions implied by music in the festival is crucial to shape the experience from the festival-goers' perspective
2. The use of emotion scales or measurements in the context of planned events is widespread and has been applied in several studies, demonstrating that it can be a practical way to understand the emotional outcome of the experience of a singular

event. However, these scales were not specified in the context of musical experiences and, in most of the cases, were centred on emotions related to consumption or marketing measures. Therefore, it lacks an analysis of emotions in the context of cultural events from the perspective of emotions understood as domain-specific scales focused on music.

3. As justified by Benckendorff and Pearce (2012), identity is a key element in understanding the psychological perspective of the event experience. Therefore, understanding the identity characteristics of the attendees should be included in the model.

Taking into consideration the above points, we justify and expand the construction of the model.

## **A new model proposal: defining emotional impacts in music festivals**

Our proposal is to evaluate the short-term emotional outcome of music festivals with a new tool called the Emotional Impact for Music Festivals (EIMF) model. This impact is mainly related to music, contextual factors, and identity elements. We propose a structure of dependent and independent variables based on existing empirical models.

The first dependent variable of the EIMF, under the name ‘characteristics of the event’, gathers basic information about the activity: number of attendees, venue, duration and most represented musical style(s). These items help to understand the effects of the general circumstances of the event.

The second variable, ‘origin of emotions’, evaluates the source of emotions in the festival-goers’ experience. This origin in the music festival experience can be understood through the four facets described by Packer and Ballantyne (2011). In their empirical model, described the music festival experience as the flow between “music experience” and the “separation of everyday life”, with the middle components of “social experience” and the “festival atmosphere”. These four facets essentially constitute the event experience in these types of organizations. Firstly, the “musical experience” refers to every feature related to music; secondly, the “social experience” relates to the connection with other members of the audience, or the feeling of experiencing something in common and the sense of belonging; thirdly, the “separation experience”, referring to the experience of liminality or being outside ordinary life; and finally, the “festival atmosphere” that was



basically understood as the experience of the contextual factors of the festival. Thus, to understand the uniqueness of the experience one must comprehend how these four elements may be the source of emotions about the overall experience. However, this uniqueness relies not only on the four facets, but also on the new or unknown experiences involved in every event (Bowen & Daniels, 2005) attended by the festival-goer. Moreover, ‘experiencing novelty’ emerged in Geus et al. (2016) as an experiential dimension (not previously considered in their theoretical approach), which in their words (p.16): “demonstrates that the liminoid, unusual or out of the ordinary condition is more than just an important condition for event experiences, it is part of the experience itself.” This might be set alongside the nature of events that offer unique experiences (Clawson & Knetsch, 1966) and their purpose as providers of unusual experiences (Jago & Shaw, 1998). Also, Gelder and Robinson (2009) recognized novelty-seeking as a relevant motivating factor for attending the Glastonbury festival. Therefore, this ‘experiencing novelty’ might be a relevant factor to take into consideration in the analysis of emotions implied in the festival experience.

The third variable, ‘Emotions’, is composed of the set of emotions in the GEMS-9 scale, their existence and their intensity. The convenience of using this scale is justified in the preceding section. Lastly, the last variable “Profile” contains the basic identity elements: age, gender, place of birth, level of studies, native language, nationality, participation, and place of residence. As described in Colombo (2016), the profile evaluates the involvement, “which indicates whether the individual is in any way involved in the act or event.” (P.8). Along with these two variables, and as explained, music is at the heart of the festival experience and therefore, the type of music or musical style performed during the festival has its relevance in the attendees’ or festival-goers’ experience. Thus, it is proposed to include the participants’ musical preferences evaluation as an (dis)involvement in the main programme of the festival. As described by several authors, individuals’ musical preferences are a key element in their emotional responses (Schäfer & Sedlmeier, 2010; Bakagiannis & Tarrant, 2006). Consequently, identifying the main musical style or musical styles represented in the festival can help to understand festival-goers’ emotional responses based on their musical preferences. The EIMF is presented summarily in the next table.

Table II. Emotional Impact for Music Festivals

	Dependent variables	Independent variables	
Emotional Impact in Music Festivals	Characteristics of the event	Number of attendees, place, date and musical style.	
	Origin of emotions	Music	How intense they perceive these as source of emotion
		Social Experience	
		Separation of normal life	
		Atmosphere of the festival	
		Experiencing newness	
	Emotions	GEMS-9 scale	Existence and intensity of the nine emotions described in GEMS-9
	Profile	Socio-demographic	Age, gender, place of birth
		Socio-cultural	Level of studies, native language, nationality
Involvement		Place of residence, musical preferences, participation	

Source: Own elaboration including definitions from Colombo (2016), de Geus et al. (2016), Packer and Ballantyne (2011) and Zentner et al. (2008).

### Test implementation of the model in three cases

To test the model of analysis, we adopted a mixed-methods approach, using both qualitative and quantitative data, to enrich and ensure the data were fit-for-purpose. The qualitative perspective was designed to test the comprehension of the general concepts, describe the emotional outcome of the festival experience and to include —when needed— potential nuances from the experience of the interviewee. To do so, between 2017 and 2019, we first conducted 10 semi-structured interviews —presented in Table III— with a heterogeneous selection of festival-goers based on two premises: firstly, the heterogeneity of gender and age; secondly, the saturation of the content analysis implemented afterwards. After this analysis, we developed a survey containing specific questions based on the EIMF. We distributed the survey to attendees at three music

festivals, who participated in the study as volunteers. Festival sizes varied from medium (approximately 2,000 participants) to large (approximately 120,000 participants). Quota sampling based on the local data was performed, obtaining a total of 148 answers, from 68 women and 80 men from the three festivals. The survey was designed following the parameters of the previously presented models summarizing the emotional effect. The festivals were carefully selected so that, even though they all involved musical performance and were all held in the Basque Country and Catalonia, the festival profiles were very different: Bilbao BBK Live, an open-air rock and pop music festival; Estival de Jazz, an experimental, community-based music festival held in Igualada (Barcelona); and Jazzaldia, a jazz/mainstream festival held in San Sebastian.

Table III Interviewee profiles

Pseudonym	Age	Gender	Reference
Ray	20	M	R0304
Fabian	23	M	F0405
Jay	25	M	J0104
Paul	26	M	P0104
Marta	30	F	M0503
Roger	31	M	R0503
Tina	31	F	T2004
Audrey	37	F	A0409
Adele	45	F	A2804
Rose	57	F	R1704

Source: Author's own elaboration

These interviews were designed to gain in-depth insight into the participant experience in terms of the cultural and emotional outcome generated by participating. The interview questions are available in the supplementary material. They were held face to face. The duration of each interview was between 1 hour and 1 hour and 30 minutes.

### *Results of the qualitative analysis*

We applied a deductive content analysis to the festival interviews to identify the relevant themes related to the main topics of analysis forecasted in the EIMF: the characteristics

of the experience, the origin of emotions and the explanation of their emotions. This deductive process allowed us to discern nuances in the festival-goers' experiences related to their emotions during the music festival.

### **Emotional description**

From the perspective of the description of the emotions, almost all those interviewed (7 out of the 10) described the experience of the music festival as one of the top emotions in their life. These intense emotions were related to different elements of the experience. For example, in the social experience, emotions enhanced relationships with others during the music festival experience. As stated by a young engineer, Fabian:

“Those smiles at the concert, that comment by a person who has noticed the same thing as you, you discuss it...if you are part of it, you notice that you have experienced something together with other people”.

But mainly, the intensity of the emotions was related to the different identity processes linked with the individual. For instance, the feeling of experiencing a milestone in their own cultural life was described by Paul as the interplay between emotions, sense of community and enjoying music:

“It's a rush. You're happy, cheerful, because you're watching your favourite band, with your people, with your friends. It's a mixture of you can't believe it. For example, last year, when I went to see Radiohead. I felt that it was unbelievable to be in Barcelona watching Radiohead play and it's a rush, like you're floating. You're happy”.

This remarkable experience with specific pieces of music or new music was also described by Adele, Tina, Fabian and Roger in different music festivals. These experiences described a development on the hobby of listening to live music with the inclusion of new styles, new musical preferences that can be understood as a process of cultural identification with specific categories of the music culture thanks to emotions.

A similar description of the music festival as an opportunity to experience intense emotions was explained through the answers to questions on the existence of remarkable moments or peak experiences. The answers demonstrate the relation of this 'unforgettable experience' with the following concepts: absence of thoughts, emotional learning, transcendence, extreme sensitization, and deep inner experiences. These unique experiences were intertwined or due to different factors of the experience of the music

festival. But mainly, the description of these peak experiences was related to music or to the experience of music. As described by Jay, he perceived a moment in which time stood still, intertwined with a sense of nothingness or an absence of thoughts:

“Well, they played a last song that I like very much, and it was also amazing, I mean, it gave me goosebumps... I don’t know, maybe not, but you stay out of this world and only centred on what is happening, that’s for sure”.

This sense of being without any thoughts and centred on the here and now was also described by Ray:

“Usually at a concert you enjoyed, well ... you notice a lot of ‘happiness’, right? You forget about your problems, it sounds typical, but it’s quite like that. Disconnect and stay focused on that and whether it’s such a happy festival, or it’s a group that makes you have a good time”.

Not only do these descriptions relate the music festival experiences to intense and positive emotions in most of the cases, but they also connect them with the existence of peak experiences that triggered processes of cultural identification. In general, the descriptions involve the elicitation of emotions from enjoying music, experiencing a social connection or, in summary, having an intense music experience. These topics confirmed the importance of music in the elicitation of emotions and its relevance for a long-term effect on the cultural identity of the participants, which is of interest to festival organizers in their aim to ensure long-term public attendance.

### **Nuances**

After the content analysis, some side concepts appeared that were considered relevant for the analysis of the festival experience because of the high frequency of citation in every interview. These nuances were mainly related to commentaries on the source of emotions during the festival experience.

- Alcohol and drugs. Although there was no specific question on this topic, most camping festival participants noted that consumption of these substances affected the music festival experience, either enhancing or disturbing it to some extent. Except for Adele and Audrey, all those interviewed had had experiences with drugs and alcohol at a camping music festival and reported that this had influenced their emotional responses or perceptions during the experience of the festival.

- The social experience becomes as relevant as the music depending on the type of music festival. Seven of those interviewed gave long and emphatic descriptions indicating that they view music festivals as an opportunity to meet old friends, connect with people with similar interests and that this activity is as important as the musical experience. The participants were all interviewed at festivals which take place in open-air venues, with several concerts during the festival and, in most of the cases, with a campsite for attendees. So, there is a festival context which reinforced the social experience.
- Atmosphere: the combination of several elements (venue, campsite, prior marketing campaigns) constructed a unique atmosphere which fostered the experience and was demonstrated to have an important weight for 8 of the 10 people interviewed.
- Motivations: two main motivations appeared in the interviewee statements, helping us to understand the reasons for attending a music festival. Firstly, the music or the artists were considered an essential point in several answers (Jay, Ray, Roger). Secondly, the social experience or the opportunity to share the experience with others was mentioned several times (Marta, Adele, Tina, Jay, Ray and Roger).

These topics might add some nuances and side considerations that can be included in a further analysis. Although they describe elements from the attendees' experience, they were present in other analyses of the literature. On the topic of motivation, it confirms the relevance described by Benckendorff and Pearce (2012) of understanding motivation to attend for the management of festivals and events. Although not of interest in the present paper, these findings do highlight the weight of music as a reason to attend a music festival as described in Gelder and Robinson (2009). Therefore, it confirms that the analysis of emotions from the perspective of music is valid. The atmosphere and social experience were also previously identified as relevant in a study by Packer and Ballantyne (2011), and are already contemplated in the current model. The nuance in these topics is that they are more important depending on which type of festival the participant attended. Therefore, the quantitative perspective may help to understand whether the weight of these topics depending on the festival type is different enough or not.

Finally, the description of the influence of alcohol and drugs was not considered previously. It is also commonly recognized that certain types of music festivals may be

associated with negative effects or experiences related to drugs (Jenkinson et al., 2014; Martinus et al., 2010). However, the consideration of these substances as originators of emotions was not contemplated in the theoretical approach in this context. Therefore, in the light of the observations of those interviewed, we decided to include these elements in the model of analysis and test their relevance as originators of emotions in the music festival experience.

#### *Final operationalization of the model of analysis for the quantitative perspective*

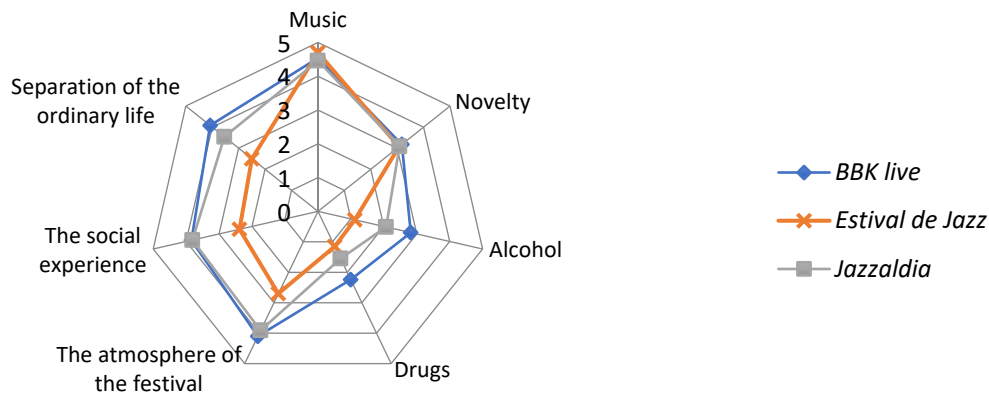
The conceptual framework helped with the specification of the final questionnaire, but the ultimate specification was determined by the previous interviews in the case of the variable 'Origin of emotions'. As presented in the previous section, this is made up of five independent variables, and creates a quantitative summary of what could be the source of the emotions within the music festival experience. In the light of the results of the interviews, the element 'Alcohol and drugs' was included.

### **Results of the survey research**

#### Origin of emotions

The emotional impact evaluated seven factors to check the origin of emotions that the participant may perceive as the main source of emotions. The survey asked participants to evaluate (using a Likert scale) the intensity of the seven factors considered as originators of emotions: music, separation of ordinary life, social experience, atmosphere of the festival, alcohol, drugs, and experiencing newness. The following graph represents the three music festivals with the mean of the evaluation of each factor as originator of emotions during the music festival experience.

Graph I. Comparison of the variable 'Origin of emotion' in the three music festivals



Source: Own elaboration

As the graph shows, and understanding the limitations of the data observed, in the three festivals the prominence of music as an emotion originator is palpable. The significance of the differences was tested through the repeated measures ANOVA adding a post-hoc test using the Bonferroni correction. Music has a significant (all  $\rho s < 0.001$ ) difference from the rest of the factors in Estival de Jazz, whereas the other factors had significant differences between them. As shown in Table IV, the data reveals that the prime focus of the origin of festivalgoers' emotions at BBK live and Jazzaldia is distributed in two more relevant elements: 'Atmosphere of the festival' and 'The social experience'. As might be deduced from the typology of the festivals, these elements are considerably greater at BBK live and Jazzaldia than at Estival. Also, the BBK and Jazzaldia festivals are held in open-air venues, facilitating interaction among the attendees, whereas the Estival analysis took place in a closed venue. Moreover, BBK offered the possibility of spending the night in camping areas. Therefore, the experience of the social factor and the atmosphere of the festival have more weight depending on the typology of the festival.

Table IV. Bonferroni corrections of the independent variables composing 'Origin of emotions'

		BBK live	Jazzaldia	Estival de Jazz
		<b>p bonf</b>	<b>p bonf</b>	<b>p bonf</b>
Music	Separation of the ordinary	0.259	< .001	< .001
	The social experience	0.003	0.010	< .001
	The atmosphere of the festival	0.349	0.058	< .001
	Drugs	< .001	< .001	< .001
	Alcohol	< .001	< .001	< .001



	Novelty	< .001	< .001	< .001
Separation of the ordinary	The social experience	1.000	1.000	1.000
	The atmosphere of the festival	1.000	1.000	1.000
	Drugs	< .001	< .001	< .001
	Alcohol	< .001	< .001	< .001
The social experience	Novelty	< .001	0.151	0.029
	The atmosphere of the festival	1.000	1.000	1.000
	Drugs	< .001	< .001	< .001
	Alcohol	< .001	< .001	< .001
The atmosphere of the festival	Novelty	0.007	< .001	0.029
	Drugs	< .001	< .001	< .001
	Alcohol	< .001	< .001	< .001
Drugs	Novelty	< .001	< .001	1.000
	Alcohol	0.035	0.110	1.000
Alcohol	Novelty	< .001	< .001	< .001
	Novelty	1.000	< .001	< .001

Source: own elaboration

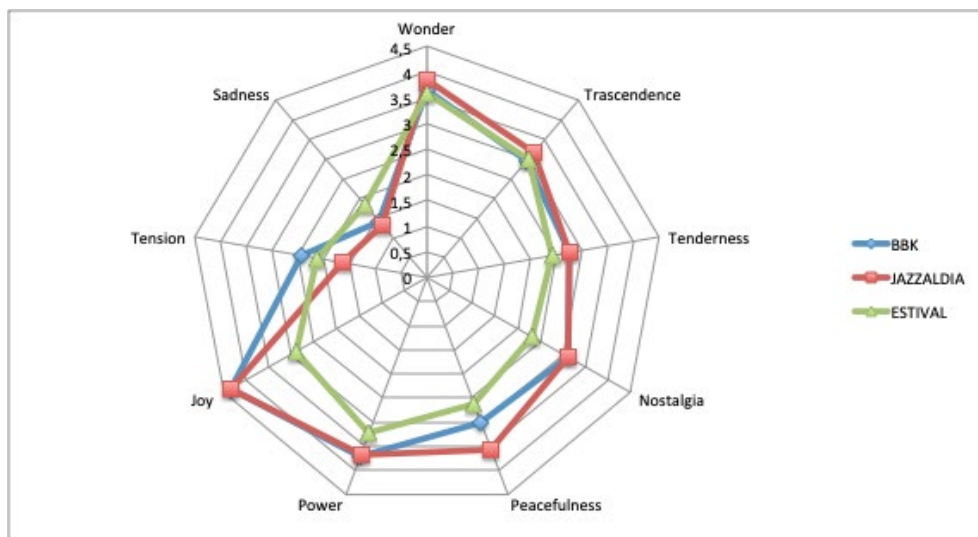
It can be discussed the results of the incorporated variables ‘Alcohol’ or ‘Drugs’ understood as sources of emotions. As seen in the table, the responses delivered more relevance within the context of the BBK and Jazzaldia festivals. The repeated measures ANOVA using the Bonferroni post-hoc test showed significant differences ( $p_{bonf} < 0.001$ ) between the rest of the factors and these two factors. This consideration requires more data to be validated, but it could be inferred that the music style, the typology of the event and the size of the festival may influence the consideration of these substances influencing the emotions in the festival experience. However, in the case of Estival, the influence of these substances was minimal. Nevertheless, music can be considered the more relevant source of emotions, but at the same time, other factors may gain importance depending on the typology of the festival.

Finally, the reliability analysis of the ‘Origin of emotions’ scale resulted in a Cronbach’s coefficient alpha of 0.631. If we split this analysis by each festival, relevant differences can be observed in the alpha coefficients: BBK (0.471); Jazzaldia (0.623); Estival (0.862). These differences confirm improved performance of the scale when the festival is more focused on the musical experience and therefore, its applicability for every type of music festival is contested.

### Emotions

As mentioned earlier, the Emotional Impact is based on the scale created by Zentner et al. (2008), which was a 0.8 Cronbach's coefficient alpha in the nine terms of the emotions in their previous studies. In our test cases, the reliability analysis was performed again and the data from this subscale resulted in a Cronbach's coefficient alpha of 0.79. In our empirical study, having applied a Likert scale (from 1 to 5, where 1 is the least intense and 5 is the most intense), the results showed higher scores for the positive emotions in all three of the festivals analysed. The most intense emotions were joy (3.85 points), wonder (3.69) and power (3.55), depending on the type of the festival, and the least intense were tension (2.07) and sadness (1.53). Analysis of this data may help us to generate a map of emotions by applying the GEMS-9 to the festival experience.

Graph II. Distribution of means of emotions in the three festivals analysed



Source: own elaboration.

As shown in Graph II, the most intense emotions were recorded for Jazzaldia and BBK in relation to joy (4.33 and 4.34 points, respectively), while the least intense emotion at the same two festivals was sadness (1.42 and 1.33, respectively). At Estival, the most intense emotion was wonder (3.59), while the least intense was also sadness (1.82). Statistical coherence cannot be maintained in a comparison, since the sample is not statistically representative. It is possible, however, to identify a trend in the importance of positive emotions such as joy and wonder over negative emotions such as sadness.

## **Discussion and challenges for implementing the EIMF**

The construction of the EIMF is inspired by models used in previous research, especially by Zentner et al. (2008), Packer and Ballantyne (2011) and Colombo (2016). The latter work, although forming part of a more complex evaluation of cultural impacts, is the methodological basis, as it permits the structure of dependent-independent variables for the evaluation of intangible impacts in the context of cultural events.

However, the EIMF differentiates itself from other models in four aspects. First, the definition of the impacts to be analysed is different, since the EIMF is only based on emotional impacts, and not the overall experience (as done, for example, in Geus et al., 2016 or Packer & Ballantyne, 2011) or only on musical emotions, as researched in several affective music evaluations. Second, the EIMF adds an element, namely the origin of emotions, giving this methodological proposal a new functional perspective for evaluating the influence of the event in the elicitation of emotions. Third, the EIMF contributes to the evaluation of the participants' socio-demographic profile, allowing the empirical analysis of the different respondent profiles, thus making it possible to observe variations in the perception of different audiences. Finally, it contributes an interdisciplinary model for evaluating the music festival experience based on the aesthetic enjoyment of music with the structure of models from events research.

The reliability of the scales applied in the model might be discussed. The Emotional Impact is based, in its essential affective evaluation, on the scales of the origin of emotions and of musical emotions (Zentner et al., 2008), which obtained a Cronbach's coefficient alpha of 0.631 and 0.8 respectively. For the latter, reliability was confirmed in the cases applied. However, in the case of the origin of emotions, there is a clear difference between the experiences or typologies of the event in the performance of the scale, showing better results in more music-focused festivals such as Estival. However, as mentioned by Aron et al. (2013), for a reliable analysis of psychological studies a Cronbach's alpha of between 0.6 and 0.9 is considered a good result. Thus, the overall reliability coefficient of this scale can be considered acceptable, but it requires further and longer analysis in different typologies of festivals to prove its performance in festivals like BBK or Jazzaldia. Therefore, the results can be considered consistent on the basis of the scales performed in the surveys.

The dispersion of the experience among multiple factors increased depending on the type of festival. In BBK live and Jazzaldia, the social experience, the atmosphere of the festival, and the novelty factor were particularly relevant. In addition, the influence of drugs and alcohol was more important in the case of the BBK festival. On the contrary, the inclusion of these factors was not relevant in the case of Estival de Jazz, where music played a leading role. As the quantitative data shows, the influence of drugs and alcohol had a residual importance in this specific music festival. Therefore, the relevance of an analysis of musical emotions decreases in those types of music festivals where the experience is surrounded by other factors. In these types of experiences, a completer analysis is required.

### **Conclusive considerations**

The EIMF should be considered and adapted as a guide for researchers in the assessment of emotional impact. This model of analysis might be applied to every type of cultural event when the emotion scale is specified to the main artistic domain of the event (for example with the use of AESTHEMOS scales by Schindler et al., 2017). This is also feasible with the consideration of the origin of emotions, as conceptualized by several authors (Weber, 2015; Hanich, 2018; and Edelman & Šorli, 2015) in the study of the experience of different typologies of cultural events. As data shows, the typology of the music festival requires the selection of variables that may differ depending on how the experience is constructed. Examples of the application of the EIMF can be found in two chapters of Oliva and Colombo (2021, 2022). The first signals how attending a music festival generates a positive personal experience, providing positive emotions capable of contributing to personal and collective well-being. The second, interrelates the descriptors of the EIMF with the development of specific processes of cultural identification illustrating that these intangible aspects are vital in fostering a sense of social sustainability based on the promotion of peacefulness and inclusivity. Consequently, this evaluation would generate data for analysis that can be helpful and illustrative for organizers or public administrations.

In general, the EIMF could be considered well-suited for use as an element for analysing and measuring the emotional impacts generated by music festivals. This model can be applied to many fields, although it would require specific scales for each typology of event. Considering these different elements, this methodological proposal could be

helpful to researchers in the field of event studies and affective music research, as it provides a guide for assessing the emotional impact of an event. The EIMF contributes to the study of complex processes involved in evaluating the emotional impacts on music festival attendees.

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